

II. International Conference on
Covid-19 Studies

August 26-27, 2020
Paris, France

FULL TEXTS BOOK

Edited by
Dr. Charu DUREJA



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Dr. Charu DUREJA**

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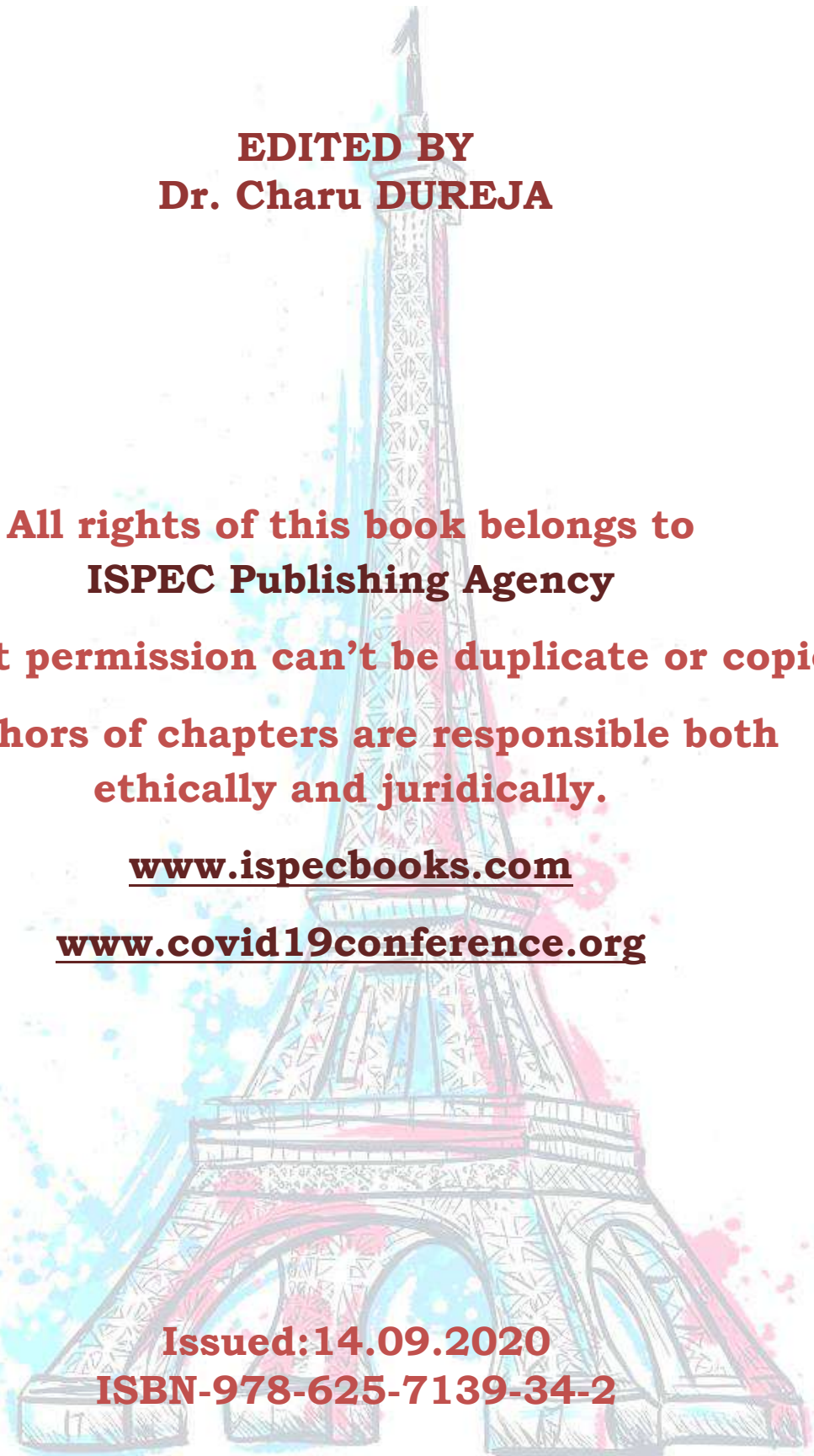
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www.covid19conference.org

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II. INTERNATIONAL CONFERENCE ON COVID-19 STUDIES

CONGRESS'S IDENTIFICATION

2 ND INTERNATIONAL CONFERENCE ON COVID-19 STUDIES

DATA AND PLACE

AUGUST 26-27, 2020

Paris/ France (ZOOM APPLICATION)

COORDINATOR

Gulnaz GAFUROVA

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Elvan CAFAROV

PRESENTATION TYPE

Oral Presentation

NUMBER OF ACCEPTED PAPERS

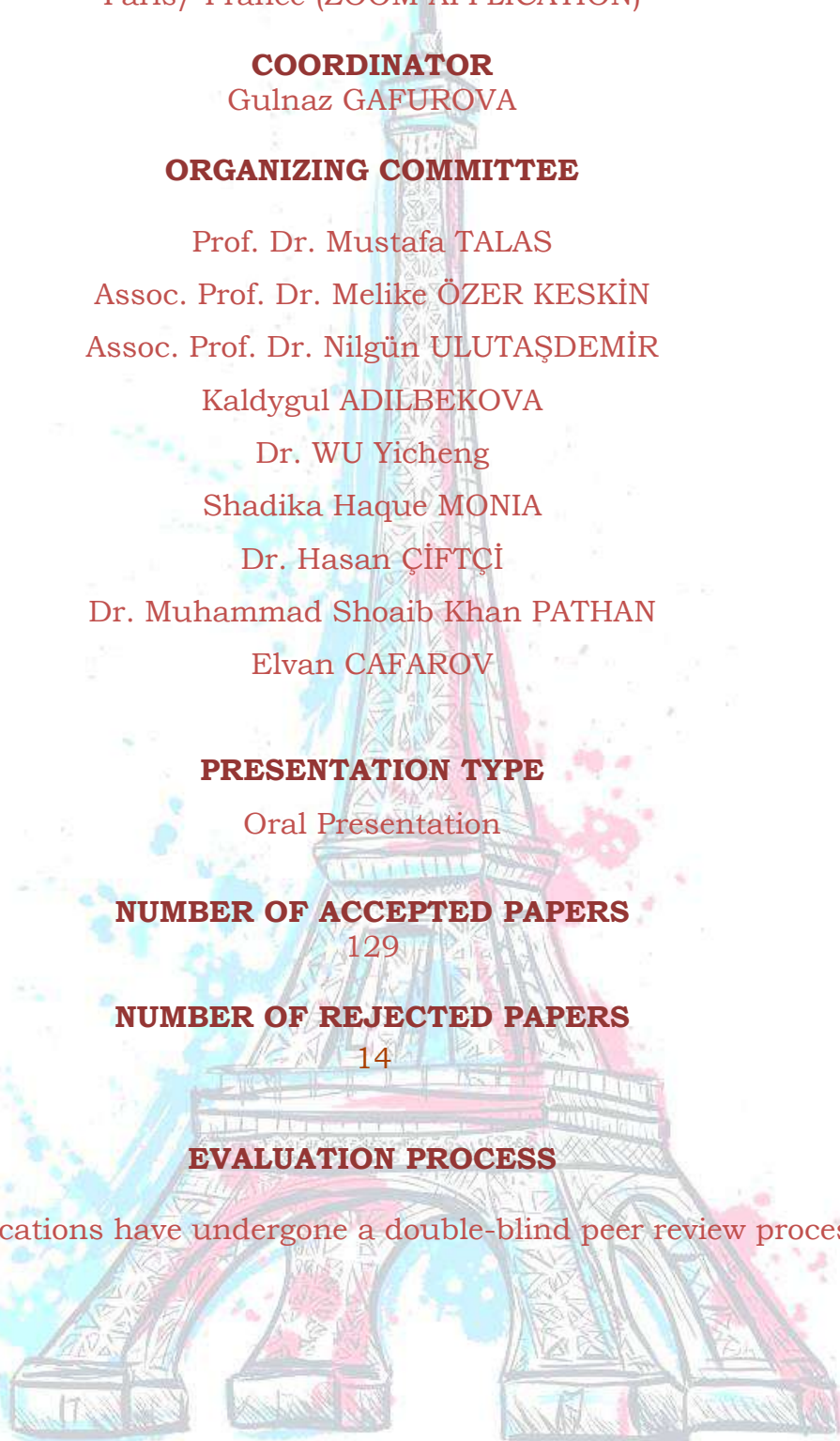
129

NUMBER OF REJECTED PAPERS

14

EVALUATION PROCESS

All applications have undergone a double-blind peer review process

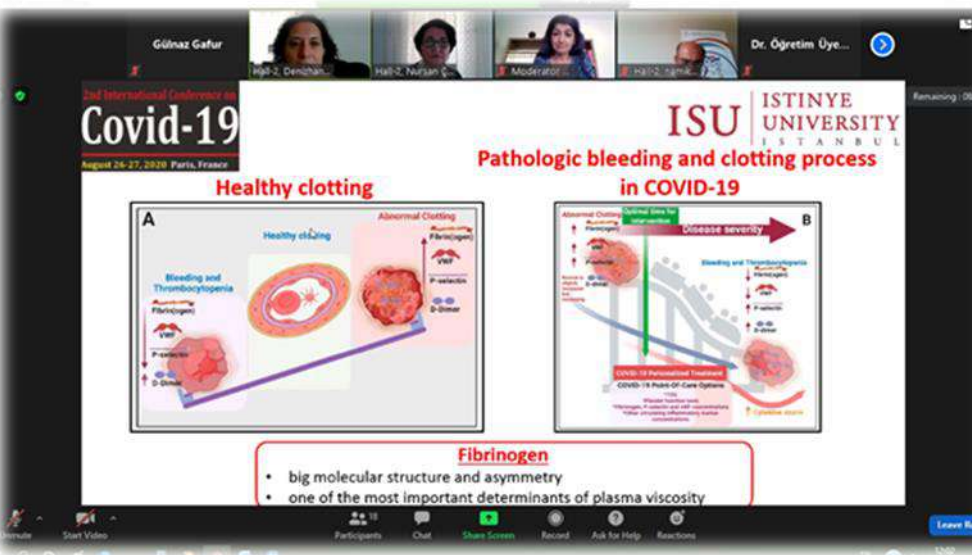
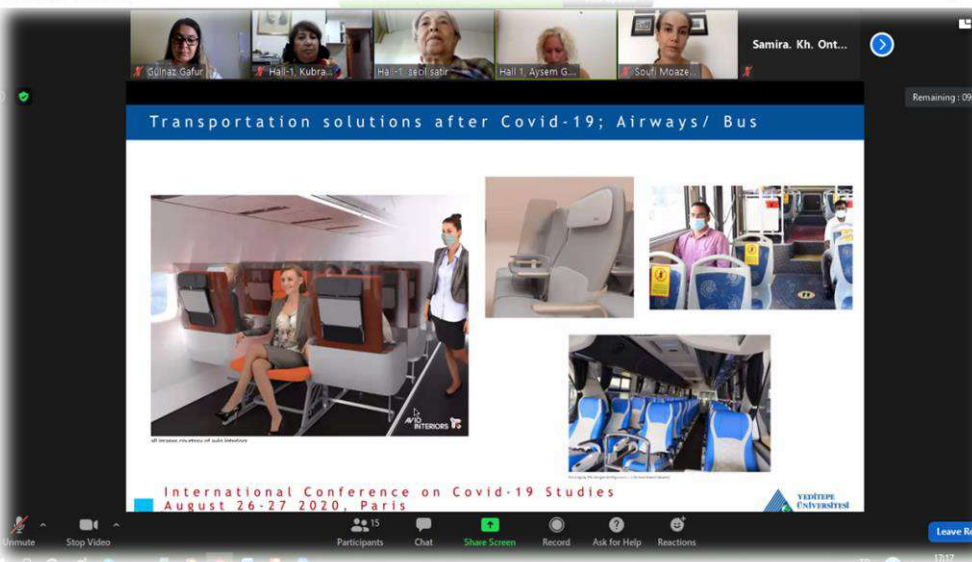


II. INTERNATIONAL CONFERENCE ON COVID-19 STUDIES

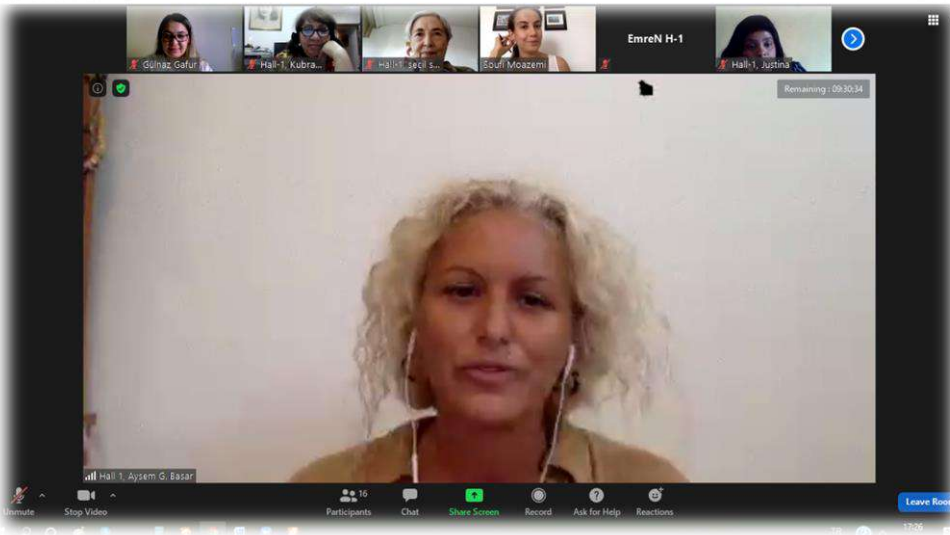
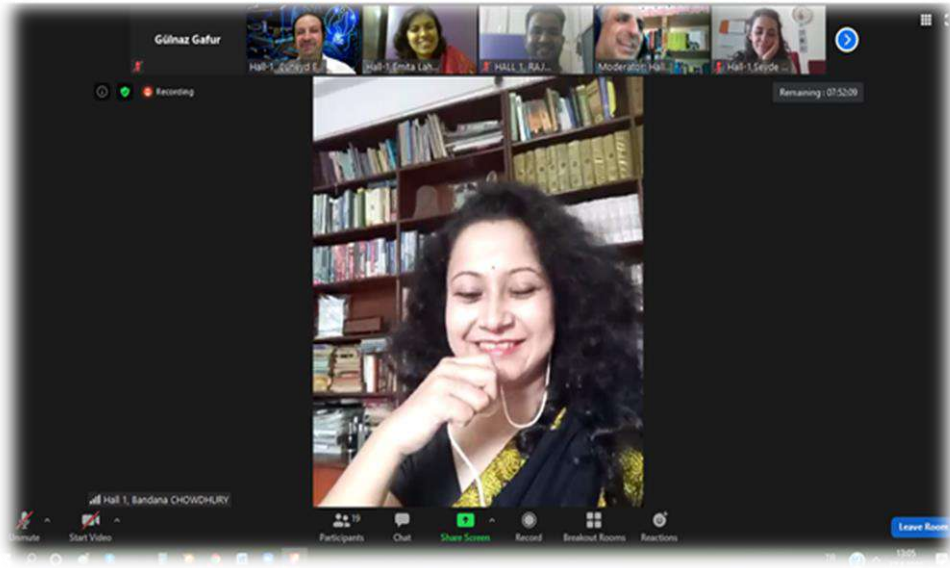
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University

CONFERENCE GALLERY



CONFERENCE GALLERY



CONFERENCE GALLERY

A screenshot of a Zoom meeting. The main video feed shows a woman with long brown hair, wearing a dark top, speaking. The top of the screen shows a gallery of other participants: Gülnaz Gafur, Moderator: Hal... (M), Session-2 Ha..., H2- Dr. Elif Kem..., Hall-2, Ovesa F..., and Gulce Alev S... (G). The bottom of the screen shows the Zoom control bar with options like Mute, Start Video, Participants, Chat, Share Screen, Record, Breakout Rooms, and Reactions. A 'Leave Room' button is visible in the bottom right corner.

A screenshot of a Zoom meeting displaying a slide. The slide is titled "SAVE YOURSELF FOLLOW TWO SIMPLE RULES" and features two historical posters. The left poster is titled "HOW DISEASE IS SPREAD" and shows a man coughing into his hand, with the text "SNEEZE BUT DON'T SCATTER". The right poster is titled "DANGER" and shows a man coughing into his hand, with the text "DON'T COUGH INTO YOUR HAND". Below the posters, there is a paragraph of text in Turkish: "24 Eylül'de New York'da sağlık görevlileri, metro ve tren istasyonlarına, sokak lambalarına, vitrinlere, polis bölgelerine, otellere ve diğer kamusal alanlara en az 10.000 poster yerleştirmişler, bu posterler üç farklı mesaj taşımıştır; bir seri poster, insanlara öksürüklerini ve hapsirmelerini örtme talimatı vermiş, diğer seri de insanları tükürmemeye teşvik etmiştir. Son seri ise New York'luların grip ve zatürrenin dönüşümü önlemeye yardım etmeye çağırmıştır." Below this text, there is another paragraph: "Bu doğrultuda kamu hizmeti kampanyaları da, broşürler ve posterler gibi, internet, radyo ve televizyon öncesi medya şeklinde yayılmıştır." The top of the screen shows a gallery of participants: Gülnaz Gafur, Hall-1, Gonca S..., Soufi Moaze..., Hall-1, Justina, and Martin Akote... (M). The bottom of the screen shows the Zoom control bar.

A screenshot of a Zoom meeting displaying a slide about *Allium sativum*. The slide has a blue header with the text "Allium sativum". Below the header, there is a list of bullet points: "Just like ginger, garlic too will protect us from coronavirus by stimulating our immunity.", "It contains **allicin** a plant compound that acts as a germicide. But remember, to make the most of garlic, consume it raw or partially cooked.", and "Garlic has powerful anti-inflammatory and antiviral properties which enhances body immunity." To the right of the text is an image of several garlic bulbs in a wooden bowl. The top of the screen shows a gallery of participants: Gülnaz Gafur, DILNENU MA..., Moderator..., Hall-2, Emmanu..., session-3Padma..., and HASAN ÇİFTÇİ. The bottom of the screen shows the Zoom control bar.

CONFERENCE GALLERY

A Zoom meeting interface with a large video window in the center showing a woman with dark hair speaking. At the top, there is a gallery of smaller video windows for other participants: Gülnaz Gafur, Hall 1, Sevil Gökçe, Hall 1, Justina, Soufi Moazemi, Samira, Kh. Ont..., and Hall 1, Ajşe... The bottom toolbar includes icons for Unmute, Start Video, Participants (16), Chat, Share Screen, Record, Ask for Help, Reactions, and a Leave Room button. A 'Remaining: 09:08:14' timer is visible in the top right corner.

A Zoom meeting interface displaying a slide titled "COVID-19 GENEL BİLGİ / COVID-19 MILESTONES". The slide content includes a "WHO Coronavirus Disease (COVID-19) Dashboard" with a world map and statistics: 210,183 cases, 23,782,965 confirmed cases, and 816,028 deaths. A legend for the map shows case counts: 300,000+, 50,000 - 300,000, 10,000 - 50,000, 100 - 10,000, 1 - 100, and No Reported Data. The slide also features a "Zoom Meeting with Kamerayaz Karayigit" header and an "Overview" link. The Zoom meeting controls and a "Remaining: 09:51:16" timer are visible at the bottom.

A Zoom meeting interface displaying a slide titled "Design for Covid-19" with the subtitle "Disinfection unit for kindergarden". The slide features a product design named "OCTOPUS" and includes numbered steps: 1. A child wearing a backpack-mounted unit; 2. A close-up of the unit's nozzle; 3. A hand being washed in a basin; 4. A close-up of the unit's speaker; 5. A close-up of the unit's confirmation tone. Text on the slide includes "Specifications of the product design", "ease of communication with voice and auditory product for children", "It will alert if you remove your hand before 7 seconds", and "After the process is completed, you will hear the confirmation tone". The slide footer mentions "International Conference on Covid-19 Studies August 26-27 2020, Paris" and the "YILDIZ ENVERİYER" logo. The Zoom meeting controls and a "Remaining: 09:32:36" timer are visible at the bottom.

CONFERENCE GALLERY

Zoom Meeting

Gülnoz Gafur Moderator: Hall-2, Dr. Elif Kem... Hall-2, Oveesa F... Gülce Alev S...

Recording Remaining: 08:33:25

Session-2 Hall-2 Dr. PRATIBHA

Unmute Start Video Participants 16 Chat Share Screen Record Breakout Rooms Reactions Leave Room

Gülnoz Gafur H2-3, Seydi H2-3, Tuğba Moderator H2-3, İshak H2-3, İnderbir s...

Remaining: 08:35:25

Impact on the economy, World **Ekonomi üzerindeki etki**

GDP growth (annual % change), QoQ

2019 2020 Projections 2021 Projections

UK GDP barely grows after biggest decline on record

Monthly GDP index for the United Kingdom

Coronavirus Wreaks Havoc on Economic Growth Prospects

How Hard Will GDP Be Hit in 2020?

statista!

Gülnoz Gafur H2-3, Gonca S... H2-3, Aylin S... Seda M... Martin Akca...

Samira, Kh. Ont... Remaining: 08:35:25

Amplifier ve ortaklar yeni dünyada yanımıza neler alacağız ya da neleri geride bırakacağız gibi soruların cevaplarını sorgulamış, bu çerçevede dünyanın her yerinden tasarımcıların katılacağı bir poster kampanyasına açık çağrı sunmuşlardır. Amplifier ve ortaklar sanatın iyileştirici gücüne inanmış ve bu doğrultuda eserler beklemişlerdir. Virüsün etkisi azaldığında ya da tamamen yok olduğunda bile bu posterlerin yaşayacağı fikrinden yola çıkarak tasarımcıları üretmeye teşvik etmişlerdir.

Amplifier Sanat Topluluğu'nun yayımladığı yarışmaya birçok tasarımcı katılmış, birinci olan afiş henüz belli olmamıştır. Ancak topluluk, çalışmaların birçok kesime ulaşabilmesi için çalışmalarını indirip, bastırmaı serbest kılmıştır.

GLOBAL OPEN CALL FOR ART

Global Open Call For Art
İstanbul Yarışma Afiş Çalışması, 2020
"Global Open Call For Art"
Competition Poster, 2020

CONFERENCE GALLERY

REASONS FOR DETERIORATING MENTAL HEALTH

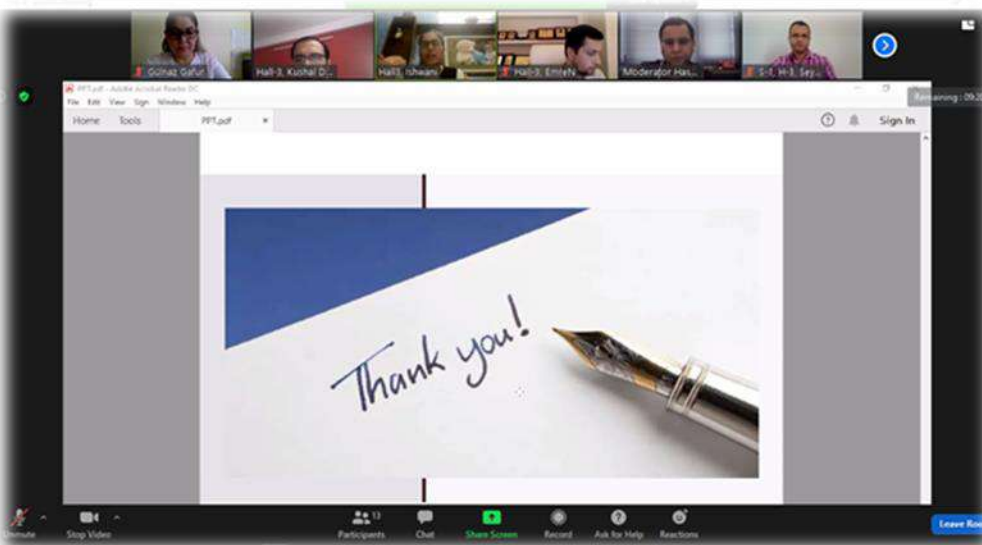
- Every sector of the economy has an important role to play in the India's economy. Even during these hard times of covid-19 every sector has important role to play. However, these lockdowns have made the situations worse and every organization have to deal with different issues. Even the issue of mental health of their employees has become a matter of great concern.
- Isolation from society, the inflow of bleak coronavirus-related information, the fear of contracting Covid-19 patients, the increasing economic recession and the increasing feelings of helplessness are all impacting people's mental health. The connection between sleep and mental health is very closely linked to each other.
- Sleep disturbances during these times have also lead to widespread problems of mental health in individuals. The greater awareness and constantly thinking of the problems arising from awareness from social media platforms was increasing the distress. These are leading to widespread problems of stress, anxiety, depression and other mental health concerns. Whether individuals work from home or from banks.

A woman with dark hair tied back, wearing a white top, is speaking in a Zoom meeting. The background shows a wall with two framed pictures. The Zoom interface at the top shows several other participants in a grid view.

ÖZEL TASARIM MASKLAR - SPECIAL DESIGN MASKS

- Özel Tasarım maskları tasarımcıların düşüncelerinden ortaya çıkan masklardır.
- Kullanım konusunda, kullanıcı ile iletişimini ile önemli olabilir.
- Başu bütünlüyle içine alın,
- Yüzün kabını çıkarmı gibi olan,
- İkiya gibi uşolararası bir kuruma özet,
- Boyundan geçerek başa dönen,
- Boyundan gir birasma kadar esnek bir malzeme ile ağız ve burnu saran,
- Sertta bir hava deposu ile destek veren,
- Güçlükle birleşen vb.,
- Maskler farklılık yaratılır.

CONFERENCE GALLERY



**II. INTERNATIONAL CONFERENCE ON
COVID-19 STUDIES**

AUGUST 26-27, 2020

PARIS, FRANCE

CONGRESS PROGRAM

Online (with Video Conference) Presentation

August 26.2020- PRESENTATIONS

**Meeting ID: 832 4587 2165
Passcode: 115408**

August 27.2020- PRESENTATIONS

**Meeting ID: 893 5960 8664
Passcode: 549476**



IMPORTANT, PLEASE READ CAREFULLY

To be able to make a meeting online, login via <https://zoom.us/join> site, enter ID instead of “Meeting ID or Personal Link Name” and solidify the session.

- The Zoom application is free and no need to create an account.
- The Zoom application can be used without registration.
- The application works on tablets, phones and PCs.
- Moderator - responsible for the presentation and scientific discussion (question-answer) section of the session.

Points to Take into Consideration - TECHNICAL INFORMATION

- ❖ Make sure your computer has a microphone and is working.
- ❖ You should be able to use screen sharing feature in Zoom.
- Attendance certificates will be sent to you as pdf at the end of the congress.
- Requests such as change of place and time will not be taken into consideration in the congress program.
- If you think there are any deficiencies / spelling mistakes in the program, please inform by e-mail until June 30, 2020 (17:00) at the latest.
- **(All speakers required to be connected to the session 15 min before the session starts)**
- Moderator is responsible for ensuring the smooth running of the presentation, managing the group discussion and dynamics.
- **Before you login to Zoom please indicate your name_surname and HALL number, exp. Hall 1, Alpaslan BOZKURT**

(All speakers required to be connected to the session **15 min before** the session starts)
Moderator is responsible for ensuring the smooth running of the presentation, managing the group discussion and dynamics.

SESSION-1, HALL-1

Meeting ID: 832 4587 2165

Passcode: 115408

26.08.2020	Time 10:00-12:30	MODERATOR – Asst. Prof. Dr. Petek TOSUN
Authors	Affiliation	Topic title
Arş. Gör. Nihan DEĞİRMENCİOĞLU AYDIN	Pamukkale Üniversitesi	COVID-19 SALGINI SEBEBİYLE YÜRÜRLÜĞE GİREN 7226 SAYILI KANUN'UN GEÇİCİ 1. MADDESİNİN ÇEKTE İBRAZ SÜRELERİNE UYGULANMASI SORUNU
Dr Deepanjana VARSHNEY	CMS Business School, Jain University	IMPACT OF COVID-19 ON HIGHER ONLINE EDUCATION: AN EXAMINATION
Asst. Prof. Dr. Petek TOSUN	MEF University, Faculty of Economics	CUSTOMER RELATIONSHIP MANAGEMENT IN THE COVID-19 OUTBREAK FROM A SALESPERSON PERSPECTIVE
Aniruddha BHOWMICK Dr. Pinaki Ranjan BHATTACHARYYA Dr. Mridanish JHA	The ICFAI University Calcutta Business School	HOW COVID-19 AND ECONOMIC LOCK DOWN MAY CHANGE ALLOPATHIC OTC MEDICINE MARKET SCENARIO: AN INTROSPECTION ANALYSIS BASED ON KOLKATA, INDIA
Doç. Dr. Murat KOÇYİĞİT Melek AKTAŞ	Necmettin Erbakan Üniversitesi	COVID-19 SÜRECİNDE KULLANIM VE BAĞIMLILIK MODELİ KAPSAMINDA SOSYAL MEDYA KULLANIMININ İNCELENMESİ
Dr. Ritu TALWAR Dr. Priyanka AGARWAL	NDIM, New Delhi Amity Business School, AUUP, Noida	STUDY OF ISSUES AND CHALLENGES OF MIGRANT WORKERS DURING PANDEMIC
Abdullahi BALA ADO Sa'adatu B. ADAM Isyaku A. SAMA'ILA	Universiti Sultan Zainal Abidin, Malaysia Bayero University, Kano Universiti Utara Malaysia	COVID-19 PANDEMIC AND THE FUTURE OF AUDITING: A CONCEPTUAL REVIEW OF LITERATURE
Dr. Mridanish JHA	ICFAI University Jharkhand, Ranchi India	NEW VISTAS FOR CONNECTING WITH CONSUMERS IN THE COVID ERA

SESSION-1, HALL-2

Meeting ID: 832 4587 2165

Passcode: 115408

2020	Paris Time 10:00-12:30	MODERATOR - Dr. Mandeep KAUR
Authors	Affiliation	Topic title
Dr Öğr.Üy. Nazmi ÖZER	Adana Şehir Eğitim Araştırma Hastanesi	COVID-19 PANDEMİSİ VE ÖNCESİ, AKUT APANDİSİTTE, BİLGİSAYARLI TOMOGRAFİ GÖRÜNTÜLERİNİN DEĞERLENDİRİLMESİ
Dr.Mandeep KAUR Ms.Tavanameet KAUR	Punjabi University Patiala	VIRTUAL ACADEMIC STRESS AMONG SCHOOL STUDENTS DURING COVID-19 PANDEMIC
Hatice ÇOLAK Esra Tansu SARIYER Ekin ÇEVİK	Üsküdar Üniversitesi, Sağlık Bilimleri Fakültesi	OBEZİTE, COVID-19 İÇİN BİR RİSK FAKTÖRÜ MÜDÜR?
Sanjana PURDHANI Ms. Tamanna SAXENA	BA+MA Clinical Psychology Amity University, Uttar Pradesh	SPIRITUALITY, WELL BEING AND ANXIETY AS THE CORRELATES OF THE FEAR RELATED TO CORONA PANDEMIC IN YOUNG ADULTS
Dr. Öğr. Üyesi Mehmet DOĞAN	Halil Bayraktar SHMYO, Erciyes Üniversitesi, Kayseri	ÜLKELERİN SAĞLIK HARCAMALARINA GÖRE COVID-19'UN DEĞERLENDİRİLMESİ
Zainab Hayyat RAJA Mehwish SHAHEED	Margalla Institute of Health Sciences, Rawalpindi, Pakistan	MISINFORMATION ABOUT COVID-19 AND DENTISTRY ON THE INTERNET
Dr. Öğr. Üyesi Nevra ALKANLI Dr. Öğr. Üyesi Arzu AY MSc Suleyman Serdar ALKANLI	T.C. Haliç Üniversitesi, Tıp Fakültesi Trakya Üniversitesi, Tıp Fakültesi İstanbul Üniversitesi, İstanbul Tıp Fakültesi	İNTERLÖKİN-18 GEN VARYASYONLARININ SARS-COV-2 (COVID-19) İLE İLİŞKİLİ İDİYOPATİK PULMONER FİBRÖZ HASTALIĞI GELİŞİMİNDEKİ ROLLERİNİN İNCELENMESİ
Öğr.Gör. Hatice TETİK METİN Dr.Öğr.Üyesi Feride ENGİN YİĞİT	Bitlis Eren Üniversitesi Sağlık Hizmetleri MYO Hasan Kalyoncu Üniversitesi	COVID-19 PANDEMİ SÜRECİNİN KADIN SAĞLIĞINA ETKİLERİ
Dr. Tarika SANDHU Jasvir KAUR	Punjabi University Patiala	COVID ANXIETY AND INSOMNIA-PREDICTIVE ROLE OF COGNITIVE EMOTION REGULATION STRATEGY
Mohammed Feroz ALI Dr. Mohammad AHSAN Dr. Prasanna B. K	Mangalore University, Karnataka India College of Applied Medical Sciences, Imam Abdulrahman Bin Faisal University; Dammam (KSA)	PSYCHOLOGICAL EFFECTS OF THE CORONAVIRUS DISEASE PANDEMIC ON PRIMARY SCHOOL TEACHERS

SESSION-1, HALL-3

Meeting ID: 832 4587 2165

Passcode: 115408

26.08.2020	Paris Time 10:00-12:30	MODERATOR- Dr. Öğr. Üyesi Hasan ÇİFTÇİ
Authors	Affiliation	Topic title
Dr. Emre NALCACIGIL	Institute of Social Sciences, Selcuk University, Turkey	AN EVALUATION ON THE EFFECT OF COVID 19 PANDEMIC ON BUSINESS MANAGEMENT AND THE CRISIS PROCESS
Mr. Kushal DEY Dr. Shivaji BANERJEE Dr. Pinaki Ranjan BHATTACHARYYA	Axis Electrical Components (I) Pvt. Ltd. St Xavier's College Autonomous Kolkata Calcutta Business School	OPPORTUNITIES AND OPERATIONAL CHALLENGES FOR INDIAN MSME'S IN THE NEW NORMAL: A TRIANGULATION EFFECT
Saham ALISMAIL Mohammad Rishad FARIDI	Alasala College, Dammam, Kingdom of Saudi Arabia Prince Sattam Bin Abdulaziz University, Al Kharj	HARNESSING THE POWER OF "IRTIQAA" DURING COVID-19. AN INITIATIVE INSPIRED BY VISION 2030, KINGDOM OF SAUDI ARABIA
Dr. Mandeep KAUR Inderbir SIDHU	Punjabi University, Patiala	WOMEN IN DUAL JOBS; BALANCING WORK AND HOME
Ishwani Dr. Parmod Kumar AGGARWAL	Punjabi University, Patiala, Punjab	COVID- 19 IMPACTING MENTAL HEALTH OF THE WORKERS IN VARIOUS SECTORS OF INDIA
Asst. Prof. Dr. Tuğba SARI	Konya Food and Agriculture University, Faculty of Social Sciences and Humanities	THE IMPACTS OF COVID-19 PANDEMIC ON SUPPLY CHAINS
Doç. Dr. Seyfi ŞEVİK	Hitit University, Vocational School of Technical Sciences	AN EARLY IMPACT ASSESSMENT OF THE NEW CORONAVIRUS (COVID-19) OUTBREAK ON THE TURKISH ENERGY SECTOR
Dr. Abdullah SETHAR Rasheed Ahmed JUMANI Dr. Faiz Muhammad SHAIKH	Deputy Director Live Stock Government of Sindh Pakistan Planning division Government of Sindh SZABAC-Dokri	IMPACT OF LOCK-DOWN OF COVID-19 ON LIVE STOCK IN RURAL SINDH
Shreshtha CHOWDHURY	Mphil Research Scholar, Sociology	SCHOOL CLOSURE AND CRISIS OF ADOLESCENT GIRLS IN COVID-19
YETIS Sazi Murat Ziya CAKICI	Pamukkale University, Faculty of Engineering Bayburt University, Faculty of Engineering	INVESTIGATION OF THE EFFECTS OF COVID-19 PROCESS ON TRANSPORTATION BEHAVIORS AND PREFERENCES

SESSION-2, HALL-1

Meeting ID: 832 4587 2165

Passcode: 115408

26.08.2020	Paris Time 13:00-15:30	MODERATOR- Assistant Professor Pyali CHATTERJEE
Authors	Affiliation	Topic title
Avukat Seyyal YILDIRIMVURAN Öğretim Görevlisi Ulaş Koray MİLANLIOĞLU Avukat Suat ÇAKAN	Van Barosu Van Yüzüncü Yıl Üniversitesi	COVID-19 PANDEMİ SÜRECİNİN TÜRK YARGI SİSTEMİNE ÜZERİNE ETKİLERİ
Assistant Professor Pyali CHATTERJEE	MATS University, Raipur, Chattisgarh, India	A CRITICAL ANALYSIS OF THE EMERGING CONCEPT OF WORK FROM HOME IN EDUCATION SECTOR DURING COVID-19 LOCKDOWN IN REFERENCE TO THE MATERNITY BENEFIT (AMENDMENT) ACT, 2017
Dr. Charu DUREJA	Rayat College of Law(Affiliated to Panjab University, Chandigarh)	CHALLENGES OF FAKE NEWS AND COVID-19 LOCKDOWN
Khalida NADEEM Nadeem AHMED Dr. Engineer Hussain SALEEM	University of Karachi, Pakistan	PERSISTENT USE OF GADGETS AND INTERNET IN LOCKDOWN ENDANGERS CHILDHOOD?
Aryan DHAWAN	RAYAT COLLEGE OF LAW, RGI, ROPAR, PUNJAB, INDIA	IMPACT OF CORONA VIRUS ON BUSINESS (WITH SPECIAL REFERENCE TO INDIA)
Prabhjot SINGH Devyani GUPTA	Galgotias University, Greater Noida	ENVIRONMENT: THE BASIC NEED, IMPORTANCE AND STRIVE TO SAVE FOR HUMAN BEINGS
Araştırma Görevlisi Hasan Ali GÜÇLÜ	Ufuk Üniversitesi	SAĞLIK TURİZMİNİN HUKUKEN İNCELENMESİ
Mohammed MUQTADIR Mrs. Masarrat Jahan QUADRI Bhumika SHARMA	M.M. Public School, Pasonda, Ghaziabad, U.P., INDIA Himachal Pradesh University, Shimla, H.P., INDIA	IMPLEMENTATION OF CONSTITUTIONAL MORALITY TO TACKLE COVID-19 VIS-À-VIS THE HOLY QURAN
Dr. Prashna SAMADDAR Victor NAYAK	Galgotias University, Greater NOIDA, India	IMPACT OF COVID-19 ON SPORTS CULTURE: AN ANALYSIS WITH RESPECT TO INTERNATIONAL EVENTS IN SOUTH ASIA
Assistant Professor Ashmika AGRAWAL Adv. Keyur TRIPATHI	Galgotias University, Greater Noida Delhi High Court	GLOBAL IMPACT OF COVID-19 ON EDUCATION SECTOR

SESSION-2, HALL-2

Meeting ID: 832 4587 2165

Passcode: 115408

26.08.2020	Paris Time 13:00-15:30	MODERATOR- Prof. Dr. Vefa TAŞDELEN
Authors	Affiliation	Topic title
Öğr. Gör. Dr Günseli GÜMÜŞEL	Atılım Üniversitesi, Sosyal Bilimler Ortak Dersler Bölümü, Ankara, Türkiye	OSMANLI İMPARATORLUĞUNDA SALGIN HASTALIKLAR: COVID-19 KARŞILAŞTIRMA DÜZLEMİNDE GÜNDELİK HAYATA YANSIMALARI VE UYGULAMALAR
Prof. Dr. Vefa TAŞDELEN	Kırgızistan Türkiye Manas Üniversitesi - Yıldız Teknik Üniversitesi	KORONAVİRÜS BAĞLAMINDA DOĞA VE KÜLTÜR KARŞITLIĞI
Zehra Cansu RENDECİ	Doğuş University, Istanbul, Turkey	THE SPECTACLE OF QUARANTINE DAYS IN TURKEY: A CONTENT ANALYSIS ON TURKISH CONSUMERS
Doç. Dr. Mehmet DALKILIÇ Yusuf Kenan KALKAY	Karamanoğlu Mehmetbey Üniversitesi Ereğli Belediyesi	SPORDA ŞİDDET VE SALDIRGANLIK
Prof. Dr. Emel ARSLAN Asst. Prof. Canan YILDIZ ÇİÇEKLER RA Merve TEMEL	Necmettin Erbakan University	PARENTAL VIEWS ON THE LIVES OF PRESCHOOL CHILDREN IN THE COVID-19 PANDEMIC PROCESS
Dr. Emilia NERCISSANS Shaolee MAHBOOB	University of Tehran, Iran	EFFECT OF COVID-19 PANDEMIC ON THE MIGRANT LABORERS AND FUTURE LABOUR MARKET OF BANGLADESH: CASES FROM IRAN AND SOME OTHER COUNTRIES
Dr.Faruk TÜRKÖZÜ	İnternational Cyprus University	COVID-19 A GLOBAL BIOLOGICAL WEAPON?
Dr. Öğretim Üyesi Selahattin YAKUT	Yozgat Bozok Üniversitesi İlahiyat Fakültesi	PANDEMİ SÜRECİNİN ÜNİVERSİTE ÖĞRENCİLERİ ÜZERİNDEKİ PSİKOSOSYAL ETKİLERİNİN BAZI DEMOGRAFİK DEĞİŞKENLER AÇISINDAN İNCELENMESİ
Ayokunmi O. OJEBODE Oluwabusayo S. OKUNLOYE	Ajayi Crowther University, Nigeria Texas Tech University, Lubbock, Texas	MEDICAL ETHNOGRAPHY: DISMANTLING CORONAVIRUS (COVID-19) THROUGH MYTHICAL (RE)CONSTRUCTION AND SOCIAL MOBILISATION IN NIGERIA
Asts. Prof. Canan YILDIZ ÇİÇEKLER Assoc. Prof. Devlet ALAKOÇ PİRPIR Prof. Dr. Neriman ARAL	Necmettin Erbakan University Selçuk University Ankara University	PARENT AND TEACHER VIEWS REGARDING SITUATIONS EXPERIENCED IN EDUCATION DURING THE COVID-19 PANDEMIC PROCESS

SESSION-2, HALL-3

Meeting ID: 832 4587 2165

Passcode: 115408

26.08.2020	Paris Time 13:00-15:30	MODERATOR- Dr. Meenakshi BANSAL
Authors	Affiliation	Topic title
Shubhankar MAHAPATRA Pinaki Ranjan BHATTACHARYYA Subhajt Basu CHOWDHURY	CMS, JIS College of Engineering Calcutta Business School	STUDENTS' PERCEPTION TOWARDS EDUCATION IN THE NEW NORMAL
Parul VERMA Prof. L.C. MALLAIAH	Babasaheb Bhimrao Ambedkar University, Lucknow	AN ANALYSIS OF IMPINGEMENT OF COVID-19 ON INDIAN ECONOMY
Dr. Vijay SINGH	Himachal Pradesh University, Shimla (India)	NEED OF INTERDISCIPLINARY RESEARCH DURING CORONA PANDEMIC (COVID-19): A STUDY
Dr. Anju Lis KURIAN Dr. C. VINODAN	Mahatma Gandhi University, P.D Hills, Kottayam, Kerala, India	GLOBAL GOVERNANCE IN THE POST COVID-19 WORLD ORDER
Dr.Niteesh Kumar UPADHYAY Assistant Professor Sugandha CHAUDHARY	Galgotias University, India	COVID-19 LOCKDOWN, 'REVERSE TRAFFICKING' OF CHILD LABOUR
Qodirov MAFTUN Wajeeda BANO	Mangalore University, Karnataka, India Tajik National University, Dushanbe, Tajikistan	IMPACT OF CORONAVIRUS DISEASE ON RURAL DEVELOPMENT: A STUDY FROM RURAL AREAS OF THE REPUBLIC OF TAJIKISTAN
Dr. Meenakshi BANSAL	J.V.M.G.R.R. College, Charkhi Dadri, Haryana, India	IMPACT OF COVID-19 ON THE COLLEGE STUDENTS OF RURAL AREAS IN INDIA
Sugandha CHAUDHARY	Galgotias University	NEED FOR A SUI-GENERIS LEGISLATION FOR PROTECTION OF TRADITIONAL KNOWLEDGE

SESSION-3, HALL-1

Meeting ID: 832 4587 2165

Passcode: 115408

26.08.2020	Paris Time 16:00-18:30	MODERATOR Lec. Dr. Soufi Moazemi GOUDARZI & Dr. Hasan ÇİFÇİ
Authors	Affiliation	Topic title
Kubra ALIYEVA	Honored Arts Worker (Baku, Azerbaijan)	THE IMAGE OF THE DRAGON IN AZERBAIJANI ARCHITECTURE AND ART
Ayşem G. BAŞAR Pınar CARTIER	Yeditepe University, Faculty of Architecture	COVID-19- INSPIRATION FOR NEW PRODUCT DESIGN IN INDUSTRIAL DESIGN EDUCATION
Martin Kudwo AKOTÉY	Valley View University, Accra, Ghana – West Africa	COVID -19 AND HIGHER EDUCATION IN GHANA – THE WAY FORWARD AFTER THE CHAOS
Dr.Öğr.Üyesi Seyit Mehmet BUÇUKOĞLU Arş.Gör. Gonca SÖNMEZ	Maltepe Üniversitesi	20. ve 21. YÜZYIL AFİŞ TASARIMLARINDA “PANDEMİ”
Leila Moslemi NAENI Falana Justina N. Alireza Ahmadian Fard FINI	University of Technology Sydney, School of Built Environment Federal Polytechnic Ile Oluji, School of Engineering	CONVID - 19 AND SUICIDE BEHAVIORS: A REVIEW ON THE MENTAL HEALTH IMPLICATION OF ECONOMIC CONTRACTION ON AUSTRALIAN CONSTRUCTION INDUSTRY WORKERS
Lec. Dr. Soufi Moazemi GOUDARZI	Başkent University, Faculty of Fine Arts	THE IMPACT OF COVID-19 ON THE FUTURE OF SHOPPING MALLS
Prof. Dr. Seçil ŞATIR	Fatih Sultan Mehmet Vakif University	NEEDS MAKE PEOPLE MORE CREATIVE. COVID- 19 AND URGENT NEEDS
Pınar CARTIER Ayşem G. BAŞAR	Yeditepe University, Faculty of Architecture	INDUSTRIAL DESIGN SOLUTIONS TO PREVENT COVID-19- CONTAMINATION IN CAMPUS INTERIOR AND OUTDOOR SPACES DURING THE NEW NORMALIZATION PROCESS
Assist. Prof Dr. Bilgen DÜNDAR	Beykent University	EĞİTİMİN TAMİRATI

SESSION-3, HALL-2

Meeting ID: 832 4587 2165

Passcode: 115408

08.2020	Paris Time 16:00-18:30	MODERATOR- Assoc. Prof. Nilgun ULUTASDEMİR
Authors	Affiliation	Topic title
Öğr. Grv. Ayşe ELKOCA Dr. Öğretim Ü. Çağla YİĞİTBAŞ Dr. Öğretim Ü. Handan ÖZCAN	Gümüşhane Üniversitesi Giresun Üniversitesi İstanbul Sağlık Bilimleri Üniversitesi	COVID-19 HASTALARINA BAKIM VEREN HEMŞİRELERDE ÖZ-YETERLİLİK
Nagendra Kumar JAIN	IGTAMSU University , MSSV (INDIA)	BHAGWAT GITA SPIRITUALITY MEETS YOGA
Esra Tansu SARIYER Arş. Gör. Ekin ÇEVİK Hatice ÇOLAK	Üsküdar University	COVID-19 AND PROBIOTICS
Dr. Öğr. Üyesi Aylin SEYLAM KÜŞÜMLER Dyt. Ayça ÇELEBİ	İstanbul Okan Üniversitesi, Sağlık Bilimleri Fakültesi	19-65 YAŞ ARALIĞINDAKİ YETİŞKİMLERİN COVID-19 PANDEMİ SÜRESİNCE PROPOLİS VE BAL ÜRÜNLERİ KULLANIM DURUMUNUN DEĞERLENDİRİLMESİ
Arş. Gör. Didem YÜKSEL Doç. Dr. Figen YARDIMCI Dr. Öğr. Üye. Ayşe Sevim ÜNAL	Ufuk Üniversitesi Ege Üniversitesi Hemşirelik Fakültesi	NEWBORNS AND NURSING CARE IN COVID 19 PANDEMIC PROCESS
Farhana TABASSUM Assistant Professor Hina RAFIQUE Muhammad MOAZZAM Sana FAROOQ Syeda Rida Shah Mehak SHERAZI	The University of Lahore, Pakistan, Faculty of Allied Health Sciences Govt.P.G.College (W) Satellite Town. Gujranwala Pakistan	EXPLORING DIGITAL PEDAGOGICAL CHALLENGES FACED BY EDUCATORS IN HIGHER EDUCATION INSTITUTES OF PAKISTAN DURING COVID-19 PANDEMIC
Nilgun ULUTASDEMİR Sureyya YİGİTALP RENCBER Ebru OZTURK COPUR	Gümüşhane University Batman University Kilis 7 Aralık University	PSYCHOLOGICAL TRACES OF THE CORONAVIRUS (COVID-19) OUTBREAK IN THE SOUTHEASTERN ANATOLIA REGION
Dr. Öğretim Ü. Handan ÖZCAN Öğr. Grv. Ayşe ELKOCA Dr. Öğretim Ü. Çağla YİĞİTBAŞ	Gümüşhane Üniversitesi Giresun Üniversitesi İstanbul Sağlık Bilimleri Üniversitesi	COVID-19 SÜRECİNİN ÜREME SAĞLIĞI ÜZERİNDEKİ ETKİLERİ
Tariel LOMIA Ekaterine LOMIA	Tbilisi State University (Tbilisi, Georgia) Caucasus International University (Tbilisi, Georgia)	GEORGIA'S TREMENDOUS SUCCESS TO FIGHT AGAINST COVID-19: WORLDWIDE ATTENTION AND OUTSANDING ACHIEVEMENTS

27.08.2020
SESSION-1, HALL-1

Meeting ID: 893 5960 8664
Passcode: 549476

27.08.2020	Paris Time 10:00-12:30	MODERATOR- Dr. Öğr. Üyesi H. Vedat AKMAN
Authors	Affiliation	Topic title
Asst.Prof.Dr. Cüneyd Ebrar LEVENT	Istanbul Aydın University	ARE THE STOCK MARKETS IN EMERGING ECONOMIES ABLE TO COPE WITH THE UNCERTAINTY CAUSED BY COVID-19?
Dr. Faiz Muhammad SHAIKH Kashaf SHAIKH Ali Raza MEMON	SZABAC-Dokri SZABIST-Larkana	IMPACT OF COVID-19 CARONAVIRUS ON POVERTY IN PAKISTAN: A CASE STUDY OF SINDH
Dr. Öğr. Üyesi H. Vedat AKMAN	Beykent Üniversitesi	COVID-19 VE KAYIT DIŞI EKONOMİNİN ETKİLERİ ÜZERİNE BİR İNCELEME
Prof. Dr. Arzu ŞENER Arş. Gör. Uzm. Sevde YÜCEL Uzm. Aysel Anıl GÜNDÜZALP	Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi	COVID-19 SÜRECİNDE TÜKETİCİLERİN FİNANSAL DURUM VE DAVRANIŞLARINA İLİŞKİN BİR DEĞERLENDİRME
Vaishakhi THAKER Dr.Prachi V. MOTIYANI	Gujarat University, Ahmedabad, India	THE EXODUS OF WORKERS IN INDIA AND COVID-19
Ayşe ERSOY YILDIRIM Nazlı KARAOĞLU	Malatya Turgut Özal Üniversitesi, İşletme ve Yönetim Bilimleri Fakültesi	COVID-19 PANDEMİSİNDE AĞIZDAN AĞIZA TÜKETİCİ İLETİŞİMİ
Dr. Hilmi TÜRKYILMAZ	Dokuz Eylül University	THE PERSPECTIVE OF THE TURKISH SOCIETY ON THE CLOSING OF MOSQUES AND MASJIDS IN THE PANDEMIC PERIOD
Dr.Faiz Muhammad SHAIKH Shabana AKHTAR Fida-e-Zehra Dr.Abdullah SETHAR	SZABAC-Dokri SZABIST-Larkana SZABIST Larkana Deputy Director Live Stock Government of Sindh Pakistan	IMPACT OF LOCK-DOWN ON SOCIAL ISSUES IN SINDH: A CASE STUDY OF LARKANA
Assistant Professor Smita LAHKAR Assistant Professor Bandana CHOWDHURY Assistant Professor Raju SAIKIA	Gauhati University, Guwahati, India Lanka Mahavidyalaya, Lanka, India	IMPACT OF NOVEL CORONAVIRUS ON EDUCATIONAL INSTITUTIONS: A STUDY ON THE STUDENTS OF ASSAM
Prof. Dr. Alexander EREMICHEV Ass. Prof. Dr. Mehmet Nesip ÖĞÜN Instructor Marif ASLANOV	University of Mediterranean Karpasia, North Cyprus	TURKISH AIRLINES AND AEROFLOT OPERATIONS DURING COVID-19 QUARANTINE

SESSION-1, HALL-2

Meeting ID: 893 5960 8664

Passcode: 549476

27.08.2020	Paris Time 10:00-12:30	MODERATOR- Assoc. Prof. Nilgun ULUTASDEMIR
Authors	Affiliation	Topic title
Arş. Gör. E. ÇEVİK H. ÇOLAK E. T. SARIYER	Üsküdar Üniversitesi, İstanbul, Türkiye	COVID-19 TEDAVİSİNDE D VİTAMİNİ SUPLEMENTASYONU
Nilgun ULUTASDEMİR Sureyya YİGİTALP RENCBER Ebru OZTURK COPUR	Gümüşhane University Batman University Kilis 7 Aralık University	PSYCHOLOGICAL TRACES OF THE CORONAVIRUS (COVID-19) OUTBREAK IN TURKEY
Öğr. Gör. Gülşah TOLLU	Mersin Üniversitesi, Teknik Bilimler MYO	COVID-19 HASTALARINDA İNTERLÖKİN-6 RESEPTÖR ANTAGONİSTİ TOCİLİZUMAB
Betül CAVLAN Assoc. Prof. Dr. Ayşe Handan DÖKMECİ	Tekirdağ Namık Kemal University	EVALUATION OF COVID-19 PANDEMIA IN TERMS OF BIOTERRORISM
PhD. Dr. Namık BİLİCİ PhD. Dr. İlknur Kulcanay ŞAHİN PhD. Dr. Senanur CAN Mustafa CENGİZ Professor. Dr. Ömer Faik ERSOY Professor. Dr. Adnan AYHANCI	Karabük University Kırıkkale University Eskişehir Private Yesevi Vocational and Technical Anatolian High School Siirt University Karabük University Eskişehir Osman Gazi University	AZİTROMİSİNİN NANOBİYOTEKNOLOJİK FARMASÖTİK İNHALER FORMÜLASYONUNUN GELİŞTİRİLMESİ
Asst. Prof. Denizhan KARIŞ	Istinye University, Medical Faculty	THE EFFECTS OF COVID-19 ON CARDIOVASCULAR SYSTEM AND HEMORHEOLOGIC PARAMETERS
Doç. Dr. Meral EKİM Prof. Dr. Hasan EKİM	Bozok Üniversitesi	COVID-19 HASTALARINDA BESLENME BİYOKİMYASININ ÖNEMİ
Özge KARAKAYA SUZAN Nursan ÇINAR	Sakarya University, Faculty of Health Science	BREASTFEEDING SAFELY IN CORONAVIRUS PANDEMIC
Dr. Öğr. Üyesi Muhammet BAYRAKTAR	Niğde Ömer Halisdemir Üniversitesi	TEMMUZ AYI COVID-19 GÜNLÜK DURUM RAPORLARI VERİLERİNE GÖRE TÜRKİYE'DEKİ DURUM

SESSION-2, HALL-1

Meeting ID: 893 5960 8664

Passcode: 549476

27.08.2020	Paris Time 13:00-15:30	MODERATOR - Dr. Froilan D. MOBO
Authors	Affiliation	Topic title
Öznur YILDIRIM Prof. Dr. Oğuz FINDIK	Karabük Üniversitesi, Mühendislik Fakültesi	DERİN ÖĞRENME YÖNTEMLERİ KULLANILARAK TÜRKİYE' DE COVID-19 YAYILIMI TAHMİNİ
Professeur G.U. KHAJIYEVA Chercheur A. DUZENOV	"Turan" University	L'ASIE CENTRALE ET LE GRAND JEU 2.0: NOUVEAUX DEFIS ET ENJEUX
Dr Ashwan A. ABDULMUNEM	University of Kerbala	CORONA VIRUS DETECTION USING IMAGE SEGMENTATION TECHNIQUES
Dr.Mohd. Iqbal SHEIKH Dr. Mir HAMEEDA	Cluster University Srinagar, J&K, India	EFFECTIVENESS OF MODERN TECHNOLOGY IN REDUCING THE CONTAGIOUS CLOUT OF COVID-19
Aakanksha KISHORE KM Kamna Rini	New Academic Block University of Delhi Jaipuria School of Business, Indirapuram, Ghaziabad	CREDIT FINANCING DURING COVID-19 CRISIS AND INCREASING BAD DEBTS IN IMPERFECT QUALITY SCENARIO
Olayinka AKINTAYO	African Chess School	SHAKABULAN EDUCATIONAL SYSTEM (S. E. S)
Seda Nur YILMAZ Canan YILMAZ Ayça İPEKLİ	Kocaeli University, Engineering Faculty	THE IMPACT OF CORONA VIRUS ON SUPPLY CHAIN
Dr. Froilan D. MOBO	Philippine Merchant Marine Academy	THE IMPACT OF VIDEO CONFERENCING PLATFORM IN ALL EDUCATIONAL SECTORS AMIDST COVID-19 PANDEMIC
S.A.M. Shafwat AMIN Farzad HOSSAIN Israt Jahan AKHI Faijah NOSHIN Md Ashraf Hossain BHUIYAN	Military Institute of Science and Technology Islamic University of Technology Bangladesh Health Professions Institute Bangladesh Institute of Health Sciences Hospital	STATUS AND HEALTHCARE FACILITIES OF COVID-19 VIRUS IN BANGLADESH
Nikita Sanjay PATIL Instr. Dr. L.N. Ece ARIBURUN KIRCA	The Centre for Environmental Planning and Technology University (CEPT), Ahmedabad - INDIA Istanbul Technical University (ITU)	IMPACT OF FURNITURE ON THE QUARANTINE PSYCHOLOGY

SESSION-2, HALL-2

Meeting ID: 893 5960 8664

Passcode: 549476

27.08.2020	Paris Time 13:00-15:30	MODERATOR - Dr. Shaveta Thakur
Authors	Affiliation	Topic title
Elif KEMALOĞLU-ER	Adana Alparslan Türkes Science and Technology University	EFFECTS OF THE COVID-19 PANDEMIC ON TRANSLATION EDUCATION
Dr. Shaveta Thakur	R.R.M.K. Arya Mahila Mahavidyalaya, Pathankot	IMPACT OF THE COVID-19 PANDEMIC ON MENTAL HEALTH AND QUALITY OF LIFE
Sufia SULTANA Richa RASTOGI	King Khalid University	COPING WITH COVID-19: STRATEGIES AND OPPORTUNITIES OF LEARNING AND INSTRUCTION FOR EFL LEARNERS
Assistant Professor Rizwana WAHID Assistant Professor Oveesa FAROOQ	King Khalid University, Abha, Saudi Arabia Govt. College for Women, M.A. Road, Cluster University, Srinagar	JUSTIFYING ONLINE ASSESSMENT IN THE TIMES OF COVID-19: TEACHERS' VIEWS
Alev-SAVTAK Gülce KARALI Fenise Selin DEMİR Müberra	Biruni University	COVID-19 SURVEY FOR SPEECH AND LANGUAGE THERAPISTS
Dr. PRATIBHA	Kishanlal Public College, Rewari	PANDEMIC AND POPULAR CULTURE: PERSPECTIVES AND TRENDS
Dr. Öğr. Ü. Gülşen TORUSDAĞ	Van Yüzüncü Yıl Üniversitesi	COMME ACTES PERLOCUTOIRES CEUX QUE LES DISCOURS MÉDIATIQUES SUR PANDÉMIE DE COVID-19 A AJOUTÉS À NOTRE LANGAGE QUOTIDIENNE ET VIE
Associate Professor Deepanjali MISHRA	KIIT University, India	IMPACT OF LOCKDOWN ON EDUCATION DURING COVID-19 IN INDIA
Sameera Sultan BALOCH	Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia	THE UTILITY OF QR CODES AMIDST THE PANDEMIC (CORONA VIRUS) IN THE FIELD OF ENGLISH LANGUAGE TEACHING
Sarika MOON	Tata Institute of Social Sciences, Hyderabad off campus	IMPACT ON WORKMAN SAFETY & CARE FROM COVID-19 PANDEMIC INFECTION AT WORKPLACE IN INDIAN MANUFACTURING SECTOR

SESSION-3, HALL-1

Meeting ID: 893 5960 8664

Passcode: 549476

2020	Paris Time 16:00-18:30	MODERATOR – Assoc. Prof. Nilgun ULUTASDEMİR
Authors	Affiliation	Topic title
Muhammet ÖRNEK Hasan BAĞCI Güven BEKTEMÜR Kürşad NURİ BAYDİLİ	Ankara Yıldırım Beyazıt University Yüksek İhtisas University, Faculty of Health Sciences University of Health Sciennes	THE EFFECT OF SOCIAL MOBILITY ON THE TRENDS OF INCREASE IN CASES DURING THE COVID-19 PANDEMIC
Nilgun ULUTASDEMİR Sureyya YIGITALP RENCBER Ebru OZTURK COPUR	Gümüşhane University Batman University Kilis 7 Aralık University	PSYCHOLOGICAL TRACES OF THE CORONAVIRUS (COVID-19) OUTBREAK ON ELDERLY LIVING IN TURKEY
Ms. Sadaa PANDOYI Ms. Samiksha JAIN	Amity University, Noida, India	IS AUTHORITATIVE PARENTING STYLE BETTER FOR YOUR TEENAGER'S ACADEMICS, WELL-BEING AND MENTAL HEALTH? - A SYSTEMATIC REVIEW
Dr. Öğr. Üyesi Merve Şeyda KARAÇİL ERMUMCU Dr. Öğr. Üyesi Nilgün SEREMET KÜRKLÜ Dr. Öğr. Üyesi Hülya KAMARLI ALTUN	Akdeniz Üniversitesi Sağlık Bilimleri Fakültesi	PANDEMİ (COVID-19) DÖNEMİNDE OKUL ÇAĞI ÇOCUKLARI VE ADÖLESANLARIN BESLENME ALİŞKANLARININ VE BESİN DESTEĞİ KULLANIMININ DEĞERLENDİRİLMESİ
Asst. Prof. Dr. Gülay SEZER Res. Asst. Dr. Zeynep ÇİFTÇİ	Erciyes University	EVALUATION OF THE USE OF PROPHYLACTIC DRUGS AND FOOD SUPPLEMENTS AGAINST COVID-19 BY HEALTHCARE WORKERS IN KAYSERİ PROVINCE
Assist. Prof. Deniz ŞENOL Assist. Prof. Şeyma TOY	Düzce University Faculty of Medicine Karabük University Faculty of Medicine	EVALUATION OF THE EFFECTS OF COVID-19 ON ANATOMY LABORATORY EDUCATION THROUGH STUDENT FEEDBACK
Assist. Prof. Hüseyin KAYA Assoc. Prof. Ahmet ÇALIŞKAN Mehmet OKUL Assoc. Prof. Tuğba SARI Assist. Prof. İsmail Hakkı AKBUDAK	Pamukkale University	ISOLATION OF SEVERE ACUTE RESPIRATORY SYNDROME CORONAVIRUS-2 IN THE TEARS AND CONJUNCTIVAL SECRETIONS OF CORONAVIRUS DISEASE 2019 PATIENTS
Öğretim Görevlisi Burcu NAL Profesör Doktor Leyla KHORSHTD Profesör Doktor Dilek SARI	Süleyman Demirel Üniversitesi Ege Üniversitesi	ÜNİVERSİTE ÖĞRENCİLERİNİN COVID-19 SALGINI SÜRESİNCE SAĞLIK BAKANLIĞINCA YAYINLANAN 14 HİJYEN KURALINA UYMA DAVRANIŞLARININ İNCELENMESİ
Müge ÖZÇELİK KORKMAZ Oğuz Kadir EĞİLMEZ	Sakarya University Training and Research Hospital	INVESTIGATION OF CORRELATION BETWEEN BLOOD TEST PARAMETERS AND LOSS OF SMELL AND TASTE FUNCTION IN COVID-19 PATIENTS

SESSION-3, HALL-2

Meeting ID: 893 5960 8664

Passcode: 549476

2020	Paris Time 16:00-18:30	MODERATOR – Assoc. Prof. Melike Özer KESKIN
Authors	Affiliation	Topic title
Assistant Professor K.R.PADMA Reader K.R.DON	SriPadmavatiMahila VisvaVidyalayam (Women's) University, Tirupati,AP. Saveetha University, India	ROLE OF PARENTS IN E-LEARNING SYSTEM AND SUPPORT GIVEN DURING ONLINE CLASSES LEARNING
Sree Sai Vyshnavi NALIMELA Dr. Venu Madhav NALIMELA	Ayurvedic Medical College Satavahana University, Karimnagar ,Telangana, INDIA	ROLE OF SELECTED PLANTS AND PLANT PRODUCTS IN IMPROVEMENT OF HUMAN IMMUNITY (natural treatment) AGAINST COVID-19
Güliz HASKARACA Esra BOSTANCI	Sakarya University Zonguldak Bülent Ecevit University	ON ONLINE MEAT SHOPPING BEHAVIOR OF TURKISH ADULTS DURING COVID-19
Uzma AYZ	The University of Poonch Rawalakot, Pakistan	GENETIC VARIABILITY, ASSOCIATION AND DIVERSITY STUDY AMONG THE SUNFLOWER GENOTYPES AT SEEDLING STAGE BASED ON DIFFERENT MORPHO-PHYSIOLOGICAL PARAMETERS UNDER POLYETHYLENE GLYCOL INDUCED STRESS
Emmanuel LAMPTEY	Pan African University, University of Ibadan, Nigeria	PSYCHOLOGICAL IMPACTS OF COVID-19 ON HEALTH PROFESSIONALS: A RESEARCH BASED ON THE CUMULATIVE ONLINE CROSS SECTIONAL SURVEY OF 1000 NURSES ACROSS ECOWAS COUNTRIES
Fəlsəfə doktoru Aynur İBRAHİMOVA Məsim qızı	Naxçıvan Dövlət Universiteti	KORONAVİRUS XƏSTƏLİYİ COVID-19 MÜALİCƏSİNDƏ İSTİFADƏSİ NƏZƏRDƏ TUTULAN QAZANILMIŞ İMMUNİTET AMİLİ - ANTİTELLƏRİN ƏHƏMİYYƏTİ
Suchismita DAS	Jadavpur University, India	COVID-19 PANDEMIC QUESTIONING THE CITIZENSHIP RIGHTS OF INDIAN MIGRANT WORKERS

II. INTERNATIONAL CONFERENCE ON COVID-19 STUDIES

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**COVID-19 SÜRECİNDE KULLANIM VE BAĞIMLILIK MODELİ KAPSAMINDA
SOSYAL MEDYA KULLANIMININ İNCELENMESİ****Doç. Dr. Murat KOÇYİĞİT**

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ÖZET

Dijital teknolojinin hızlı gelişimi ve kullanımının artması ile toplumsal sistemler ve kültürel faaliyetlerin devamı ile enformasyon akışının etkisinin artması açısından sosyal medya platformları günümüzde önemli bir yere sahiptir. Bu doğrultuda araştırmanın temel amacı; dünya genelinde yaygınlaşan yeni bir koronavirüs tipi olan Covid-19 salgını sürecinde, kullanım ve bağımlılık modeli çerçevesinde, katılımcıların sosyal medyaya yönelik tutumları ve sosyal medya kullanım alışkanlıkları araştırılmıştır. Bu bağlamda amaçlı örnekleme yöntemiyle online olarak 577 sosyal medya kullanıcısı ile gerçekleştirilen araştırmanın verileri kullanılarak kullanıcıların Covid-19 sürecindeki sosyal medya kullanım alışkanlıkları araştırılmıştır. Araştırmada kullanım ve bağımlılık modeli ele alınarak oluşturulan ve geliştirilen soru formu kullanılmıştır. Verilerin analizi istatistiksel paket programı kullanılarak yapılmıştır. Araştırma doğrultusunda sosyal medya kullanım süresinin arttığı, sosyal medya kullanım alışkanlıklarının değiştiği, geleneksel medyanın daha güvenilir olduğu, toplumsal sistemdeki değişimlerin medya kullanım alışkanlıklarını değiştirdiği, içinde bulunulan toplumsal koşulların sosyal medyaya olan bağımlılığı artırdığı gibi sonuçlara ulaşılmıştır.

Anahtar Kelimeler: Sosyal Medya, Kullanım ve Bağımlılık Modeli, Koronavirüs, COVID-19

**INVESTIGATION OF SOCIAL MEDIA USE IN THE CONTEXT OF USES AND
DEPENDENCY MODEL IN THE PROCESS OF COVID-19****ABSTRACT**

Social media platforms have an important place today in terms of the rapid development and use of digital technology, the continuation of social systems and cultural activities and the impact of information flow. In this direction, the main purpose of the research is; during the Covid-19 epidemic process, which is a new coronavirus type that is spreading worldwide, the attitudes of the participants towards social media and their habits of social media have been investigated within the framework of the use and addiction model. In this context, using the data of the research conducted with 577 social media users online with the purposeful sampling method, the social media usage habits of the users in the Covid-19 process were investigated. In the research, the questionnaire form created and developed by using the uses and dependency model was used. The analysis of the data was done using statistical package program. As a result of the research, it has been reached that social media usage time increases, social media usage habits change, traditional media is more reliable, changes in social system change media usage habits, social conditions increase dependency on social media.

Keywords: Social Media, Uses and Dependency Model, Coronavirus, COVID – 19

GİRİŞ

Günümüzde insan hayatında başlıca öneme sahip iletişim teknolojileri bireyler tarafından oldukça yaygın şekilde kullanılmaktadır. Yaşadığımız çağda iletişim teknolojileri ile birlikte gelişen sosyal medya; insanların hızlı ve etkili bir biçimde iletişim sürecine girmelerine olanak sunmaktadır. Dünya üzerinde gerçekleşen toplumsal, ekonomik, sağlık ve kültürel gibi büyük gelişmeler, sosyal medyanın kullanılmasında etkin rol oynadığı görülmektedir.

Medyada sunulan gündem; toplumsal sistemler, medya ve izleyici arasındaki karmaşık ilişkinin sonucudur. Toplumun yapıları ve olayları, medyanın işleyişi ve kitlenin kullanımı kitle-medya-toplum arasındaki işlevleri nedeniyle sürekli olarak farklılık göstermektedir (Rubin & Windahl, 1986: 191). Medyanın geçmişten günümüze gelen süreci incelendiğinde, zaman akışının devamlılığının sağlanması açısından önemli bir faktör olduğu görülmektedir (Zafer & Vardarlier, 2019: 358). Bu doğrultuda gerek geleneksel medyada gerekse sosyal medyada gündem belirleme durumu bu noktada ortaya çıkmaktadır. Özellikle sosyal medyada bireyler kişisel ve aracı kaynak ortamlardan daha fazla bilgi alır ve bu da bağımlılığa yol açabilir (Rubin ve Windahl, 1986: 192). Teknolojinin, sürekli ilerleyerek günlük hayatın içerisinde daha fazla görünür hale gelmesiyle kültürel faaliyetlerin yaşatılması ve önemli bilimsel verilerin halka hızlı ve etkili şekilde aktarılması açısından medya önemli bir yere sahiptir (Zafer ve Vardarlier, 2019, 358).

İçinde bulunduğumuz toplumda dünya çapında birden fazla ülkede etkisi görülen birçok olay gerçekleşmiştir. Sağlık açısından ise pandemi olarak isimlendirdiğimiz salgın hastalıklar meydana gelmiştir. Çin'in Wuhan şehrinde 31 Aralık 2019'da nedeni belirlenemeyen zatürre tipi vakalarının bildirilmesi üzerine, Dünya Sağlık Örgütü (DSÖ) tarafından yeni bir koronavirüs tipi açıklanmış ve pandemi ilan edilmiştir. Bu virüsün bireyler üzerinde sebep olduğu hastalık ise Covid-19 olarak adlandırılmıştır (Erciyes & Genç, 2020: 2).

Sağlık kuruluşlarına öksürük, ateş ve iştahsızlık gibi belirtilerle başvuran bireylerin, Çin'de bölgesel bir halden çıkıp küresel bir hale dönüşmesi, virüse bağlı can kayıplarının önemli bir sayıya ulaşması sebebiyle ülkeler de olağanüstü hal uygulamaları gündeme gelmeye başlamıştır. Bu süreçte devlet tarafından toplumsal ve bireysel olarak sosyal izolasyon ile karantina gibi birtakım koruyucu tedbirler alınmıştır.

Dünya genelinde meydana gelen pandemi, uzmanlar tarafından adlandırılan yenedünya düzeni ile kişilerin alışkanlıklarını da etkilemeye başlamıştır. Özellikle günümüzde sosyal medyanın birey ve toplum yaşamı için hiç şüphesiz büyük ölçüde bir önemi bulunmaktadır. Bireyler açısından çok önemli bir yere sahip olan sosyal medya platformlarının kullanımında pandemi sürecinde ne gibi değişikliklerin olduğu araştırma konusu haline gelmiştir.

Sosyal yapı koşulları göz önünde bulundurulduğunda bağımlılık açısından bireylerin ihtiyaç ve güdeleri medya kullanımında önemlidir. Pandemi döneminde ihtiyaçlar, güdüler veya arzular, sosyal medya platformlarına, içeriğine veya işlevsel alternatiflere bağımlılığa yol açabilecek kişisel ve aracı davranışlara neden olabilmektedir. Bu nedenle sosyal medyanın etkileşimli hali bireylerde farklı bağımlılık dereceleri oluşturabilmektedir (Rubin & Windahl, 1986: 187).

Bu doğrultuda çalışmada, Rubin ve Windahl (1986) tarafından geliştirilen kullanım ve bağımlılık modeli temel alınarak, katılımcıların Covid-19 sürecindeki sosyal medyaya yönelik tutumları, sosyal medya kullanım alışkanlıkları ve bağımlılık düzeyleri araştırılmıştır.

KAVRAMSAL ÇERÇEVE

Kullanım ve Bağımlılık Modeli

Rubin ve Windahl, kullanımlar ve doyumlar modelini bir aşama daha ileriye taşıyarak 'bağımlılık' ögesini de modele dâhil ederek kullanımlar ve bağımlılık modelini geliştirmişlerdir. Ball-Rokeach ve DeFleur (1976), bağımlılık ilişkilerinin toplumsal değişim ve çatışma dönemlerinde ortaya çıkabileceğini savunmuştur. Bağımlılık, toplumsal yapı tarafından kolaylaştırılan veya kısıtlanan etkili medyanın bir görünümüdür. Model, medya kullanımının meydana gelebileceği bazı durumları ve bireysel tüketicilerin dışındaki önemli değişkenleri vurgulamaktadır. Bunun yanı sıra tüketicilerin sosyal ve psikolojik özelliklerine bağlı olarak ihtiyaç ve güdülerinin medya kullanımının düzeyleri arasında ilişkiyi incelemekte farklı bir çerçeve sunmaktadır (Rubin & Windahl, 1986: 186).

Medya ve içeriklerinin seçilmesi, kullanılması ve yorumlanması medya kullanımına karşılık gelir. Toplumsal ve medya sistemlerinin belirli yapıları göz önüne alındığında, bireyler, toplumsal yapılar ve koşullar doğrultusunda ihtiyaçlarını, güdülerini veya arzularını tatmin etmek için kişisel ve aracı kanallar veya mesajlar ararlar. Bu arayış sonucunda birey

ihtiyaçlarını gidermek için medya platformlarını etkin bir şekilde kullanmaya başladıkça, kullanım düzeyindeki artış bağımlılığa neden olacaktır (Rubin & Windahl, 1986: 186–187). Bağımlılık kavramı “*bir tarafın ihtiyaçların karşılanması veya hedeflere ulaşılmasının başka bir tarafın kaynaklarına bağlı olması*” olarak tanımlanmıştır (Ball-Rokeach & DeFleur, 1976: 6). Bağımlılık sürekli bir kavramdır çünkü bir birey iletişim kanallarına veya mesajlara değişen derecelerde bağımlı hale gelebilir. Kısacası bireylerin ihtiyaçlarını gidermek amacıyla kullanma düzeyleri fazlaştıkça medyaya olan bağılıkları o yönde artacak ve medyanın değeri de aynı oranda yükselecektir (Rubin & Windahl, 1986: 186–187).

Kullanımlar ve bağımlılık modeli, kitle iletişim araçlarının kullanımlarının ve etkilerinin bütünleşik olarak incelenmesini sağlar. Kitle iletişim araştırmaları için toplum temelli ve izleyici merkezli bir çerçeve sunan model; kitle iletişim araçlarının işleyişi ve medya kullanımının uygulanmasını vurgulamaktadır. İletişim ihtiyaçlarının araçlar tarafından karşılanması veya güdülerinin tatmin edilmesi kullanım ve bağımlılığın bir sonucudur. Modelin birbirinden farklı ve verimli şekillerini de görebiliriz. Toplumsal sistemler ve medya izleyicileri arasındaki ilişkilerin, özellikle toplumsal yapıların ve olayların ihtiyaçlar, güdüler, bilgi arama stratejileri ve medya kullanımı üzerindeki evrensel bir bağımlılığa yol açtığını varsayabiliriz. Zamanla değişim gösteren bir toplum yapısı ve medya kullanımındaki farklılıklar açısından ilk olarak Becker (1976); McLeod ve arkadaşları (1977) tarafından Amerika Birleşik Devletlerinde yaşanan Watergate skandalı ile ilgili medya kullanımı, Dotan ve Cohen (1976) tarafından da savaş ve barış sırasında medya kullanımı çalışmalarını örnek verebiliriz. Kullanımlar ve bağımlılık modeli, medyanın toplumsal ve bireysel etkilerini dikkate almak için sezgisel bir çerçeve de sağlamaktadır (Rubin & Windahl, 1986: 197).

Sosyal Medya

Dünya’da ve Türkiye’de geleneksel medya (gazete, radyo, televizyon vb.) yerini Web 2.0 temelli internet teknolojisinin yaygınlaşması ile yeni medyaya bırakmıştır. Yeni medya; bilgi işlem teknolojisi aracılığıyla etki alanı artan, gün geçtikçe büyük değişim ve gelişim gösteren bir olgudur. Günümüzde kolay ve ekonomik bir şekilde ulaşılabilen yeni medyanın önemli temel unsurlarından olan sosyal paylaşım ağları yani sosyal medya, bireysel ve kitlesel iletişime olanak sağlar (Kırık & Domaç, 2014: 410).

Sosyal medya; kullanıcının içerik yaratmasını ve paylaşılmasını sağlayan Web 2.0 temelinde ideolojik ve teknolojik yapılar üzerine kurulmuş internet bazlı uygulamalar olarak Kaplan ve Haenlein (2010) tarafından tanımlanmıştır (Maviş, 2013: 12). Bu tanım sosyal medyanın teknik ve içerik yönlerini ortaya koyması açısından önem arz etmektedir. Diğer yandan, sosyal medya, görsel ve yazılı olarak bireylerin düşüncelerini aktarabilmelerini kolaylaştıran, düzenli olarak yeni özellikler kazanan çevrimiçi uygulamalardır. Bunun yanı sıra sosyal medya üzerine çeşitli tanımlar yapılmıştır. Tablo 1’ de bu tanımlardan bazılarına yer verilmiştir.

Tablo 1. Sosyal Medya Tanımları

YAZAR(LAR)	TANIM
Blackshaw ve Nazzaro (2004)	“Sosyal medya, ortak ilgi alanları hakkında başkalarıyla bilgi paylaşmak isteyen tüketiciler tarafından oluşturulan ve kullanılan çeşitli yeni çevrimiçi bilgi kaynaklarını temsil eder.”
Richeter ve Koch (2007)	“Sosyal medya, kullanıcılar arasında etkileşimi, işbirliğini ve paylaşımı kolaylaştıran her türlü çevrimiçi medya ve içerik uygulaması veya platformudur.”
Russo vd. (2008)	“Sosyal medya uygulamaları, katılımcı bir kültürel deneyimi ve kurumlar arasında çevrimiçi işbirliğini kolaylaştırma işlevine sahiptir.”
Kaplan ve Haenlein (2010)	“Sosyal medya, Web 2.0’ın ideolojik ve teknolojik temelleri üzerine inşa edilmiş, kullanıcı tarafından üretilen içeriklerin oluşturulmasına ve değiştirilmesine izin veren bir grup İnternet tabanlı uygulamadır.”

Xiang ve Gretzel (2010)	<i>“Sosyal medya internette tüketici tarafından üretilen içeriği taşıyan ilk araç olarak düşünülmüştür.”</i>
Kietzmann vd. (2011)	<i>“Sosyal medya, bireylerin ve toplulukların kullanıcı tarafından oluşturulan içeriği paylaştığı, birlikte oluşturduğu, tartıştığı ve değiştirdiği mobil teknolojileri ve web tabanlı son derece etkileşimli platformlardır.”</i>
Leonardi vd. (2013)	<i>“Sosyal medya, kurum içindeki iç iletişim ve sosyal etkileşim için araçlardır.”</i>
Zembik (2014)	<i>“Sosyal medya, öncelikli fikri sosyal etkileşimi sağlamak olan İnternet ve mobil uygulamalardır.”</i>
Obar ve Wildman (2015)	<i>“Sosyal medya, kullanıcı tarafından oluşturulan içeriğin can damarı olduğu İnternet 2.0 tabanlı uygulamalardır. Bunlar aynı zamanda bireylerin veya halkların profillerini birbirine bağlayarak çevrimiçi sosyal ağların geliştirilmesini kolaylaştırır.”</i>
Filo vd. (2015)	<i>“Sosyal medya, kullanıcılar tarafından oluşturulan içeriğin kuruluşlar ve bireyler arasında etkileşimini, birlikte oluşturulmasını, geliştirilmesini ve paylaşılmasını kolaylaştıran yeni multimedya teknolojileridir.”</i>
Alalwan (2018)	<i>“Sosyal medya, pazarlama ve reklamcılık faaliyetleri için giderek daha fazla kullanılan platformlardır ve insanların, kuruluşların ve hatta hükümetlerin ticari, sosyal, politik ve eğitim düzeyinde etkileşim kurdukları yeri temsil etmektedir.”</i>
Kapoor vd. (2018)	<i>“Sosyal medya farklı geçmişlerden gelen kullanıcılar arasında ilişki kurmaya izin vererek sürdürülebilir bir sosyal yapıya neden olur.”</i>

Kaynak: Colella & ark., 2019: 33.

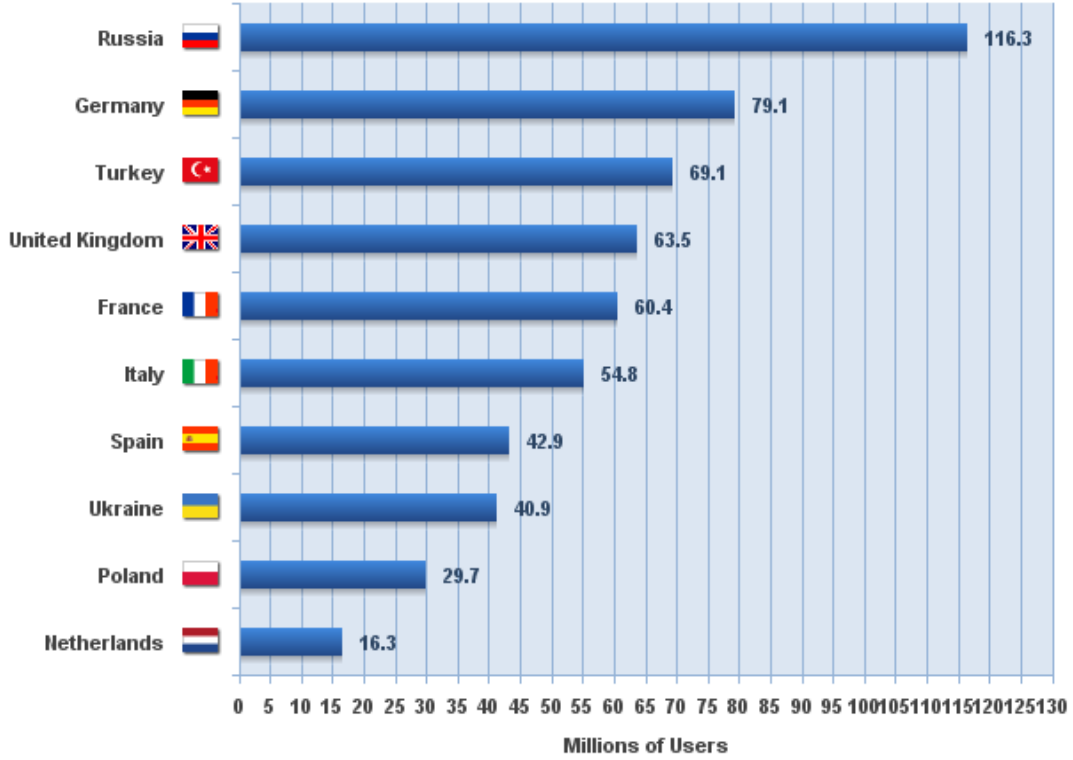
Sosyal medya hakkında yapılan tanımların temelinde kişilerarası iletişimi desteklediğine görülmektedir. Kullanıcıların anlık olarak internet ortamında birbirleriyle yaptığı diyaloglar ve paylaşımlar sosyal medyayı oluşturur. İnsanların ortak çıkarlar doğrultusunda buluşabileceği sanal ortamda farklı araçlar ile çok yaygın bir uygulama alt yapısına sahip olan sosyal medya kısacası çok geniş bir kavramdır (Aktan & Koçyiğit, 2016: 65).

Zaman ve mekân sınırlaması olmayan sosyal medya Anthony Mayfield (2008) göre çevrimiçi (online) medyanın yeni bir türü olarak karşımıza çıkmakta ve özelliklerini şu şekilde sıralamaktadır (Mayfield, 2008, 5):

- Katılım: Sosyal medya ile ilgilenen herkesin katkılarını ve geri bildirimlerini isteklendirir. Medya ve izleyici arasındaki çizgiyi bulanıklaştırır.
- Açıklık: Sosyal medya hizmetlerinin çoğu geri bildirimlere ve katılımlara açıktır. Bilgi paylaşımı, oylama ve yorum yapma açısından teşvik etmektedir. Parola korumalı içeriklere erişmede ve kullanılmasında engeller nadiren görülebilir.
- Diyalog: Geleneksel medya, içeriğin bir kitleye aktarıldığı veya dağıtıldığı bir yayın olarak adlandırılırken sosyal medya daha iyi bir iki yönlü iletişime imkân tanınması açısından oldukça geniş imkânlara sahiptir.
- Topluluk: Sosyal medya, toplulukların hızlı bir şekilde oluşmasına ve etkili bir şekilde iletişim kurmasına olanak tanır. Bunun sonucu olarak topluluklar, fotoğraf, politik bir konu veya favori bir TV programları gibi birden fazla ortak ilgi alanlarını paylaşır.
- Bağlantılılık: Sosyal medyanın çoğu platformu, diğer sitelerle, kaynaklara ve insanlarla olan bağlantılı olma hali ile gelişir ve diğerleriyle olan bağlantılardan yararlanır.

Bireylerin kullanım kontrolüne sahip olduğu, yenilik ve değişimlerin sürekli hâkimiyet gösterdiği sosyal medya; gün geçtikçe bireylerin bu platforma yönelmesinde etkili olmuştur (Koçyiğit, 2017: 93). Dünya’da sosyal medya kaynaklarını kullananlar ülkeler arasında Türkiye’deki kullanıcıların sayısı günümüzde oldukça artmaktadır. Tablo 2’de yer alan verilere göre Avrupa ülkelerinin internet kullanımına göre sıralaması yer almaktadır.

Şekil 1. Avrupa Ülkelerinin İnternet Kullanımında İlk 10 Ülkesi – 30 Haziran 2019



Kaynak: <https://www.internetworldstats.com/stats4.htm>, 20.06.2020.

Şekil 1’de yer alan verilerin ortalamaları alınırken ülkelerin nüfus sayıları 2019 yılının ortası için, esas olarak Birleşmiş Milletler Nüfus Bölümü verilerine dayanmaktadır. Böylece somut verilere göre; Türkiye’deki internet kullanıcı sayısının Avrupa kıtasında üçüncü sırada yer aldığını göstermektedir.

Yapılan araştırmalar göz önüne alındığında sosyal medyanın hayatımızın önemli bir parçası haline geldiğini görmekteyiz. Ülkelerde nüfusun büyük çoğunluğu günlük hayatlarında vaktinin yarısından fazlasını sosyal medyada geçirmektedir. Sosyal medya; eğlenme, bilgi edinme ve kişilerarası iletişim kurma gibi birçok konuda kullanılan bir araçtır. Bu araştırmada da toplumsal olayların sosyal medya kullanımı üzerindeki etkilerini incelemek amaçlanmıştır.

Yeni Koronavirüs Covid-19 Pandemisi

İnsanlık tarihi göz önüne alındığında oldukça geniş coğrafya alanına yayılan hatta toplu ölümler ve sağlık problemleri meydana getiren birçok endemi ve pandemi yaşanmıştır (Kırık & Özkoçak, 2020: 144). 21. Yüzyılda o an için sebebi bilinmeyen zatürre vakaları dünya sağlık örgütüne bildirilmiş ve böylece 5 Ocak 2020 tarihinde, insanlarda daha önce tespit edilmemiş yeni bir koronavirüs görülmeye başlanmıştır (Budak & Korkmaz, 2020: 66).

Günümüzde bütün dünyayı etkisi altına alan yeni bir koronavirüs (2019-nCov, COVID-19 veya SARS-CoV-2) türü olarak adlandırılan Covid-19 kısa zamanda Çin’in her eyaletini etkisi altına almıştır. Zamanla dünyaya yayılmış ve Dünya Sağlık Örgütü (World Health Organization) tarafından 11 Martta pandemi ilan edilerek dünya harekete geçmiştir (Aldemir & Avşar, 2020: 156).

Pandemi dünyada birden fazla ülkede veya kıtada, çok geniş bir alanda yayılan ve etkisini gösteren salgın hastalıklara verilen genel isimdir. Hastalığın Dünya Sağlık Örgütü (World Health Organization) tanımlamasına göre bir pandemi olarak nitelendirilmesi için üç önemli kritere sahip olmalıdır (Kırık & ark., 2020: 42).

- Ülkedeki kişilerin daha önce maruz kalmadığı bir hastalığın ortaya çıkışı,
- Hastalığa sebep olan tesirin insanlara bulaşması ve tehlikeli bir hastalığa yol açması,
- Hastalık etmeninin bireyler arasında kolayca ve devamlı olarak yayılması.

Çin'in Hubei Eyaleti, Wuhan şehrinde 31 Aralık 2019 tarihinde hastalar üzerinde etkisi görülmeye başlayan bu virüs, sağlık yetkilileri arasında endişeye neden olmuştur (Aktürk, 2020: 5). Covid-19 virüsünün teşhisi ve yayılmasının önlenmesi, tedavisi kadar önemlidir. Kişiden kişiye dokunma ve solunum yollarıyla bulaşıcı bir hastalık olması, bulaşma hızının da yüksek olduğu anlamına gelir. Ülkemizde ise ilk olarak vaka; Dünya Sağlık Örgütü'nün pandemi ilan ettiği 11 Mart 2020 tarihinde görülmüştür. Kısa sürede bölgesel bir halden çıkıp küresel hale dönüşmesi ülkeler arasında ciddi tablolar oluşturmuştur. Tablo 2'de bu verilere yer verilmiştir.

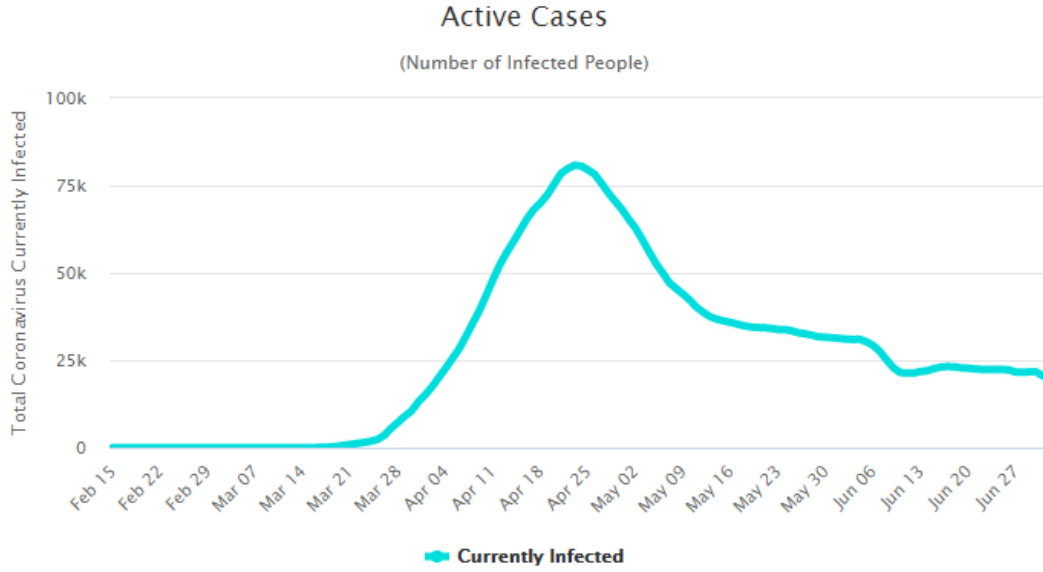
Tablo 2. Dünya'da vaka sayısında ilk 10'da olan ülkelerin verileri

	TOPLAM VAKA	TOPLAM ÖLÜM	TOPLAM İYİLEŞEN	AKTİF VAKA	TOPLAM TEST SAYISI
DÜNYA	10,795,162	518,058	5,934,994	4,342,110	
1. ABD	2,779,953	130,798	1,164,680	1,484,475	34,855,642
2. BREZİLYA	1,453,369	60,713	826,866	565,790	3,070,447
3. RUSYA	654,405	9,536	422,931	221,938	19,852,167
4. HİNDİSTAN	605,220	17,848	359,896	227,476	8,826,585
5. BİRLEŞİK KRALLIK	313,483	43,906	N/A	N/A	9,662,051
6. İSPANYA	296,739	28,363	N/A	N/A	5,448,984
7. PERU	288,477	9,860	178,245	100,372	1,699,369
8. ŞİLİ	282,043	5,753	245,443	30,847	1,109,792
9. İTALYA	240,760	34,788	190,717	15,255	5,445,476
10. İRAN	230,211	10,958	191,487	27,766	1,693,242
13. TÜRKİYE	201,098	5,150	175,422	20,526	3,433,963

Kaynak: <https://www.worldometers.info/coronavirus/>, Erişim tarihi: 01.07.2020

Tablo 2'deki verilere göre ülkemiz ilk 10 ülke arasında yer almamaktadır. Şuan ki dünya genelindeki vaka durumuna göre 13. sırada yer almaktadır. Covid-19 pandemisiyle birlikte ülkelerde ölüm oranlarını azaltmak adına yenedünya düzeni başladı. Bugüne kadar yaşadığımız normal yaşama ara verildi ve sıkı tedbirler alındı. 21. yüzyılda hızla yayılan Covid-19 virüsü neticesinde II. Dünya Savaşı sırasında meydana gelen olaylara benzeyen olağanüstü durumlar gerçekleşti. İnsanların sosyal izolasyonlarını sağlamak adına uluslararası spor etkinlikleri neredeyse tamamen ertelendi veya hatta iptal edildi. Bu durum sadece geçmişten günümüze kadar dünya savaşı sırasında oldu çünkü müsabakaları iptal edebilecek başka hiçbir durum yaşanmamıştır (Buana, 2020: 2). Nitekim insanların rutin hale gelmiş günlük davranışları kısıtlanmaya başlandı. Bireyler kendi sosyal izolasyon koşullarını sağlayarak zamanlarının büyük bir çoğunluğunu evde geçirmeye başladılar. Bu süreçte iş hayatında da değişimler oldu. Çalışan bireyler iş hayatlarını homeoffice mantığı çerçevesinde evlerine taşımaya başladı. Alınan tedbirler neticesinde gün geçtikçe aktif vaka sayılarında gözle görünen bir değişim meydana geldi. Bu değişim aşağıdaki yer alan grafikte belirtilmektedir.

Şekil 2. Türkiye Koronavirüs Aktif Vaka



Kaynak: <https://www.worldometers.info/coronavirus/>, Erişim Tarihi: 01.07.2020

Uzmanlar tarafından zamanla Covid-19 virüsünün hem hasta sayısında hem de yaşam üzerindeki etkisi azalması bekleniyor (Üstün ve Özçiftçi, 2020, 151). Şekil 2’de yer alan verilere göre diyebiliriz ki bireyler ne kadar tedbirlere önem verip dikkat ederlerse vaka sayılarında gözle görülen değişimler meydana gelmeye devam edecektir.

Pandemi döneminin zorunlu bir hale getirdiği sosyal izolasyon ve karantina gibi uygulamalar neticesinde bireyler birbiriyle iletişim halinde olmak için farklı yollar arayarak internet ya da telefon kullanımlarına yöneldi. Bu durum bireylerin kullanım oranını giderek arttırmaya başladı ve böylece sosyal medya platformları oldukça önem kazandı. Kullanım oranı arttıkça bireylerde bağımlılık düzeyinde de artış görülmeye başlandı diyebiliriz. Bir şeyi her gün yapmak artık bireylerde rutin haline getirir. Görüleceği üzere pandeminin etkisiyle sosyal, ekonomik ve sağlık gibi her alanda değişimler meydana gelmiştir.

ARAŞTIRMANIN YÖNTEMİ

Bu çalışmada, yeni tip koronavirüs olan Covid-19 salgını döneminde bireylerin sosyal medya kullanımlarını, kullanım ve bağımlılık modeli kapsamında incelemek amacıyla, nicel araştırma yöntemlerinden betimsel araştırma tekniği kullanılmıştır. Bu bağlamda araştırmanın amacı, dünya genelinde yaygınlaşan yeni bir koronavirüs tipi olan Covid-19 salgını sürecinde, kullanım ve bağımlılık modeli çerçevesinde, katılımcıların sosyal medyaya yönelik tutumları ve sosyal medya kullanım alışkanlıkları araştırılmıştır. Aynı zamanda araştırmanın bir diğer amacı ise pandemi sürecinde sosyal medya kullanımının sosyo-demografik değişkenlere göre ne düzeyde anlamlı farklılıklar oluşturduğunu incelemektir. Bu bağlamda olasılığa dayalı olmayan örnekleme yöntemlerinden amaçlı örnekleme metoduyla online olarak 577 sosyal medya kullanıcısı ile gerçekleştirilen araştırmanın verileri kullanılarak, kullanıcıların Covid-19 sürecindeki sosyal medya kullanım alışkanlıkları araştırılmıştır.

Verilerin Toplanması ve Analizi

Araştırmada kullanılan gözlenen değişkenler (tutum ifadeleri), kullanıcıların Covid-19 pandemi dönemi öncesi ve sonrasında sosyal medya kullanım düzeylerini belirlemek ve sosyal medya platformu hakkında düşüncelerini inceleyip daha çok hangi amaçla sosyal medyayı kullandıklarını belirlemek amacıyla, Alan M. Rubin ve Sven Windahl’ın kullanım ve bağımlılık modeli çalışmasından kurgulanarak hazırlanmıştır. Sosyo-demografik değişkenlerin (yaş, cinsiyet, gelir durumu, eğitim vb.) yanında katılımcılara, çoktan seçmeli sorular yöneltilerek, elde edilen veriler analiz edilmiştir. Online olarak 577 katılımcı ile gerçekleştirilen katılımcılara

toplamda 37 soru yöneltilmiştir. Araştırmada kullanım ve bağımlılık modeli ele alınarak oluşturulan ve geliştirilen soru formu kullanılmıştır. Verilerin analizi istatistiksel paket programı kullanılarak yapılmıştır.

BULGULAR

Tablo 3. Katılımcıların Sosyo-Demografik Özellikleri

Demografik Değişkenler	Değer	Frekans	Yüzde	Demografik Değişkenler	Değer	Frekans	Yüzde
Cinsiyet	Erkek	247	42,8	Medeni Durum	Bekâr	368	63,8
	Kadın	330	57,2		Evli	209	36,2
	Total	577	100,0		Total	577	100,0
Yaş Ort.	29,19			Eğitim Durumu	İlköğretim	11	1,9
					Lise	108	18,7
					Üniversite	90	15,6
					Lisansüstü	368	63,8
					Total	577	100,0
Gelir Durumu				Meslek	Kamu personeli	197	34,1
					Özel sektör çalışanı	123	21,3
					Öğrenci	210	36,4
					Çalışmıyor	47	8,2
					Total	577	100,0
Günlük boş zaman süreniz				Günlük uyku süreniz	1-3 saat	154	26,7
					4-6 saat	210	36,4
					7-9 saat	107	18,5
					10 saat ve üzeri	106	18,4
					Total	577	100,0
					1-4 saat	27	4,7
					5-8 saat	440	76,3
					9 saat ve üstü	110	19,1
					Total	577	100,0

Tablo 3’de görüldüğü üzere katılımcıların %42,8’i erkek, %57,2’si ise kadındır. Katılımcıların yaşları incelendiğinde ortalaması 29,19 olduğu görülmektedir. Öte yandan katılımcıların eğitim durumları incelendiğinde, katılımcıların büyük çoğunluğunun %63,8 ile lisansüstü eğitimi mezunu olduğu görülmektedir. Ayrıca katılımcıların meslek bilgileri incelendiğinde ise %36,4’ünün öğrenci, %34,1’inin kamu personeli, %21,3’ünün özel sektör çalışanı ve %8,2’sinin çalışmadığı bilgisi görülmektedir. Çalışmaya katılan bireylerin gelir durumları incelendiğinde %40,7’nin 2500 ve altı ve %32,8’inin 4500 ve üstü olduğu belirtilmiştir. Günlük boş zaman süreleri sorulduğunda ise katılımcıların %36,4’nün 4-6 saat arasında olduğu ve %26,7’sinin 1-3 saat olarak cevapladığı görülmektedir. Katılımcıların günlük uyku sürelerine bakıldığında ise %76,3 oranındaki çoğunluğunun 5-8 saat arasında olduğu görülmektedir.

Tablo 4. Covid-19 Öncesi ve Sürecinde Sosyal Medya Kullanım İstatistikleri

Covid-19 salgını öncesi günlük sosyal medya

kullanımı		
2 saat ve altı	250	43,3
3 saat	162	28,1
4 saat	77	13,3
5 saat ve üstü	88	15,3
Total	577	100,0
Covid-19 sürecinde günlük sosyal medya kullanımı		
2 saat ve altı	123	21,3
3 saat	121	21,0
4 saat	120	20,8
5 saat ve üstü	213	36,9
Total	577	100,0

İlk kez Çin'in Wuhan kentinde ortaya çıkan Covid-19 vakalarının tüm dünyaya yayılmasının ardından ülke yönetimleri, salgının şiddeti baskılayabilmek için ülke çapında çok katı tedbirlerle hastalığının artmasını engellemeye çalışmışlardır. İnsanlar artık iş hayatlarında ve sosyal yaşamlarında bilinçli bir biçimde kendi sosyal izolasyonlarını sağlamak zorunda kalmış ve yaşamlarında rutin haline gelen birçok alışkanlıklardan uzaklaşmaya başlamıştır. Özellikle sosyalleşmenin askıya alındığı bu dönemde toplumsal ve kültürel hayattaki değişimler bireylerin günlük sosyal medya kullanım oranına da etki sağlamıştır. Dünya'da ve ülkemizde sosyal izolasyonun başlamasıyla birlikte bireyler uzak kaldıkları sevdiklerinden haber almak, gündemden haberdar olmak ve artan boş vakitlerini değerlendirmek amacıyla sosyal medyaya yöneldi. Tablo 4'de görüldüğü gibi karantina ve evde kalma politikalarının artmasıyla birlikte kullanıcıların Covid-19 sürecinde sosyal medya kullanımının 2 kata yakın arttığı tespit edilmiştir. Pandemi öncesi 577 kullanıcının %43,3 lük dilimini oluşturan 250 kişinin 2 saat ve altı bir sürede sosyal medya platformlarında vakit geçirdiği gözlenirken değişen dünya düzeni doğrultusunda 577 kullanıcının %36,9'luk dilimini oluşturan 213 kişinin kullanım düzeyi 5 saat ve üstü olarak çoğunluk sağladığı görülmüştür.

Tablo 5. Covid-19 Sürecinde Sosyal Medya Kullanımı Betimleyici İstatistikleri

Değişkenler	□	Std. S.
Sosyal medyanın içerik çeşitliliğine sahip olması, bu platformların etkisini arttırmaktadır.	3,86	1,08
Covid-19 sürecinde sosyal medyayı kullanım şekli, toplumsal yapıları ve olayları etkilemektedir.	3,82	1,08
Covid-19 sürecinde sosyal medya kullanım sıklığım arttı.	3,77	1,38
Covid-19 sürecinde sosyal medyanın alternatifinin olmaması bu platformlara olan bağımlılığı arttırmaktadır.	3,62	1,21
Bu süreçte daha fazla boş zamana sahip olduğum için sosyal medyada daha fazla zaman geçirmeye başladım.	3,61	1,44
Covid-19 sürecinde içinde bulunduğumuz toplumsal koşullar, sosyal medyaya olan bağımlılığımı etkilemektedir.	3,58	1,30
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	3,56	1,18
Sosyal medyanın ortaya çıkardığı sosyo-kültürel sistem, davranış kalıplarını değiştirmektedir.	3,55	1,17
Covid-19 sürecinde salgınla ilgili bilgi eksikliğini gidermek için sosyal medyayı daha çok kullanmaya başladım.	3,54	1,36

Sosyal medya platformlarının çeşitliliği, farklı doyum arayışına neden olabilmektedir.	3,52	1,18
Covid-19 sürecinde sosyal medya içeriklerinden daha ziyade geleneksel medya (TV, Gazete, Radyo vb.) içeriklerini güvenilir buluyorum.	3,50	1,28
Sosyal medyanın hayatımıza girmesi ile birlikte doğrular, hakikatler ve olgular önemini yitirmeye başlamıştır.	3,46	1,25
Covid-19 sürecindeki sosyo-kültürel etkenler sosyal medya kullanım sıklığımı arttırdı.	3,44	1,30
Covid-19 sürecinde toplumsal sistemdeki değişimler medya kullanım alışkanlıklarımı da değiştirdi.	3,37	1,28
Bu süreçte gündem belirleme özelliğine sahip olan en önemli araç sosyal medyadır.	3,34	1,30
Bu süreçte sosyal medya kullanım alışkanlıklarım değişti.	3,33	1,42
Bu süreçte daha fazla bilgiye ulaşma düşüncesi sosyal medya bağımlılığımı arttırmaktadır.	3,23	1,39
Temel ihtiyaçlarıma ve hedeflerime hizmet ettiği için, sosyal medyayı yoğun bir şekilde kullanıyorum.	3,22	1,31
Sosyal medyanın ortaya çıkardığı sosyo-kültürel sistem, sosyal normları belirlemektedir.	3,21	1,14
Covid-19 sürecinde gündemden geri kalmama düşüncesi, sosyal medyaya yönelik bağımlılığımı arttırmaktadır.	3,18	1,35
Covid-19 sürecinde daha çok sosyal medya aracılığıyla bilgi eksikliğimi gidermeye çalışıyorum.	3,18	1,28
Sosyal medyanın ortaya çıkardığı sosyo-kültürel sistem, ihtiyaçları belirlemektedir.	3,12	1,20
Sosyal medya platformlarını kullanıyor olmam, psiko-sosyal özelliklerimi etkilemektedir.	3,10	1,29
Sosyal medyayı kullanma potansiyelim herhangi bir güç (sosyal, politik, ekonomik, kültürel) tarafından kısıtlanmaktadır.	2,55	1,43
Sosyal medya platformlarını kullanıyor olmam iç dünyamı anlamada bana yardımcı olmaktadır.	2,52	1,26
Covid-19 sürecinde sosyal medya içeriklerini oldukça güvenilir buluyorum.	2,41	1,12

Tablo 5. incelendiğinde katılım sağlayan bireylerin cevaplarına göre yöneltilen soruların ortalaması en yüksek olandan en düşük olana doğru sıralanarak sunulmuştur. Buna göre, aritmetik ortalaması en yüksek olan “Sosyal medyanın içerik çeşitliliğine sahip olması, bu platformların etkisini arttırmaktadır ($\bar{x}=3,86$)” ifadesine katıldıkları yönünde geri bildirimde buldukları görülmektedir. İkinci sırada ise “Covid-19 sürecinde sosyal medyayı kullanım şekli, toplumsal yapıları ve olayları etkilemektedir ($\bar{x}=3,82$)”, ifadesinin olduğu görülmektedir. Yöneltilen ifade kullanım şeklinin ne yönde değiştiğini desteklemek adına ortalaması üçüncü en yüksek olan “Covid-19 sürecinde sosyal medya kullanım sıklığım arttı ($\bar{x}=3,77$)” ifadesi yöneltilmiştir. Sosyal izolasyon sürecinde bireylerin sosyal medya platformlarına olan bağımlılık düzeyini tespit etmek adına yöneltilen “Covid-19 sürecinde sosyal medyanın alternatifinin olmaması bu platformlara olan bağımlılığı arttırmaktadır” ifadesi aritmetik ortalaması en yüksek olan ($\bar{x}=3,62$) dördüncü ifadedir. İlk dört ifadeye göre bireylerin sosyal medyaya yönelme sebepleri arasında görülen boş zaman artışını ifade etmek adına “Bu süreçte daha fazla boş zamana sahip olduğum için sosyal medyada daha fazla zaman geçirmeye başladım” ifadesi katılımcılara yöneltilmiş ve ($\bar{x}=3,61$) oranla beşinci en yüksek aritmetik ortalama sahip olduğu görülmüştür. Elde edilen bulgulara göre; katılımcılar Covid-19 sürecinde çoğunlukla sosyal medyaya yönelmiş ve bu süreçte sosyal medyanın alternatifinin olması bu platformlarının kullanılmasına ve kullanım artıça bağımlılığının artması ile iki yaklaşım arasındaki ilişkinin paralel yönde olduğu görülmüştür. Bu süreçte sosyal medya kullanımına olan yönelmenin aksine katılımcıların “Covid-19 sürecinde sosyal medya

içeriklerini oldukça güvenilir buluyorum.”, ifadesine verdikleri cevaplarla, en düşük ortalama olarak ($\bar{x}=2,41$) geri bildirimde buldukları görülmüştür.

Tablo 6. Sosyal Medya Kullanım Amacı İstatistikleri

Değişkenler	Frekans	%
Eğlenme	249	43,2
Enformasyon toplama (Bilgi edinme)	174	30,2
Öğrenme sürecimi destekleme	58	10,1
Sosyalleşme sürecime katkı sağlama	45	7,8
Duygu ve düşüncelerimi paylaşma	31	5,4
Kendimi gerçekleştirme	7	1,2
Toplumsal statü kazanma	6	1,0
Karar destek sistemi sağlama	5	,9
Temsil yeteneği kazanma	2	,3
Total	577	100,0

Tablo 6’ya bakıldığında katılımcıların %43,2’si eğlenme, %30,2’i enformasyon toplama (bilgi edinme) %10,1’i öğrenme sürecini destekleme, %8’i ise sosyalleşme sürecine katkı sağlamak amacıyla sosyal medya platformlarını kullandıklarını belirtmiştir. Ayrıca sosyal medya kullanım amaçları arasında, duygu ve düşünceleri paylaşma, karar destek sistemi sağlama, kendini gerçekleştirme, temsil yeteneği kazanma ve toplumsal statü kazanma gibi amaçların da olduğu belirlenmiştir.

Tablo 7. Cinsiyete değişkenine göre Covid-19 Sürecinde Sosyal Medya Kullanımına İlişkin t-Testi İstatistikleri

Değişkenler	Cinsiyet	N	\bar{x}	Std. S.	t	p
Covid-19 sürecinde salgınla ilgili bilgi eksikliğini gidermek için sosyal medyayı daha çok kullanmaya başladım.	Erkek	247	3,51	1,41	,49	,62
	Kadın	330	3,56	1,32		
Bu süreçte sosyal medya kullanım alışkanlıklarım değişti.	Erkek	247	3,22	1,42	1,52	,12
	Kadın	330	3,40	1,42		
Covid-19 sürecinde sosyal medya kullanım sıklığım arttı.	Erkek	247	3,66	1,38	1,66	,09
	Kadın	330	3,85	1,38		
Bu süreçte daha fazla boş zamana sahip olduğum için sosyal medyada daha fazla zaman geçirmeye başladım.	Erkek	247	3,58	1,43	,48	,62
	Kadın	330	3,64	1,45		
Covid-19 sürecinde sosyal medya içeriklerini oldukça güvenilir buluyorum.	Erkek	247	2,39	1,19	,39	,69
	Kadın	330	2,43	1,07		
Covid-19 sürecinde sosyal medya içeriklerinden daha ziyade geleneksel medya (TV, Gazete, Radyo vb.) içeriklerini güvenilir buluyorum.	Erkek	247	3,44	1,30	,39	,37
	Kadın	330	3,54	1,27		
Covid-19 sürecinde gündemden geri kalmama düşüncesi, sosyal medyaya yönelik bağımlılığımı arttırmaktadır.	Erkek	247	3,23	1,33	,89	,50
	Kadın	330	3,15	1,37		
Bu süreçte daha fazla bilgiye ulaşma düşüncesi sosyal medya bağımlılığımı arttırmaktadır.	Erkek	247	3,30	1,33	,11	,35
	Kadın	330	3,19	1,43		
Bu süreçte gündem belirleme özelliğine sahip olan en önemli araç sosyal medyadır.	Erkek	247	3,48	1,24	2,13	,03
	Kadın	330	3,24	1,33		
Covid-19 sürecinde içinde bulunduğumuz	Erkek	247	3,52	1,29	1,06	,28

toplumsal koşullar, sosyal medyaya olan bağımlılığımı etkilemektedir.	Kadın	330	3,63	1,30		
Covid-19 sürecinde sosyal medyayı kullanım şekli, toplumsal yapıları ve olayları etkilemektedir.	Erkek	247	3,84	1,02	,29	,76
Covid-19 sürecinde sosyal medyanın alternatifinin olmaması bu platformlara olan bağımlılığımı arttırmaktadır.	Kadın	330	3,81	1,13		
Covid-19 sürecinde daha çok sosyal medya aracılığıyla bilgi eksikliğimi gidermeye çalışıyorum.	Erkek	247	3,67	1,17		
Covid-19 sürecinde toplumsal sistemdeki değişimler medya kullanım alışkanlıklarımı da değiştirdi.	Kadın	330	3,58	1,24	,85	,39
Covid-19 sürecindeki sosyo-kültürel etkenler sosyal medya kullanım sıklığımla arttırdı.	Erkek	247	3,22	1,27		
Temel ihtiyaçlarıma ve hedeflerime hizmet ettiği için, sosyal medyayı yoğun bir şekilde kullanıyorum.	Kadın	330	3,16	1,29	,54	,58
Sosyal medya platformlarının çeşitliliği, farklı doyum arayışına neden olabilmektedir.	Erkek	247	3,32	1,27		
Sosyal medya platformlarını kullanıyor olmam, psiko-sosyal özelliklerimi etkilemektedir.	Kadın	330	3,40	1,28	,79	,43
Sosyal medya platformlarını kullanıyor olmam iç dünyamı anlamada bana yardımcı olmaktadır.	Erkek	247	3,31	1,29		
Sosyal medyanın ortaya çıkardığı sosyo-kültürel sistem, ihtiyaçları belirlemektedir.	Kadın	330	3,53	1,31	2,03	,04
Sosyal medyanın ortaya çıkardığı sosyo-kültürel sistem, sosyal normları belirlemektedir.	Erkek	247	3,16	1,33		
Sosyal medyanın içerik çeşitliliğine sahip olması, bu platformların etkisini arttırmaktadır.	Kadın	330	3,26	1,30	,85	,39
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Erkek	247	3,59	1,19		
Sosyal medyanın hayatımıza girmesi ile birlikte doğrular, hakikatler ve olgular önemini yitirmeye başlamıştır.	Kadın	330	3,47	1,17	1,26	,20
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Erkek	247	3,03	1,32		
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Kadın	330	3,15	1,27	1,08	,28
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Erkek	247	2,46	1,31		
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Kadın	330	2,56	1,23	,89	,37
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Erkek	247	3,13	1,25		
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Kadın	330	3,11	1,17	,21	,83
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Erkek	247	3,25	1,17		
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Kadın	330	3,18	1,11	,76	,44
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Erkek	247	3,53	1,16		
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Kadın	330	3,57	1,17	,38	,69
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Erkek	247	2,52	1,40		
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Kadın	330	2,58	1,45	,26	,62
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Erkek	247	3,83	1,09		
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Kadın	330	3,89	1,07	,97	,50
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Erkek	247	3,69	1,15		
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Kadın	330	3,47	1,20	2,20	,02
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Erkek	247	3,54	1,24		
Sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir.	Kadın	330	3,40	1,25	1,33	,18

Tablo 7. incelendiğinde cinsiyet değişkenine göre, Covid-19 sürecinde sosyal medya kullanımına ilişkin değişkenler arasındaki farklılıkları tespit etmek amacıyla “bağımsız gruplar t- testi” gerçekleştirilmiştir. Cinsiyete göre, “bu süreçte gündem belirleme özelliğine sahip olan en önemli araç sosyal medyadır, Covid-19 sürecindeki sosyo-kültürel etkenler sosyal medya kullanım sıklığımla arttırdı, sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duygular ve kişisel kanaatler, nesnel gerçeğin önüne geçmiştir” ifadeleri arasında anlamlı ($p<0,05$) farklılıklar tespit edilmiştir. Öte yandan katılımcılara yöneltilen geri kalan ifadelerle göre cinsiyet değişkeni açısından fark testlerinde anlamlı bir farklılık tespit edilememiştir. Diğer sosyo-demografik değişkenlere göre gözlenen değişkenlere ilişkin fark testlerinde de herhangi bir anlamlı sonuç bulunamamıştır.

SONUÇ

2019 yılının aralık ayında Çin'in Wuhan kentinde ortaya çıkan Covid-19 (Koronavirüs) pandemisi, kısa zamanda tüm dünyayı etkisi altına alarak hızla yayılmış ve büyük bir salgına dönüşmüştür. Bu doğrultuda, küresel pandemi ile birlikte toplumsal davranışlar değişmeye başladı ve hayatımıza sosyal izolasyon kavramı girdi. Pandemi ile birlikte alınan önlemler kişilerin rutin yaşamlarından uzaklaşmalarına neden olmuştur. Yenidünya düzeni ile birlikte kişilerin alışkanlıkları farklılaşmış, pandemi öncesi ve sonrası olarak iki farklı tablo ortaya çıkmıştır. Pandemi ile birlikte değişen düzende kullanılan iletişim araçlarında da farklılıklar olmuştur. Özellikle pandemi ile ilgili bilgi akışını takip etmek ve insanların salgının ortaya çıkardığı endişeli ruh halinden bir an olsun kendilerini uzaklaştırabilmek adına sosyal medya daha fazla yöneldikleri görülmüştür. Bu doğrultuda, araştırmada 577 katılımcının; cinsiyet, yaş, eğitim durumu, medeni durumu, aylık gelir durumu ve meslek gibi demografik özelliklerine verilen cevaplar doğrultusunda günlük boş zaman ve uyku süreleri de baz alınarak ülkelerin savaştığı ve hızla yaygınlaşan yeni bir koronavirüs tipi olan Covid-19 salgınının sürecinde, bireylerin sosyal medyaya yönelik tutumları ve sosyal medya kullanım alışkanlıkları araştırılmıştır.

Araştırma doğrultusunda, salgın öncesine göre sosyal medya kullanımında gözle görülen bir artış meydana gelmiştir. Covid-19 salgını öncesi sosyal medya kullanım süresi 2-2,5 saat iken pandemi sürecinde bu süre 5 saatlere kadar çıkmıştır. Bu durum pandemi sürecinde insanların boş zamanlarının arttığını ve sosyal medyaya daha fazla yöneldiklerini gösterebilmektedir. Aynı zamanda katılımcıların sosyal medya platformlarını bilgi edinmek için kullandıkları da göz önünde bulundurulduğunda kullanım oranının arttığı ve kullanıcıların yavaş yavaş bu platformlara bağımlı hale geldiği ifade edilebilir. Katılımcıların sosyo-demografik özelliklerinden cinsiyet değişkenine yönelik gerçekleştirilen fark testi sonuçlarında bazı sorularda anlamlı farklılıklar olduğu tespit edilmiştir. Yenidünya düzeni ile birlikte sosyal medyanın bu dönemde kullanım amacına göre yöneltilen ifadede ise kişilerin birçok amacın yanı sıra en çok bu platformları eğlenme amacı ile kullandığı belirlenmiştir. Geleneksel medya (TV, Gazete, Radyo vb.) içeriklerini sosyal medya platformlarından ziyade daha güvenilir bulduklarını ve araştırmaya katılan katılımcıların yarıdan fazlası (%57) sosyal medyanın yoğun kullanımı ile birlikte, kamuoyu oluşturmada duyguların ve kişisel kanaatlerin, nesnel gerçeğin önüne geçtiğini düşündükleri tespit edilmiştir. Covid-19 sürecinde kullanıcılarının günlük hayatlarında daha fazla boş zamana sahip olması nedeniyle sosyal medyada daha fazla zaman geçirmelerine rağmen kullanıcıların yüzde 54'ü sosyal medya içeriklerini güvenilir bulmamaktadır. Bu olumsuz yanıtın yanı sıra Covid-19 sürecinde sosyal medyanın alternatifinin olmamasının bu platformlara olan bağımlılığı artırdığını düşünenlerin oranı (%58) ise oldukça fazladır. Katılımcıların sosyal medyaya vakit geçirme süreleri bu dönemde artmasıyla birlikte kullanım ve bağımlılık modelinin ana düşüncesi olan bireylerin ihtiyaçlarını gidermek amacıyla kullanma düzeyleri fazlaştıkça bağımlılıkları o yönde artacaktır düşüncesi yapılan araştırma doğrultusunda desteklenmektedir. Araştırma doğrultusunda Covid-19 sürecinde sosyal medya kullanım süresinin arttığı, sosyal medya kullanım alışkanlıklarının değiştiğini ve bireylerin sosyal medyaya daha fazla yöneldiğini, sosyal medyanın içerik çeşitliliğine sahip olması bu yüzden eğlenme ve bilgi edinme gibi amaçlar doğrultusunda sosyal medyada etkin olduklarını, geleneksel medyanın katılımcılar açısından daha güvenilir olduğu, toplumsal sistemdeki değişimlerin medya kullanım alışkanlıklarını değiştirdiği, içinde bulunulan toplumsal koşulların sosyal medyaya olan bağımlılığı artırdığı sonuçlarına varılmıştır.

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ABSTRACT

With unlock one and two Indian companies from various categories have stepped up with a range of measures to win back the customers. Promotional efforts such as short videos, personal messages, health tips, recipes and information nuggets, are being used for customer engagement. Companies that show solidarity in such times are likely to earn a long-term impact in the minds of the target audience. India has historically been a relationship-based marketing environment, wherein building and maintaining credibility is important. In the present COVID 19 scenario relationships, built on a foundation of trust are more important than ever before. This paper explores the selected promotional strategies adopted by various companies during this pandemic to create a meaningful experience with the customers. This paper highlights the creative works of those companies that use technology and innovation to create out of the box solution.

Keywords: customer engagement, branding, pandemic, promotion

INTRODUCTION

Be it app-based cab operators, hospitality chains or consumer goods, brands that have found themselves in the list of non-essentials are in a tight spot as the world around them shuts down for business. Missing from consumers' lives, they also face the threat of oblivion as the consumers withdraw from earlier lifestyles into a more frugal existence. To deal with the ensuing disruption in their businesses, a group of companies are stepping in with products and services that directly alleviate the ongoing crisis in consumers' lives or are tying up with brands that do so. While all of this is helping the brands stay relevant amidst the crisis, a report by Nielsen India notes that this is also reflective of a growing worldwide trend to move towards a more tech-enabled consumption grid. For all brands in their endeavour to stay relevant and be of assistance in the ongoing crisis, technology has been a big enabler. A recent report by Nielsen India, May 2020 on the impact of Covid-19 on consumption patterns and brand partnerships also noted that online offerings and tech-based enablers will grow in importance. It believes that this will be the norm as more and more people seek a tech solution to problems or needs that were hitherto serviced offline.

Brands are diversifying their fare, offering new touchpoints and expanding their web of associations, with other brands and customers. Decathlon India and Converse India are promoting talent hunts as they encourage people to colour or exercise their way through a lockdown. Disney has launched a draw at home series of tutorials for people across the world. There are many brands tinkering around with the logo and their visual identities too, much like what other brands in other sectors are also doing. In the Audi campaign for instance, the rings of its logo can be seen apart to drive home the message of social distancing. It wanted the audience to think and act out of the box by creatively innovating and engaging with the brand during their downtime. A Covid-19 Barometer India Research survey by Kantar on Understanding Consumer Sentiments and Implications for Brands found that consumers are however looking to brands for reassurances and hence there is a need for advertisers to keep talking to their patrons, in a sensitive manner and through innovative means. There is a need to find and leverage the

most suitable digital influencer, who embodies the true brand value and proposition. A report released in June 2020 by an Indian influencer-marketing firm Buzzoka states that right from celebrities to the rising class of micro-influencers are emerging as a critical marketing tool for brands. Hence brands must tread carefully and the messaging must be sensitive to the emerging situation. Also, with a ban on outdoor gatherings, the process of creating an advertisement needs overhaul too. The present paper throws light on the promotional strategies adapted by companies during the pandemic.

PROMOTING THE BRAND AMID COVID 19

Short videos, personal messages, health tips, recipes and information nuggets, are all being served up as engagement hooks. With governments across the world enforcing varying degrees of restraint over conducting day-to-day businesses, advertisers are quietly handing over the camera and microphone to users and employees. Short videos, personal messages, health tips, recipes and information nuggets, are all being served up as engagement hooks, in the rapidly evolving marketing playbook in the post Covid-19 world. Experts said that there are two sides to the emerging situation—one is that screen time has never been higher and brands can, perhaps for the first time ever, have the undivided attention of their consumers. This is driving more and more brands to keep the communication channels buzzing, although the overall volume of advertisement created and released has come down significantly. For instance, Amazon has asked its delivery persons to shoot and upload while Asian Paints has asked customers to send short clips of their daily routines for its campaign Har Ghar Kuch Kehta Hai.

Advertisements however have been largely flowing in through digital channels, where the ease of uploading home-made videos and user-generated content is high. Traditional brand and marketing communication have taken a backseat for the moment. Even jewellery brands are moving away from the traditional gifting stories, of a man bringing home diamonds and gold for his wife. The advertisement for Kalyan Jewellers celebrates love between a young woman and her parents-in-law. Pulse candy has been leveraging both macro and nano influencers in the digital space.

In today's situation with the corona virus scares and the sentiment being the way it is, the companies would like to just encourage people to use technology. For Volkswagen and BMW, the digital thrust is likely to hold up through future launches too, given that the current pandemic is likely to increase the influence of online channels even further. Another auto company betting on a digital future is MG Motor. The company said it has completely digitised the process of bookings and delivery. Transparency and experience will emerge as key differentiators is driving many companies to design personalised engagements and interactions with potential buyers.

CONNECTING WITH COMPASSION

Over the past several weeks, Indian companies from across categories and both large and small have stepped up with a range of measures to help fight the devastating impact of Coronavirus on life, livelihoods and public health systems. Real estate companies and hospitality chains are offering up their inventory as quarantine facilities, restaurants and hotels are packing up food for migrant workers, transporters are sending out their fleet of vehicles to ferry the ill, the stranded and to transport grains and food to the needy while many have committed huge amounts as aid to medical health workers and for the supply of ventilators. Auto maker Mahindra & Mahindra has said that it will make ventilators, oil to telecom conglomerate Reliance Industries has ventured into masks and personal protective equipment (PPE) for India's health care professionals, amongst other things while Diageo's United Spirits is now producing sanitizers. While this is commendable and much needed and companies that show solidarity in such times are likely to earn a long-term halo for their brands, marketing experts say that turning these efforts into a public relations exercise or a branding pitch could boomerang. According to a report by

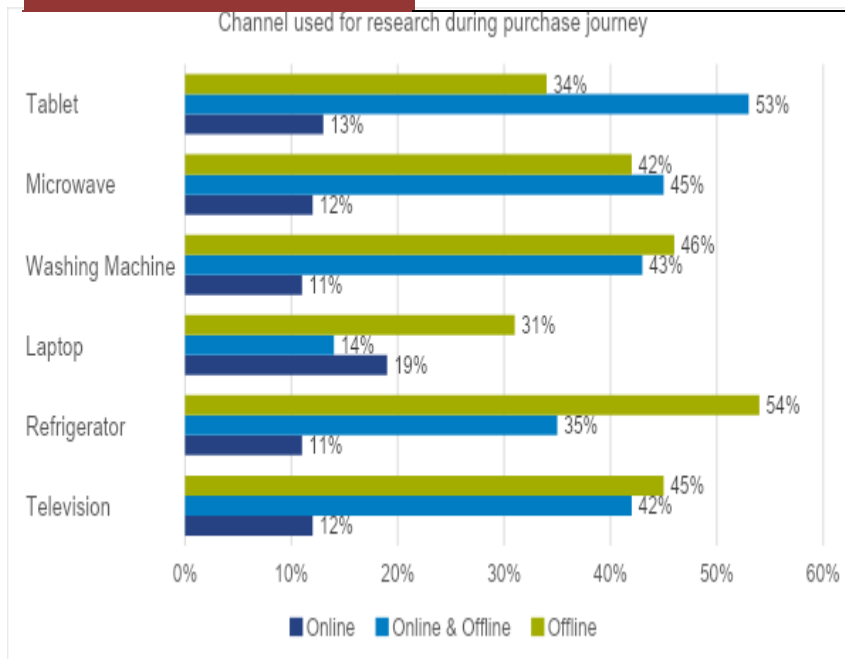
Facebook and KPMG (Eliminating friction in the automobile path to purchase, 2018-19), a poor digital strategy means that more than two-thirds of four-wheeler addressable market does not even enter the purchase funnel.

It is not the time for cleverness or gimmicks. Not for cute spacing of logos. It is the time to be honest and compassionate. To offer any and all kinds of support. Especially if your organisation and brand purported to celebrate such values. The Tata group, L&T, Mahindra & Mahindra, several public sector fuel retailers, Air India, Spicejet and IndiGo have all stepped in to fill the gaps in the government's relief measures and complement the state's efforts. It is time for all brands to rethink the way they have traditionally marketed themselves or reached out to customers. Some inspiring brands have made real and honest moves already. Many more will follow. Hopefully the seeds of a cultural transformation will be sown to outlast the virus. For instance, Mastercard has partnered with the Bill & Melinda Gates Foundation and Welcome Trust to speed up the response to the COVID-19 epidemic. matching employee donations to relief efforts, and have contributed to funds. Public sector fuel retailers have managed to efficiently tap their vast petrol pump network to reach out to migrant workers walking back to their villages. The same providers are also using their LPG delivery network efficiently to provide essentials to needy households. Specific tailored marketing pitches using first party data, smoother payment and financing processes and digital launches are among the ways which are keeping their brands in the game. As minimal to zero physical proximity becomes the norm, brands are looking at ways in which to press their digital channels into service, most efficiently and with maximum impact. For example, the recent launch of Creta by Hyundai. Eager to knock down friction on the purchase pathway to the minimum, the company had been working on a click-to-buy portal. Piloted in January with a few dealerships, Hyundai commissioned it into full service in the wake of a lockdown as it sought to ensure a seamless customer purchase journey. A similar imperative pushed luxury car maker BMW to launch a digital facelift of its entry level SUV BMW X1 in India and Volkswagen India to go for the online launch of its T-Roc

TECHNOLOGY FOR TARGETING

Millennials, also called Gen Y (defined as those born between 1982 and 2004) constitute 27% of global population, and 34% of Indian population, and play a dominant role in driving consumption demand in consumer markets in India. Millennials spend heavily on necessities, education utilities form their monthly incomes, but most of their additional incomes are spent on consumptions in entertainment, dining, apparels, accessories and electronics. They spend generously on personalised consumer experiences and hence brands that cater to their customized tastes and fit into their lifestyles and values would thrive. For example, one-third of Indian millennials use fitness apps on their smartphones, and almost half think that healthy lifestyle is essential. In order to grow companies must focus on value systems of brands and the extent of customization they can offer. Brands must re-invent themselves to grow with millennials.

According to one report by Google and Kantar TNS (2019), even though all auto purchases happen offline, 90 per cent of car buyers research online before setting foot into a dealership. And once they're at the dealership, 65 per cent of car buyers will continue to do research on their smartphones. This holds true for both mass and premium brands. With swift progressions in technology, social & digital media has changed the way how consumers shop and behave. While in-store purchase journey is governed by overall consumer experience, online purchase journey depends solely on research. 69% of Indian consumers begin their purchase journey with search engines to gather knowledge about the products. More than half (55%) of the consumers refer to the product review and price comparison sites (51%).



(Figure 1. Channels used during the purchase journey)

Majority of consumers who visit the eCommerce websites also refer to the manufacturers' website for further details and price comparison. While doing an online research, chances of shoppers buying a particular brand increase substantially if they visit the manufacturer website. Contrary to this, offline purchase triggers involve emotions such as trust, instant gratification, value and time.

To be successful in today's buying-selling landscape, marketers need to build relationships at scale by leveraging technology to engage with the right contacts at the right time, while fostering human connection and trust. Scaling customer relationships by leveraging technology is at the heart of the COVID era. In India, the 400 million strong millennial segments in the age group 18-36 years (median age 29-32 years) has a collective spending power of \$330 billion. This segment looks for low-attention span communication with instant gratification, in form of quick ways to solve their day-to-day problems. This is reflected in how new age start-ups communicate to millennials. For example, Swiggy targets them with messages such as, "Think Food Think Swiggy", or "Working Late? So are we" or even like, "Cooking gone wrong?" Such short messaging helps to connect with this segment faster, besides solving their immediate problems too. Millennials would also drive the "sharing economy" of the future, by shedding ownership and adopting sharing of services. However, 70% of millennials live in hinterlands and rural areas, which contribute 30%-40% of revenues for many firms in India today. So, pay attention to millennials' real needs and re-invent brands rather than using this generational cohort as a marketing shortcut.

The primary difference in campaign delivery now, versus a few years earlier, is that consumers are looking for relatable stories that they can share amongst their peer group. Hence, most brands are taking the content marketing route for the occasion rather than pure play advertising. Mother Dairy is rewriting the brand rulebooks to talk to an audience that is younger, premium-paying and more diverse than its traditional stronghold of milk-guzzling North Indian states. The brand is positioning itself for a national audience and looking to wear the mantle of a millennial dairy label (despite its legacy of 45-odd years) by infusing quirky humour and agility into its digital persona, thereby differentiating itself from rivals Amul (Gujarat Cooperative Milk Marketing Federation) and Nestle among others.

CONCLUSION

A lot of customer engagement strategies in future will primarily be driven by data analytics offering deep-dive insights. Serving this purpose, artificial intelligence will help brands to formulate the product promotions strategy through prescriptive analysis. Therefore, brands need a more granular view of the consumer behaviour during the purchase cycle providing visibility of device use, search terms, touchpoints, sites visited and more for inclusive business growth. This is an unprecedented situation which requires all to find new ways to work together and rise to the occasion. It is time for companies to build brands that are sensitive to the consumers' problems but anonymous in their solidarity. In such an environment the one trait that marketers need is sensitivity. The best marketing action therefore is the one that stays away from the limelight of publicity.

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COVID-19 EVALUATION OF COUNTRIES ACCORDING TO HEALTH EXPENDITURES**Dr. Öğr. Üyesi Mehmet DOĞAN**

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ABSTRACT

COVID-19, which appeared in December 2019, created a pandemic by being seen in almost all countries of the world in June 2020. With COVID-19 pandemic, the need for healthcare services has increased even more. Health expenditures of countries are one of the most important factors affecting health outcomes. The aim of this study is to evaluate COVID-19 cases according to the health expenditures of the countries.

World Health Organization (WHO) health expenditures in 2017 and WHO COVID-19 cases, deaths and fatality rates were evaluated as of June 30, 2020. Most cases seen in 10 countries (United States of America (USA), Brazil, Russia, India, England, Peru, Chile, Spain, Italy, Pakistan) and Turkey was evaluated.

As of 30 June 2020, there were 10,185,374 cases and 503,862 deaths worldwide. Approximately 68.2% of cases (6,953,152) and 67.8% of deaths (341,787) occurred in 11 countries. Among the countries evaluated, Italy has the highest fatality rate of 14.48%, while Pakistan is the country with the lowest fatality rate with 1.89% fatality rate. Due to the COVID-19 pandemic; 198.613 cases, 5155 deaths have occurred in Turkey. The fatality rate is 2.59% in Turkey. In the USA, which has the highest number of COVID-19 cases and deaths worldwide, it is the country with the highest health expenditure, with \$ 10,246 per capita health expenditure. In Pakistan, which has the lowest health expenditure, the fatality rate is one of the countries with the lowest fatality rate with 1.89%. Per capita health expenditures were realized in Spain, England and Italy in Spain with a fatality rate of 10% or more. In Spain (11.38%) \$ 3.468, in England (13.92%) \$ 4.338 and in Italy (14.48%) \$ 3.619 health expenditures per capita were realized. Pakistan, India and Peru per capita health expenditure are \$ 1000 or less. It has a fatality rate of 1.89% (\$ 160) in Pakistan, 2.98% (\$ 253) in India and 3.36% (\$ 681) in Peru. Per capita health spending in Turkey was realized as \$ 1,180.

While comparing countries, it is not only appropriate to evaluate health expenditures, but the number of cases and deaths is high in countries such as the USA, England, Italy, Spain that make more health expenditures. Countries should also consider extraordinary situations such as COVID-19 when planning their health expenditures and plan their health expenditures more carefully.

Key Words: COVID-19, Health Expenditures, Fatality Rate

ÖZET

Aralık 2019 ortaya çıkan COVID-19, Haziran 2020'de neredeyse dünyanın tüm ülkelerinde görülerek pandemi oluşturmuştur. Pandemi ile birlikte sağlık hizmetlerine olan ihtiyaç daha da artmıştır. Ülkelerin sağlık harcamaları, sağlık çıktılarını etkileyen en önemli faktörlerden biridir. Bu çalışmanın amacı ülkelerin sağlık harcamalarına göre COVID-19 vakalarını değerlendirmektir.

Dünya Sağlık Örgütü (DSÖ) 2017 yılı sağlık harcamaları ve 30 Haziran 2020 itibarıyla DSÖ COVID-19 vaka, ölüm ve fatalite hızları değerlendirilmiştir. En çok vaka görülen 10 ülke (Amerika Birleşik Devletleri (ABD), Brezilya, Rusya, Hindistan, İngiltere, Peru, Şili, İspanya, İtalya, Pakistan) ve Türkiye değerlendirmeye alınmıştır.

30 Haziran 2020 tarihi itibarıyla dünya genelinde 10.185.374 vaka, 503.862 ölüm meydana gelmiştir. Yaklaşık vakaların %68.2'si (6.953.152) ve ölümlerin %67.8'i (341.787) değerlendirmeye alınan 11 ülkede meydana gelmiştir. ABD, 126.141 ölüm ve 2.590.582 vaka ile en çok ölüm ve vaka bulunan ülke konumundadır. Değerlendirmeye alınan ülkeler arasında %14.48 İtalya en yüksek fatalite hızına sahip ülke

iken Pakistan %1.89 fatalite hızı ile en düşük fatalite hızına sahip ülkedir. Türkiye’de COVID-19’dan dolayı 198.613 vaka, 5155 ölüm meydana gelmiştir. Türkiye’deki fatalite hızı %2.59’dur. Dünya genelinde COVID-19 vaka ve ölüm sayısı en yüksek olan ABD’de 10.246 \$ kişi başı sağlık harcamasıyla da en yüksek sağlık harcaması yapan ülke konumundadır. En düşük sağlık harcaması yapan ülke olan Pakistan’da fatalite hızı %1.89 ile en düşük fatalite oranına sahip ülkelerden biridir. Fatalite hızı %10 ve üzerinde olan İspanya’da (%11.38) 3.468 \$, İngiltere (%13.92) 4.338 \$ ve İtalya’da (%14.48) ise 3.619 \$ kişi başı sağlık harcaması gerçekleşmiştir. Kişi başı sağlık harcaması 1000 \$ ve altında olan Pakistan (160 \$) %1.89, Hindistan (253 \$) % 2.98 ve Peru (681 \$) %3.36 fatalite hızına sahiptir. Türkiye’de kişi başı sağlık harcaması 1.180 \$ olarak gerçekleşmiştir.

Ülkeleri karşılaştırırken sadece sağlık harcamalarını değerlendirmek uygun olmamakla beraber daha çok sağlık harcaması yapan ABD, İngiltere, İtalya, İspanya gibi ülkelerde vaka ve ölüm sayıları yüksektir. Ülkelerin sağlık harcamalarını planlarken COVID-19 gibi olağan dışı durumları da dikkate almaları ve bundan sonraki sağlık harcamalarını daha dikkatli planlamalıdır.

Anahtar Kelimeler: COVID-19, Sağlık Harcamaları, Fatalite Hızı

INTRODUCTION

Coronaviruses, which are enveloped and single-stranded RNA viruses; it first appeared in China (In Wuhan City, Hubei Province) on December 31, 2019. Coronaviruses can be found in bats, pigs, cats, dogs, rodents and poultry. Coronaviruses can manifest themselves in different pictures in humans, from simple cold to severe acute respiratory syndrome. Common symptoms of the virus are respiratory symptoms, fever, cough, and dyspnea. In more severe cases, pneumonia, severe acute respiratory infection, kidney failure, and death may occur (COVID-19 (SARS-CoV2 ENFEKSİYONU) REHBER, 2020).

The virus was first named as "Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)" due to its similarity to SARS (Severe Acute Respiratory Syndrome), and later as "Coronavirus Disease 2019 (COVID-19)" by WHO (Zhu, Zhang, & Vang, 2020). COVID-19 cases seen in China for the first time spread rapidly, and cases and deaths started to be seen in Thailand, Japan and South Korea, which were neighbors of China, and then in almost all countries of the world (as of June 30, 2020; 182 countries, 33 regions). In 47 case reports published by WHO on 7 March 2020, the number of cases worldwide was 100 thousand, and in 75 case reports dated April 4, 2020, the number of cases exceeded 1 million. On June 30, 2020, when the study was conducted; It has been reported that there are more than 10 million cases worldwide and around 503 thousand deaths due to coronavirus. The first case was seen in Turkey on March 11, 2020. As of 30 June 2020, 198 thousand cases, 5300 deaths occurred (<https://www.who.int/>, 2020).

Health system; it is one of the factors that ensures adequate and qualified healthcare services (Ulutürk, 2015). Providing health services in a socially acceptable, sustainable, equal and effective manner should be the main goal of countries. The financing model and delivery method chosen should also be a tool to achieve this goal (Tatar, 2011). Although it is difficult to classify health systems in terms of financing, globally; Four basic systems can be mentioned: Beveridge, Bismarck, National Health Insurance and Out-of-pocket payment model. The providers of health care, the way health care is paid, are the main differences that distinguish these systems from each other. Also, another difference is how financial risks differentiate between providers and buyers of health insurance (Tatar, 2011; Don, 2010). The "Beveridge Model", also known as "National Health System" and "From the Budget", advocates that the public should give the health system financed by tax revenues. In this model; the public is in the position of providing, financing and organizing the service.. England is the best example of countries applying the Beveridge model. Another financing model is the "Bismarck Model", also known as "German Insurance System" and "Social Health Insurance", based on the principle of paying health insurance premiums proportional to individuals' income rather than public expenditures. In the Bismarck model with an insurance system, the financing of the insurance fund; It is provided by compulsory contributions from employees and employers and membership to the insurance fund is mandatory. In the Bismarck model, therapeutic and outpatient care services are covered by insuring against disease risks. Germany is the best example of countries applying the Bismarck model (Tatar, 2011). In the " Out-of-pocket " model, also known as the "Direct Payment" model; individuals buy the health service they need by paying from their own pockets. Payments in this model; It can be examined under three headings as direct payment, user contribution and informal payment. Direct payments are defined as payments made when access to the service is interrupted due to long waiting times and for services not covered by social security. User contribution is the payments made by individuals under health

insurance for a certain amount of the health service fee they receive. Informal payments are qualified as illegal payments to service providers other than legal payments (Çelik, 2011). "There are some similarities from the Bismark and Beveridge models in the "National Health Insurance" model, which is also named as the "Mixed Model". Private healthcare providers are used in this model. But it is a system run by the state and financed by citizens through the payment of taxes and premiums. In the National Health Insurance model, it is a system that is more easily managed and organized compared to other systems because it is the only payer and does not have marketing or profit purposes. National Health Insurance model is also a cheaper system. Canada is the best example of a country that has implemented the national health insurance model (Woolhandler, Campbell, & Himmelstein, 2003).

Which financing model to use, how much share will be allocated to health, how to use the allocated share and the resulting health outcomes are important for countries. The aim of this study is to evaluate COVID-19 cases according to the health expenditures of countries.

MATERIALS AND METHODS

According to World Health Organization data dated June 30, 2020 were evaluated most cases seen in 10 countries (USA, Brazil, England, Russia, India, Peru, Chile, Spain, Italy, Pakistan) and Turkey. Fatality rates were calculated from the number of cases and deaths of these countries. Data on health expenditures were also obtained from the 2017 World Health Organization (WHO) health expenditures data. Health expenditure per capita is considered as health expenditure. According to the health expenditure data of the countries, COVID 19 cases, death and fatality rate were evaluated.

RESULTS

As of June 30, 2020, the country with the highest number of cases and deaths due to COVID-19 is the USA. Approximately 2 million 590 thousand cases and 126 thousand deaths occurred in the USA. Brazil is the second country with the highest number of cases and deaths, with approximately 1 million 360 thousand cases and 58 thousand deaths. A total of 198 thousand cases and 5,155 deaths have occurred in Turkey. The number of cases and deaths of the countries are shown in Figure 1 and 2.

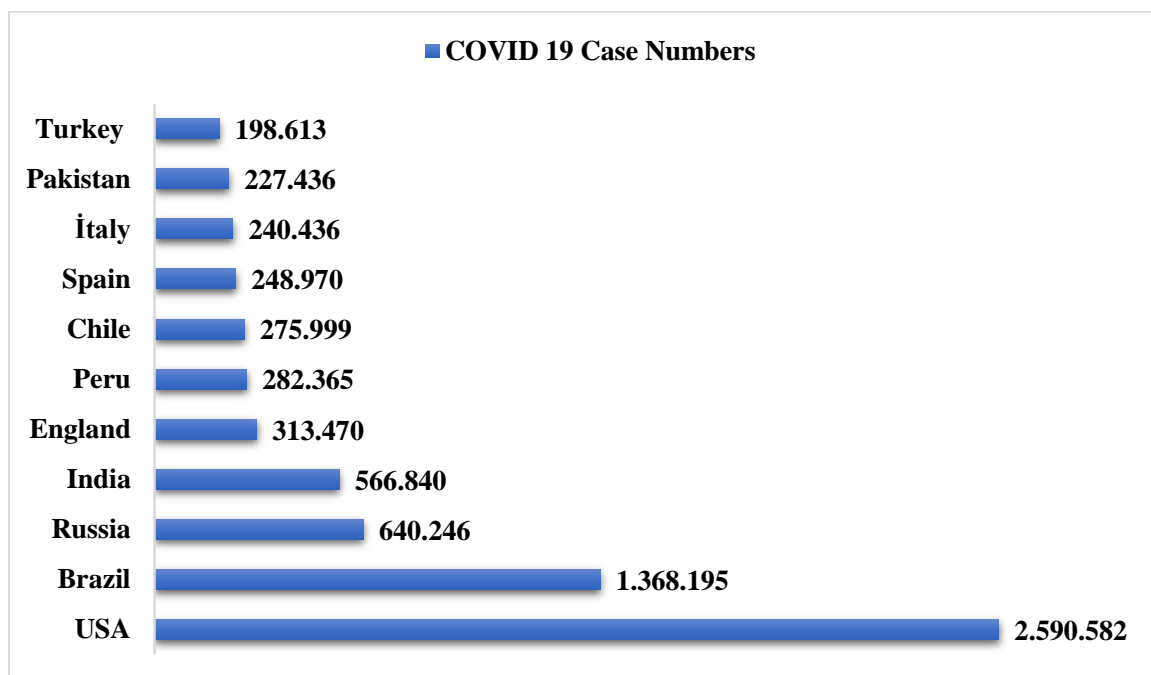


Figure 1. COVID 19 Cases Numbers of Countries

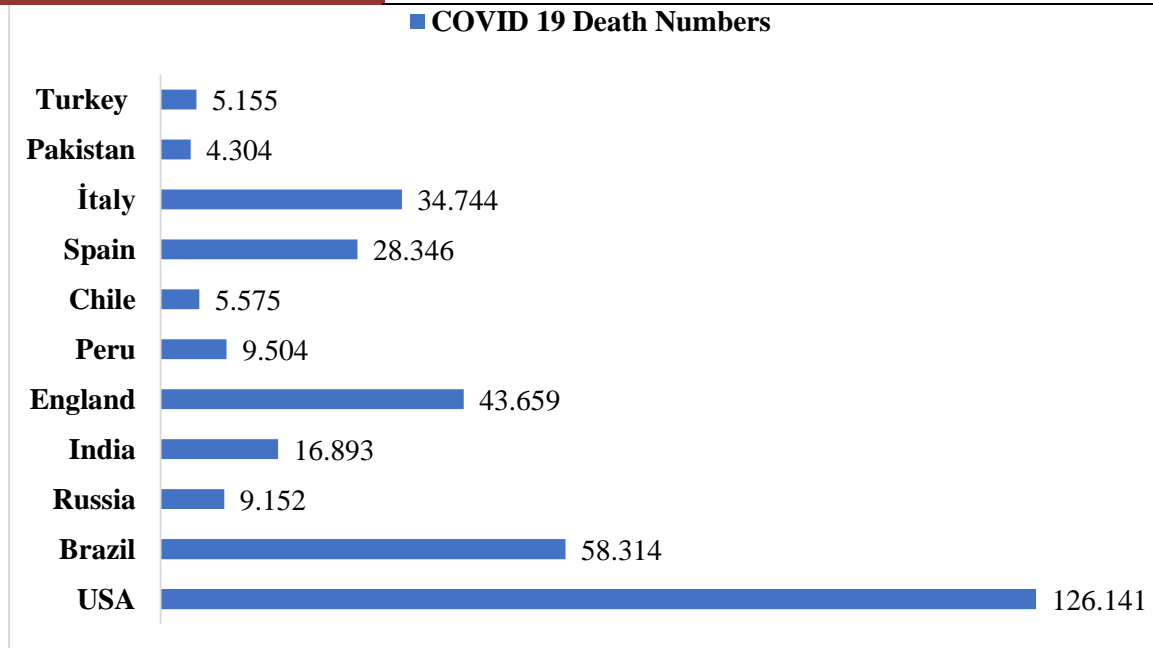


Figure 2. COVID 19 Death Numbers of Countries

Fatality rate is one of the most suitable parameters to compare countries with COVID 19. The country with the highest fatality rate is Italy with 14.48%. England has the second highest fatality rate with 13.92%, while Spain has the third highest fatality rate with 11.38%. The fatality rate in the USA with the highest number of cases is 4.86%. The country with the lowest fatality rate is Russia with 1.42%. Russia with the lowest fatality rate is followed by Pakistan with 1.89% and Chile with 2.01%. The fatality rate in Turkey is 2.59%. COVID 19 fatality rates of the countries are shown in Figure 3.

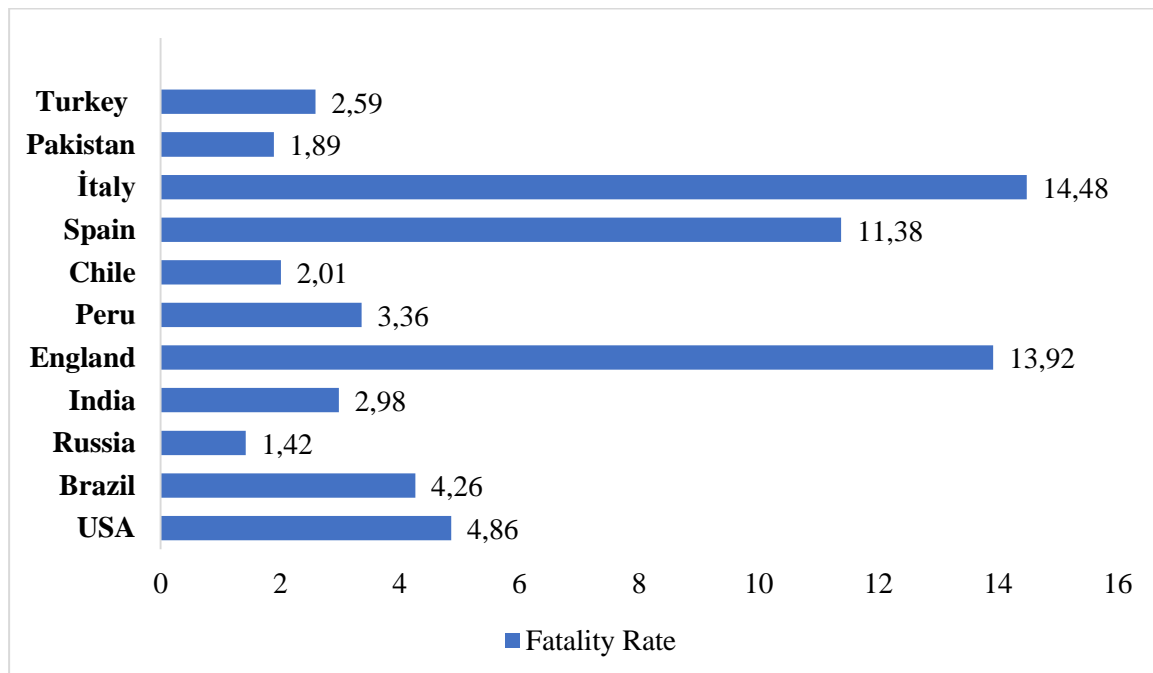


Figure 3. COVID 19 Fatality Rates of Countries

The country with the highest number of cases and deaths in the world is the country with the highest health expenditure in the USA, with \$ 10,246. In health expenditures, USA is followed by England with 4.338 \$ and Italy with 3.619 \$. Pakistan is the country with a low health expenditure of \$ 160. India follows Pakistan with \$ 253 and Peru with \$ 681. Health expenditures in Turkey in 1180 is \$. Per capita health expenditures of the countries are shown in Figure 4.

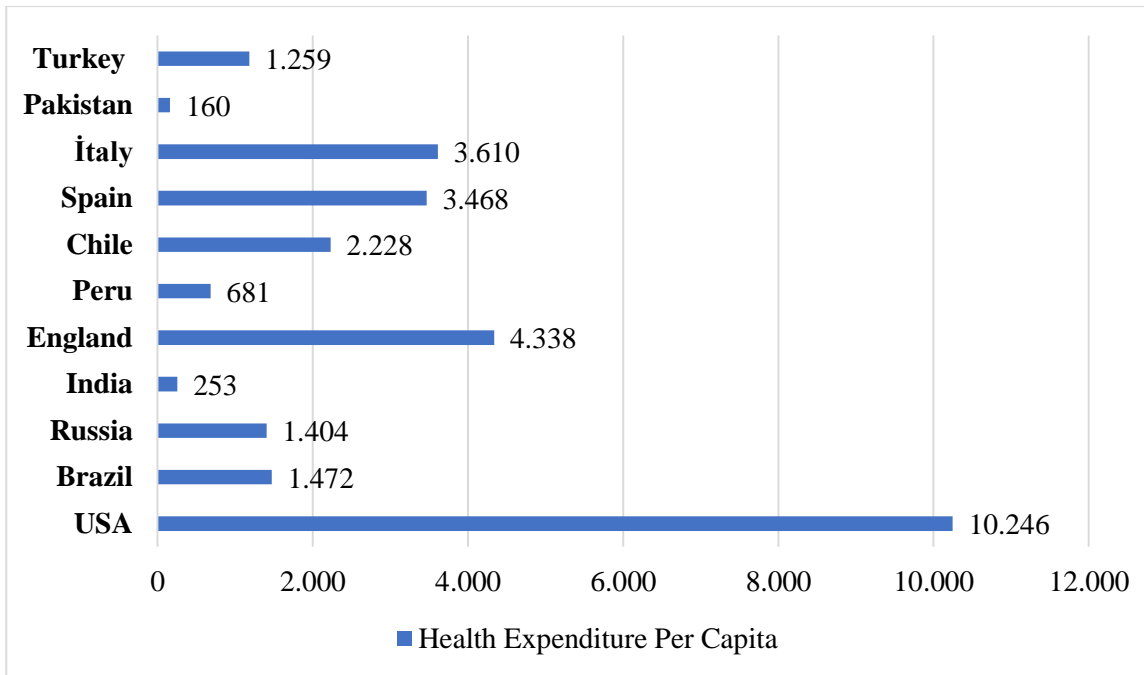


Figure 4. Per Capita Health Expenditure of Countries (\$)

DISCUSSION

The USA is the country with the highest number of COVID 19 cases and deaths in the world, with approximately 2 million 590 thousand cases and 126 thousand deaths (<https://www.who.int/>, 2020). In addition, the USA allocates \$ 10,246 per capita health expenditure and 17.1% of its Gross National Product (GNP) to health. The USA is also the world leader in its share of GNP for health and per capita health expenditures. The USA is one of the countries that apply the mixed model as health financing. It is similar to the Beveridge model in terms of veterans and children receiving health care, the national health insurance model in terms of service provision to the elderly, and the Bismarck model in terms of health services provided to employees. Public institutions named "Medicaid" have been established for the health problems of individuals with low income who cannot have private health insurance. Similarly, public institutions named "Medicare" have been established for the elderly. It is also a country where people who do not have health insurance pay out-of-pocket (Daştan & Çetinkaya, 2015). Despite the highest health expenditures in the world, the USA is a country that cannot get the value of its wages according to important health indicators. According to Commonwealth Fund 2013 data, the USA ranked last in the health performance ranking of developed countries prepared by the OECD (OECD, 2013).

It is remarkable that the USA has the highest number of COVID 19 cases and deaths besides the negative consequences in health level indicators. However, although the data on COVID 19 cases and health expenditures do not cover the same year, it will not be correct to interpret this situation only with health expenditure and health indicators.

CONCLUSION

While comparing countries, it is not appropriate to evaluate only health expenditures, but the number of cases and deaths is high in countries such as the USA, England, Italy and Spain, which make more health expenditures. All countries should learn from COVID 19 and prepare themselves for extraordinary situations such as COVID 19, in addition to preparing for the usual situation in determining policies for health expenditures.

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**PSYCHOLOGICAL EFFECTS OF THE CORONAVIRUS DISEASE PANDEMIC ON
PRIMARY SCHOOL TEACHERS****Mohammed Feroz ALI**

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ABSTRACT

The Corona virus disease of 2019 (COVID-19) has had an immense psychological impact worldwide and no academic institution escaped from it. Most of the teachers also suffered from psychological factors. A cross-sectional study was carried out from February to May 2020 to investigate the psychological effect of COVID-19. An online survey with google form was conducted with 370 primary teachers from different primary schools. The adopted questionnaire covers many aspects of participant's socio demographic information that included gender, age, marital status, ethnicity, and living style. The survey also included a different questionnaire (Coronavirus Anxiety and Obsession with COVID-19) that is used to investigate psychological effects. Statistical analysis was carried out using IBM SPSS for windows, version-21. The data was normally distributed. Descriptive analyses were conducted for socio demographic characteristics. Analysis of variance test was applied to see the differences between various categories of psychological parameters. Significant level was set at 0.05 levels. The results indicated that there was a significant level of difference in Coronavirus Anxiety, Obsession with COVID-19, among gender, age, marital status, living style and with different ethnicity for primary teachers. However, there was not much difference found between age category and marital status for primary teachers for psychological parameters. On the basis of finding we can conclude that more than fifty percent primary teacher's experiences moderated psychological impact. Specific precautionary measure should be adopted to avoid teacher's mental health.

Keywords: COVID-19, Mental health, Pandemic, Psychology, Self-isolation, Social distancing, Quarantine

INTRODUCTION

Teachers play the most important role in the development of our society. They are not only responsible for educating children but also shaping the world around us. The coronavirus disease of 2019 (COVID-19) made the role of the teachers more challenging and had put more stress in their lives as they not only thought of the educating children, but the safety of the students and their families as well. Teachers are going through a particularly uncertain time in terms of their professional lives and work. Rapid moves to online delivery methods to keep students engaged in learning –from early childhood to year 8 –have led to significantly increased workloads for teachers working not only to move teaching content and materials into online space, but also to become sufficiently adept at navigating the required software. The impact on teachers and students is uneven—in some contexts, for example, many students not having internet

connectivity and not having access to online teaching that made the job challenging and required lots of patience as the expectation from the ministry of education and the parents were high.

In many schools, moving to online space presents considerable difficulties as teachers struggle to adapt to what might well be a "new normal" for quite some time as COVID-19 has forced many countries around the globe to adopt early quarantine steps as a main disease control mechanism so schools around the country are closed (Rubin, Wessely, 2020). Apart from physical suffering, the outcomes of this quarantine on mental health and well-being at both the personal and population levels are manifold. Driven mass quarantine used by national lockout systems may cause mass hysteria, anxiety, and distress due to factors such as feeling cornered and losing control. This can be stepped up where households need to be divided, due to the uncertainty of disease progression, inadequate supplies of basic essentials, financial losses, increased risk levels, which are typically magnified by vague information and inappropriate media communication in the early phase of the pandemic (Maunder, Hunter, Vincent, Bennett, Peladeau, Leszcz. 2003). Past outbreaks have recorded that the psychological impact of quarantine can vary from immediate effects, such as irritability, fear of contracting and transmitting infection to family members, indignation, confusion, frustration, isolation, rejection, anxiety, depression, insomnia, despair, to extreme consequences, including suicide (Jeong, Yim, Song, Ki, Min, Cho, Chae, 2016). Suspected isolated cases may suffer from anxiety due to health uncertainty and obsessive-compulsive symptoms, such as repeated temperature checks and sterilization (Li, Yang, Liu, Zhao, Zhang, Zhang, 2016). Consequences such as posttraumatic stress disorder (PTSD) have been reported, with symptoms positively associated with quarantine duration (Reynolds, Garay, Deamond, Moran, Gold, Styra, 2008). Post-quarantine psychological effects may include significant socio-economic deprivation and psychological symptoms due to financial setbacks (Brooks, Webster, Smith, Woods, Wessely, Greenberg, 2020). Another very important aspect is stigmatization and community disapproval of the quarantine cordon in the form of discrimination, suspicious and ignored neighborhood, property poverty, occupational bias, and withdrawal from social activities even after epidemics have been controlled (Brooks, Webster, Smith, Forest, Wessely, Greenberg, 2020). HCPs are therefore expected to be more stigmatized than the general population for being quarantined and gradually psychologically disturbed. Children who are (or suspected to be) infected with COVID-19 and need isolation or quarantine may require special attention to respond to their fear, anxiety and other psychological effects (Liu, Bao, Huang, Shi, Lu 2020).

Fiji confirmed the first case at the mid of March, immediately the travel was banned and further imposed on the United States, Europe, and United Kingdom. The government has passed a rule that all travelers arriving in or returning to Fiji from outside the country must be self-isolated for 14 days. On 20 March, all schools and non-essential businesses in Lautoka were closed at midnight, as the first case of the lockdown of the city had links to that city. Some other nationals who traveled from India found positive. The government has taken firm measures, putting the lives and well-being of its citizens above the economy. While the country was hit by the pandemic and was in good control the government had closed all schools to see that the children are safe as schools can become easy place for transmission of the disease. Teachers were expected to go to schools during the lockdown and prepare worksheets which were to be picked up by parents. (Pacific News June 2020). Teachers were prone to come under coronavirus anxiety, and obsession as anyone can be having the disease whom they encounter with other persons. Teachers knew that when the schools reopen the syllabus was to be completed. Experience teachers know that children would return after 3 months and most of the things taught would have to be revised.

METHOD

The research style followed in this study was a systematic survey method. Studies have been conducted with primary physical education and sports teachers.

Participants

The total sample consists of 375 primary physical education and sports teachers of Fiji voluntarily took part in the survey. This sample consisted of 208 males and 162 females with age ranging from 20 to 55 years, 71 teachers were single, and 299 teachers were married, twenty teachers lived alone, 101 lived with parents 174 lived with spouse and 75 teachers had a joint extended family. There were 335 who were Indo-Fijians (Indians of Fijian decent) and 35 I-taukai (Natives of Fiji). Moreover, 63 teachers lived in rural areas, and 248 in urban and 59 in semi urban.

Tools

An online google form was prepared to collect data. This form consists number of questionnaires. The adopted questionnaires encompass many facets of the socio-demographic details of the participants, including gender, age, marital status, ethnicity and lifestyle.

The coronavirus anxiety scale (CAS) is a self-report mental health screener of dysfunctional anxiety associated with the coronavirus crisis. Because a significant number of people experience clinically significant fear and anxiety during an infectious disease outbreak, the CAS was developed to help clinicians and researchers efficiently identify cases of individuals functionally impaired by coronavirus-related anxiety. Each item of the CAS is rated on a 5-point scale, from 0 (not at all) to 4 (nearly every day), based on experiences over the past two weeks. A CAS total score ≥ 9 indicates probable dysfunctional coronavirus-related anxiety. Elevated scores on a particular item or a high total scale score (≥ 9) may indicate problematic symptoms for the individual that might warrant further assessment and/or treatment.

The Obsession with COVID-19 Scale (OCS) is a self-report mental health screener of persistent and disturbed thinking about COVID-19. The OCS was developed on two large samples of adults ($n = 775$; $n = 398$) residing across the United States. The OCS is a reliable instrument ($\alpha > .83$), with solid factorial (single factor) and construct (correlated with coronavirus anxiety, spiritual crisis, alcohol/drug coping, extreme hopelessness, and suicidal ideation) validity. Each item of the OCS is rated on a 5-point scale, from 0 (not at all) to 4 (nearly every day), based on experiences over the past two weeks. This scaling format is consistent with the DSM-5's cross-cutting symptom measure. An OCS total score ≥ 7 indicates probable dysfunctional thinking about COVID-19. Elevated scores on a particular item or a high total scale score (≥ 7) may indicate problematic symptoms for the individual that might warrant further assessment and/or treatment.

Procedure

Google form link was sent to teachers using the social media platform such as WhatsApp, Viber, Facebook messenger and email. As they open the link, first of all they give their voluntary consent for this study. if they agree than they followed by other demographic details, which measured several variables, including experience, gender, family type, ethnicity, age, marital status, the coronavirus anxiety scale, and the Obsession with COVID-19 Scale questionnaires.

Statistical Techniques

Statistical analysis was performed using IBM SPSS for windows, version-21 (IBM Crop. USA). The data has usually been circulated. Descriptive analyzes were conducted for socio-demographic characteristics. The analysis of the variance test was extended to the differences between different types of psychological parameters. The significance level was set at 0.05 level

RESULTS

Table-1 The comparison amongst primary physical education teachers as per their gender for coronavirus anxiety scale and obsession with COVID-19 scale by ANOVA test

Psychological Parameters	Males(N=208) Mean ± SD	Females(N=162) Mean ± SD	F	Sig.
Coronavirus Anxiety Scale	2.90 ± 3.72	2.91 ± 3.39	.001	0.979
Obsession with COVID-19 Scale	3.48 ± 3.19	3.40 ± 2.89	.061	0.804

A comparative analysis has been conducted for coronavirus anxiety scale and obsession with COVID-19 scale between males and females, the results indicated in table-1. In order to measure coronavirus anxiety scale and obsession with COVID-19 scale between males and female's findings showed that there was insignificant difference ($F = .001$ and $.061$, $Sig. = .979$ and $.804$) for males and females respectively. The means scores of psychological parameters as coronavirus anxiety scale and obsession with COVID-19 scale appear almost same for males and females' participants.

Table-2 The comparison amongst primary physical education teachers as per their age categories coronavirus anxiety scale and obsession with COVID-19 scale by ANOVA test

Psychological Parameters	Age (18-25) Mean ± SD	Age (26-35) Mean ± SD	Age (36-45) Mean ± SD	Age (46-55) Mean ± SD	F	Sig.
Coronavirus Anxiety Scale	3.20 ± 3.27	2.70 ± 3.22	3.40 ± 4.0	2.48 ± 3.58	1.35	0.258
Obsession with COVID-19 Scale	3.84 ± 2.85	3.29 ± 2.93	3.70 ± 3.38	3.25 ± 2.67	0.627	0.598

A comparative analysis has been conducted for coronavirus anxiety scale and obsession with COVID-19 scale among different age categories, the results indicated in table-2. In order to measure coronavirus anxiety scale and obsession with COVID-19 scale among different age categories findings showed that there were insignificant differences ($F = 1.35$ and $.627$, $Sig. = .258$ and $.598$) respectively. The means scores of coronavirus anxiety scale and obsession with COVID-19 scale appear almost same for different age categories.

Table-3 The comparison amongst primary physical education teachers as per their marital status coronavirus anxiety scale and obsession with COVID-19 scale by ANOVA test

Psychological Parameters	Single(N=71) Mean ± SD	Married(N=299) Mean ± SD	F	Sig.
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Coronavirus Anxiety Scale	2.69 ± 3.2	2.96 ± 3.66	0.326	0.568
Obsession with COVID-19 Scale	2.61 ± 2.30	3.65 ± 3.18	6.740	0.010

A comparative analysis has been conducted for coronavirus anxiety scale and obsession with COVID-19 scale as per their marital status of participants, the finding showed in table-3. In order to measure coronavirus anxiety scale and obsession with COVID-19 scale between single and married participants, the results indicated that there was an insignificant difference ($F = .326$, $Sig. = .568$) for coronavirus anxiety scale. Whereas there was a significant difference also exist for obsession with COVID-19 scale ($F = 6.74$, $Sig. = .010$) respectively for single and married participants. The means scores of coronavirus anxiety scale appear almost same, while the obsession with COVID-19 scale has varied means scores for single and married participants.

Table-4 The comparison amongst primary physical education teachers as per their living style for coronavirus anxiety scale and obsession with COVID-19 scale by ANOVA test

Psychological Parameters	Alone (N=20)	With Parents (N=101)	With Spouse (N=174)	Joint Family (N=75)	F	Sig.
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD		
Coronavirus Anxiety Scale	2.20 ± 3.12	2.90 ± 3.55	3.31 ± 3.86	2.16 ± 2.89	2.130	0.096
Obsession with COVID-19 Scale	2.75 ± 3.02	2.68 ± 2.54	4.17 ± 3.41	2.97 ± 2.43	6.600	0.000

A comparative analysis has been conducted for coronavirus anxiety scale and obsession with COVID-19 scale as per their living style, the finding showed in table-4. In order to measure coronavirus anxiety scale and obsession with COVID-19 scale among participants, the results indicated that there was an insignificant difference ($F = 2.130$, $Sig. = .096$) for coronavirus anxiety scale. Whereas there was a significant difference for obsession with COVID-19 scale ($F = 6.600$, $Sig. = .000$ respectively) for their living style categories. The means scores of coronavirus anxiety scale and obsession with COVID-19 scale appear differently in all living style categories.

Table-5 The comparison amongst primary physical education teachers as per their ethnicity area for coronavirus anxiety scale and obsession with COVID-19 scale by ANOVA test

Psychological Parameters	Indo-Fijian (N=335)	Itaukai (N=35)	F	Sig.
	Mean ± SD	Mean ± SD		
Coronavirus Anxiety Scale	2.75 ± 3.43	4.42 ± 4.51	7.104	0.008
Obsession with COVID-19 Scale	3.41 ± 3.03	3.71 ± 3.33	0.297	0.586

A comparative analysis has been conducted for coronavirus anxiety scale and obsession with COVID-19 scale as per their ethnicity group, the result showed in table-5. In order to measure coronavirus anxiety

scale and obsession with COVID-19 scale between Indo-Fijian and I-taukai group, the results revealed that there was a significant difference ($F= 7.104$, $Sig. = .008$) for coronavirus anxiety scale. Whereas, there was insignificant difference for obsession with COVID-19 scale ($F=.297$, $Sig. = .586$.) for their ethnicity group. The means scores of coronavirus anxiety scale and obsession with COVID-19 scale appear almost same for Indo-Fijian and I-taukai group.

Table-6 The comparison amongst primary physical education teachers as per their year of teaching experiences for coronavirus anxiety scale and obsession with COVID-19 scale by ANOVA test

Psychological Parameters	<5 (N=51) Mean \pm SD	5-10 (N=106) Mean \pm SD	11-15 (N=71) Mean \pm SD	16-20 (N=38) Mean \pm SD	>20 (N=104) Mean \pm SD	F	Sig.
Coronavirus Anxiety Scale	2.67 \pm 3.31	2.69 \pm 3.23	2.52 \pm 2.81	2.95 \pm 3.84	3.50 \pm 4.31	1.080	0.366
Obsession with COVID-19 Scale	3.04 \pm .79	3.38 \pm 3.07	3.69 \pm 3.37	2.92 \pm 3.04	3.74 \pm 2.96	0.872	0.481

A comparative analysis has been conducted for coronavirus anxiety scale and obsession with COVID-19 scale as per their year of experiences, the results showed in table-6. In order to measure coronavirus anxiety scale and obsession with COVID-19 scale among different categories for their year of experiences, the results revealed that there was insignificant difference ($F= 1.080$ and 0.872 , $Sig. = .366$ and $.481$) for coronavirus anxiety scale and obsession with COVID-19 scale respectively. The means scores of coronavirus anxiety scale and obsession with COVID-19 scale appear differently in all years of experiences categories.

Table-7 The comparison amongst primary physical education teachers as per their living area coronavirus anxiety scale and obsession with COVID-19 scale by ANOVA test

Psychological Parameters	Rural (N=63) Mean \pm SD	Urban (N=248) Mean \pm SD	Sami-urban (N=59) Mean \pm S	F	Sig.
Coronavirus Anxiety Scale	3.25 \pm 4.24	2.69 \pm 3.30	3.44 \pm 3.90	1.398	0.248
Obsession with COVID-19 Scale	2.85 \pm 2.44	3.46 \pm 3.17	4.00 \pm 3.06	2.155	0.117

A comparative analysis has been conducted for coronavirus anxiety scale and obsession with COVID-19 scale as per their living area, the finding indicated in table-7. In order to measure coronavirus anxiety scale and obsession with COVID-19 scale among different living areas, the findings exhibited that there were insignificant difference ($F= 1.398$ and 2.155 , $Sig. = .248$ and $.117$) for coronavirus anxiety scale and obsession with COVID-19 scale respectively. The means scores of coronavirus anxiety scale and obsession with COVID-19 scale appear differently in the living area's groups.

Discussion

Gender determines the unequal power and control of men and women over the socio-economic determinants of their anxiety and obsession, their social position, status and care in society, and their vulnerability and exposure to specific mental health threats. In context of the COVID-19 pandemic, a study was conducted in general population during the outbreak of coronavirus and reported that the people who follow COVID-19 news are more anxious than who don't, women feel more anxious than men (Moghanibash, 2020). A study in China showed that more than a quarter of participants experienced moderate to severe anxiety symptoms, and women suffered from psychological stress and distress, anxiety, and depression (Wang et al., 2020). The coronavirus pandemic is a shock for the country so the amount of anxiety and obsession faced by males and females were almost same as the warning from World Health Organization and the trends which were seen in United States of America and Italy both males and females had similar means for the anxiety and obsession. As in another study, middle aged people reported a stronger anxiety associated with the current COVID-19 pandemic, possibly because this age group is facing greater family and job concerns (Moghanibash 2020). Available data suggest that social disconnectedness puts the older people at a greater risk of depression and anxiety (Santini et al 2020). Fear of unknown and uncertainty over the daily living, contracting the virus or worry about spreading the infection to other family members and non-availability of ongoing medications etc. are contributing further to the heightened anxiety among the elderly (Mehra et al., 2020). Anxiety disorders start in childhood, adolescence, or early adulthood until they reach a peak in middle age, then tending to decrease again with older age (Bandelow & Michaelis 2015). In a study, with the increase in education level, the level of anxiety become higher due to the majority of female participants. The correlation also showed that younger age and higher education levels were associated with higher coronavirus anxiety (Wang et al., 2020). Anxiety thoughts affect girls more than boys; they have more metacognitive beliefs about the uncontrollability of worry, and they believe that worry must be avoided. On the other hand, positive beliefs in worry are more common in girls, and punishment and meta-concern are being implemented as control strategies for girls than boys. In our study, the anxiety rate was also directly associated with a high prevalence of coronavirus infection. These findings are matched with our findings. Coronavirus infection does not differentiate between geographical location, ethnicity, and religion; therefore, it is considered as a global issue and pandemic. If there is insufficient access to health care facilities, people will be victimized, so governments' international policies should not prevent aiding people. At present, Fiji is subject to less severe sanction under minimum pressure of anxiety and obsessions.

For the living style the obsession means for living alone was higher than with parents as support from family would provide some comfort to the child. However, living with spouse obsession was much higher than living with parents alone or families which may be due to the physical contact which may occur with the partner. The findings are supported to the research by Phillips et al., which used single status as a reference group, a multinomial regression analysis, increased rates of panic disorder without agoraphobia, and lower rates of obsession with marital or stable cohabitation status (Phillips, Gunderson, Gunderson, McElroy & Carte 1998). The current research did not show significant difference on coronavirus anxiety and obsession with COVID-19 living areas. The mean scores of coronavirus anxiety scale and COVID-19 fixation appear differently in the living area categories. Urban areas have been depicted as places of transition, human isolation, insecurity and conflicting values, seen as a center of technological development and social dislocation, perceived by some as crime - ridden, riot-torn havens for individuals without strong loyalty and clear principles. On the other hand, rural areas have been depicted as environments of social stability, integration, supportive interpersonal networks, and consensus on moral and political issues; and, in addition, as esthetically superior to large cities (Li, Li, Xin, Wang & Yang 2020)

Main limitations of the present study were represented by the lack of specific psychometric assessment and its cross-sectional nature. In fact, the actual picture of psychologically suffered people may change

during the current pandemic. Further research with specific psychometric measures and follow-up evaluation of the peoples is warranted to clarify the potential risk and consequences of the current COVID-19 pandemic on coronavirus anxiety and Obsession with COVID-19 on peoples.

Conclusion

This study was conducted during the COVID-19 pandemic. Self-isolation was carried out for safety. Everyone suffered from high or low mental health complications. Anxiety and obsession disorders are the most common among people. The study found significant differences among different types of population. There is a need to provide psychological as well as pharmacological support to those who are suffer from anxiety and obsession. Family support, a good primary partner, a living place, the maturity level, and a good habit can provide some relief from anxiety during such pandemic. The research suggests that supports from the stakeholders are needed to minimize the effect of anxiety and obsession on people.

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**AN EVALUATION ON THE EFFECT OF COVID 19 PANDEMIC ON BUSINESS
MANAGEMENT AND THE CRISIS PROCESS****Dr. Emre NALCACIGIL**

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ABSTRACT

The global Covid 19 pandemic has been observed to decrease and decline, but is still ongoing in many countries, so time is needed to determine its effects and consequences. According to the general opinion, the virus's transformation into a pandemic started as of December 2019 and has not yet been reflected in Economic first and second quarter data, and extensive studies in this area have not yet been sufficiently revealed. Therefore, the results of the pandemic impact in the economy and business world can be revealed in a meaningful and detailed manner, as well as pre-and post-pandemic comparisons can be made, as stated by international institutions such as the IMF, World Bank and ILO, at least a period of one year should be left behind. On the other hand, there is very little accurate scientific data on the pandemic effect, and the vast majority of studies are based on individual and public health. When we look at the field of Business Management in the pandemic process, it can be stated that the most important change is in the way they work. Short work, remote work, flexible work, mobility, etc. as such, it has actually been switched to models that are already in the management literature but have often become mandatory with the pandemic. The pandemic is a global health crisis and has affected all sectors and caused significant changes. In this study, the effects of Covid 19 pandemic in the field of business management were examined and evaluated by examining available data, findings and studies.

Keywords: Covid 19, Pandemic, Business Management, Work Life**COVID 19 PANDEMİSİNİN İŞLETME YÖNETİMİNE ETKİSİ VE KRİZ SÜRECİNE
İLİŞKİN BİR DEĞERLENDİRME****ÖZET**

Küresel çapta Covid 19 pandemisinin azalma ve gerileme eğilimi gösterdiği gözlenmekle birlikte pek çok ülkede halen devam ediyor olması nedeniyle etkilerinin ve sonuçlarının ortaya konulabilmesi için zamana ihtiyaç vardır. Zira virüsün pandemiye dönüşmesi genel kanaate göre Aralık 2019'dan itibaren başlamış olup ekonomik bakımdan birinci ve ikinci çeyrek verilerine henüz yansımamış, bu alanda kapsamlı çalışmalar henüz yeterince ortaya çıkmamıştır. Dolayısı ile pandemik etkinin ekonomi ve iş dünyasındaki sonuçlarının anlamlı ve ayrıntılı bir şekilde ortaya konulabilmesi ve ayrıca pandemi öncesi-sonrası karşılaştırmalarının yapılabilmesi için IMF, Dünya Bankası ve ILO gibi uluslararası kurumların ifade ettiği üzere en az bir yıllık bir periyodun geride bırakılması gerekmektedir. Diğer yandan pandemik etki hakkında doğruluğu teyit edilmiş sağlıklı bilimsel veri oldukça az olup, yapılan çalışmaların da büyük çoğunluğu bireysel ve halk sağlığı merkezlidir. Pandemi sürecinde işletme yönetimi alanına bakıldığında en önemli değişimin çalışma şekillerinde olduğu ifade edilebilir. Kısa çalışma, uzaktan çalışma, esnek çalışma, mobilite vb. gibi aslında yönetim literatüründe zaten yer alan ancak pandemi ile çoğu zaman zorunlu hale gelen modellere geçilmiştir. Diğer yandan pandemi, küresel sağlık krizi olup tüm sektörleri etkilemiş ve önemli değişimlere neden olmuştur. Bu gelişmeler

ve kısıtlar altında bu çalışmada Covid 19 pandemisinin işletme yönetimi alanındaki etkileri mevcut veri, bulgu ve çalışmalar incelenerek değerlendirilmiştir.

Anahtar Kelimeler: Covid 19, Pandemi, İşletme Yönetimi, Çalışma Hayatı

INTRODUCTION

Due to Covid 19, which has turned into an epidemic in general, countries, as well as medical and health systems, economic, political, professional, ethical, etc. in terms of importance, they are faced with problems and consequences. Although each of these developments can be a separate evaluation and research area in itself, the effects of the pandemi on business / organizational management have been investigated in this study.

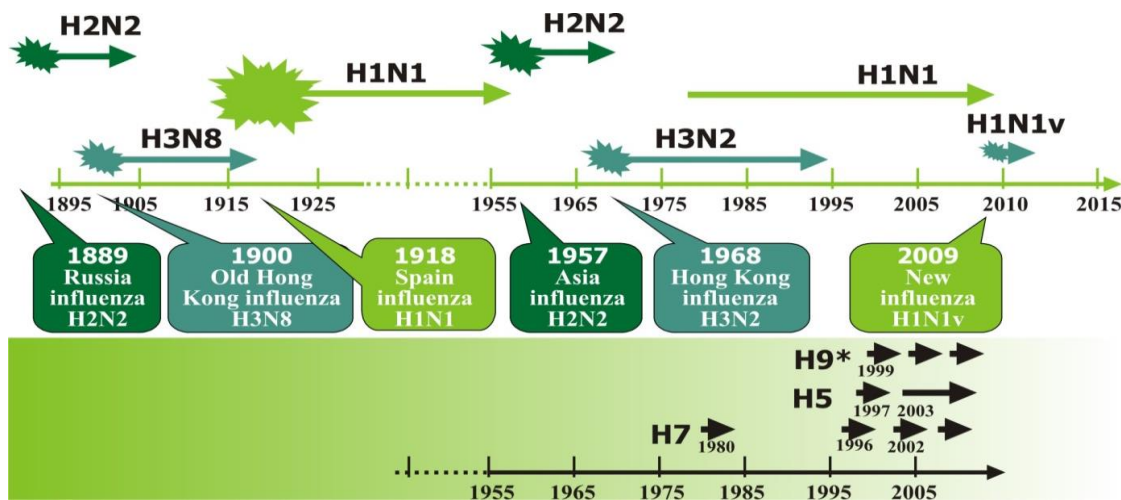
When we look at the world economic history, it is seen that there are many crises. 1929 Depression, 1973 Oil Crisis, 2008 Mortgage Crisis etc. The sources of such developments are wrong decisions, asymmetrical information and wrong policies. However, the common point of these crises is based on humanitarian factors, and measures have been taken in terms of their development and consequences, and human-made measures have been taken to prevent them from repeating. Health crises caused by epidemic diseases followed their natural process and left humanity mostly helpless. Epidemics can cause profound damage and consequences for an indefinite period and depending on the degree of impact on the individual, society, business world and economy. As a matter of fact, the epidemic called Corona Virus - Covid 19 is still continuing in the period we are in. Although a literature on the effects of this epidemic has been developed in the field of health, it is seen that the first studies have been made in terms of business and economy. Since the epidemic is not over, it is very difficult to make an assessment before and after. It can be stated that one year should be left behind and the return to the old situation or normal should have been fully realized in order to reveal the results of the epidemic, which has been confirmed as a pandemi since December 2019. Since the effects of the pandemi continue to be experienced in many countries around the world at the time of the preparation of this study, global and national trade systems have not returned to normalization.

1. PANDEMIA CASE AND COVID 19 PANDEMIC

It is seen that many epidemic diseases have been experienced throughout human history and their effects have caused millions of deaths. The effects of epidemic diseases have changed according to the specific characteristics of the disease, methods of struggle and medical-pharmacological developments. However, as a known fact, epidemic diseases have caused serious negative economic and social consequences in countries or geography where they are experienced. Plague, HIV / AIDS, Spanish Flu, Asian Flu, Typhus, Ebola, Cholera etc. Millions of people lost their lives in epidemics and continue to die (Yolun, 2012: 11-14).

Viral events showing mutations that cause epidemic diseases have been described as “influenza pandemics” (Sezen, 2009: 21). Since such outbreaks have enough big cases to be a separate study, the historical course is shown in Figure 1 in order to reveal a general view for the period before the Covid 19 pandemic.

Figure1. Recent Pandemics



Source: Sezen, F. (2009). Influenza Pandemics, Turkish Journal of Hygiene and Biology, 66 (2), p. 21

In the first wave of pandemics shown in Figure 1, the majority of deaths were between the ages of 30-35, while the second wave was experienced in almost all of these pandemics, and the majority of those who died in the second wave were those aged 65 and over (Sezen, 2009: 22). However, the H1N1 epidemic seen all over the world in 2009 and 2010 was the first test in studies conducted as "pandemic influenza preparations". Later, it took part in scientific studies with the name of "Mers-Cov", which predicted pandemic effect about the first "Corona Virus" seen in 2012 (Özlü and Öztaş, 2020: 469).

Pandemic is a health term produced by the combination of the words "pan" meaning "all" and "demos" meaning "people" in ancient Greek. Pandemic is accepted as an epidemic that has spread to a continent or the world and has an effect on this surface. The concept of pandemic is mainly used to refer to geographical spread, and the condition in which a disease affects a large part of the population by out of control or spreading over a wide area is defined as an epidemic. In short, epidemic refers to the effect of the disease, and the spread of the pandemic. In addition to these concepts, pandemic is used for a disease state to be effective in a narrow area (TÜBA, 2020: 21; Budak and Korkmaz, 2020: 63). According to these explanations, although the pandemic is common, if it affects the society and human health, it is defined as an epidemic. However, in this study, it was preferred to use the term pandemic due to its general acceptance and use.

On December 31, 2019, after the first cases of pneumonia reported in Wuhan, China, similar symptoms were seen in other countries, and the World Health Organization (WTO) declared a "global pandemic" due to this virus called Covid 19 (Budak and Korkmaz, 2020: 65-67). After the epidemic was declared, each country has taken various measures on Covid 19. Covid 19 is a type of virus in the family of coronaviruses that are evaluated in two parts as "Corona Virus" and "Toro Virus". Contagion, effect, symptom, result, treatment, etc. although it varies according to variables such as the age, health history and living conditions of the individuals, it usually causes damage to the respiratory tract or causes death (Rahman, 2013: 5; Özlü and Öztaş, 2020: 470).

Although the epidemic is seen in many countries around the world, there have been differences in the magnitude of its effects. Some countries have been able to keep the infection rates and deaths under control by taking effective and qualified measures in this regard, while some have not been relatively successful. The main method in combating the epidemic is to reduce the contact rates of people, use of masks, hygiene, social distance, flection, quarantine, etc. There have been applications such as. Struggle can generally be mentioned in three types of methods. The first of these is the "doing nothing" method applied by countries such as England, Sweden and the Netherlands. The second is the "suppression" method used by China, Singapore, South Korea, Australia and South East Asian countries. The third is the method of "trying to reduce the impact" used by Western countries. Turkey has chosen the methods of combat using first, to reduce infection and then the method of impact reduction. (TORAKS, 2020: 8). According to the general opinion of the WTO and the scientists who

carry out these studies, when the beginning of the epidemic is accepted as December 2019, it is suggested that it is possible to return to the normal in 1-1.5 years with the best probability.

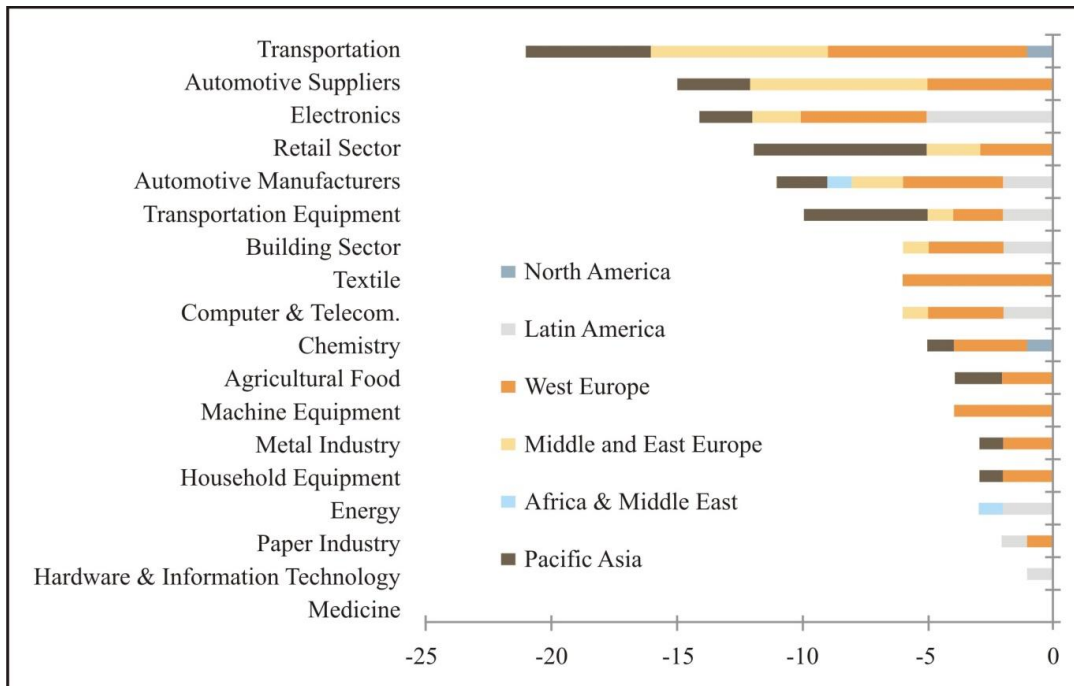
2. ECONOMIC AND SOCIAL EFFECTS OF COVID-19

The Covid 19 outbreak has had far-reaching economic and social impacts. The pandemic effect caused contractions in production, disrupted distribution and supply channels, and caused serious disruptions, especially in the service sectors (McFall, Kaplan, & Morgan, 2020). Although Covid 19 emerged as a health crisis, it rapidly became economical, causing deep and great damage in all economies and continues to be (Luisetto and Latyshev, 2020: 1). COVID-19 has primarily been effective in business life all over the world, from local businesses to global businesses. In the way of working, there has been an orientation towards remote working and part-time models. In many countries, the effects of contraction in employment and unemployment are expected to be seen in the medium term. Although governments try to prevent employment deterioration with incentive policies and financial assistance, it is difficult to determine clearly what the effects of the epidemic are yet (MARSH, 2020). However, industrial production in the global economy contracted or decreased by an average of 20 percent in the same period compared to April 2019. Although this shrinkage is heterogeneous, there are countries with a decrease of more than 50 percent (UNIDO, 2020). There was a record recession in the world economies in the second and third quarters of 2020.

In the period of March 2019 - April 2020, all manufacturing industries were affected by the crisis, and the motor vehicle and services sector suffered the most in production. For example, the automotive sector was directly / indirectly affected by approximately 94 percent, and the service (tourism, travel, transportation, etc.) sectors were affected approximately 80 percent. In addition, the pandemic effect was felt more in the sub-business lines working under these sectors (UNIDO, 2020).

Lemerle et al. (2020: 2) stated in their study that there were almost no sectors that were not affected by the pandemic, and that there would be a record decline in 126 main sectors in the first two quarters of 2020. According to the researches, "The service, transportation, automotive, electronics and retail sectors are mostly affected, and Covid-19; They are caused by direct or indirect effects on demand (5 out of 10), profitability (4 out of 10) and money liquidity (1 out of 10). 6 out of 10 rating ratings decrease from "medium" level to "sensitive" level. With the acceleration of the Covid-19 pandemic, there is almost no sector left to emerge globally without being affected by this process. "Risk rating changes according to the effect of Covid 19 on the basis of sectors and regions are shown in Figure 2.

**Figure 2. Change in Sector Risk Ratings by Sector and Regions
(Comparison of Q1 2020 and Q4 2019)**



Source: Maxime Lemerle, et al. Negative Effects of Covid-19 on Sector Basis, Allianz Research, https://www.eulerhermes.com/content/dam/onemarketing/ehndbx/eulerhermes_com/tr_TR/documents/allianz-rapor-dizgi.pdf, Access Date: 28.07. 2020

In the period of March-April 2020, as shown in Figure 2, automotive and related sub and sub-industries come first among the industries that decreased in industrial production, respectively, furniture, textiles, other manufacturing, beverage, fabricated metal products, machinery, other non-metallic ones, electrical equipment, paper, forestry products, leather, basic metals, transportation (UNIDO, 2020; Lemerle et al., 2020: 2).

Although there is an increase in panic and stock goods purchases, especially in individual consumption products, supply difficulties may affect a number of sectors more in the medium term due to the decrease in production and interruption of logistics in the factories in China, which is the starting point of the pandemic. Since this situation will also cause price-cost increases, new effects of the crisis are likely to emerge in some aspects in the near future. Especially in local economies, inflationary pressures can be seen as a strong possibility (Statistica, 2020).

It is stated in many studies that the effects of the Covid 19 epidemic still cannot be revealed due to the continuing disease. Although the studies are based on comparisons with the previous fiscal period, there is an uncertainty about when this pandemic will end and the second wave. On the other hand, it is predicted that the pandemic started with the health crisis and caused economic crisis and then social crises. For this reason, the social impacts of the predictions made by the United Nations Development Program are as follows according to the expectations (UNDP, 2020);

- Poverty; Due to the economic shocks caused by COVID-19, the problem of extreme poverty, which will affect 40-60 million people, may be experienced.
- Gender inequality; On average, women make up 70% of healthcare workers and the social care sector in 104 countries. Women are already doing three times more low-wage work than men. This situation may worsen with Covid-19 because of prospective unemployment.
- Unregistered Employment; in developing countries, there may be an increase of more than 70 percent in unregistered employment, especially for women.
- Violence; Quarantine, social isolation etc. the reasons have led to an increase in violence for the families and other domestic crimes in particular and may continue to occur.

- Education; the pandemic affected about 1.2 billion students (or 68% of the total enrolled students) due to school closures, and schools are still closed in 144 countries. This situation may lead to loss of education performance as well as disrupt the equality balance in education in favor of those who have options.
- Social Protection; Approximately 55 percent of the world population does not have any social protection. Globally, only 20 percent of workers are covered by unemployment benefits, and in some regions coverage is much lower than that. The pandemic has caused serious pressure on social security systems and healthcare systems, and may be a problem bigger than expected.
- Income and Business Losses; Approximately 1.6 billion informal workers lost 60 percent of their income, with little or no access to social protection, and this situation is expected to continue
- Decline in Global Trade; Global trade values fell by 3 percent in the first quarter of 2020, and a 27 percent decrease is expected in the second quarter. The signs of recovery in other quarters of 2020 seem weak.
- Commodity Prices; There has been a record drop in commodity prices by more than 20 percent, and with the impact of the contraction in the industry, oil prices have fallen by about 40 percent since the beginning of 2020 and the stagnant course is likely to continue.
- Food safety; Covid-19 could double the number of people facing food crises in low- and middle-income countries, putting nearly 265 million people at risk of acute food insecurity by the end of 2020.

Covid-19 has had far-reaching and serious impacts on financial markets, including the equity, bond and commodity (including crude oil and gold) markets. The United Nations Development Program is expected to decline \$ 220 billion in revenues in developing countries, and the economic impact of Covid-19 is expected to last months of 2020 or even years (Jones, Palumbo, & Brown, 2020).

According to the results of the EY Consultancy company's survey called "Global Capital Trust Barometer 2020" covering 46 countries, 14 sectors and more than 2,900 executives, 73% of the participating executives stated that "Covid-19 will cause serious disruptions in the global economy", "52 percent of them started to take actions to change the existing supply chain", 95% of participants stated "the Covid-19 pandemic will have a negative impact on profitability and profit margins", "72% of them have started to implement a radical transformation program", "46 percent stated that their companies were not open to merger and acquisition opportunities for the next 12 months" (EY, 2020). According to the results of this survey, it is seen that the pandemic will cause serious changes in business management and processes in the near future and even in the medium term.

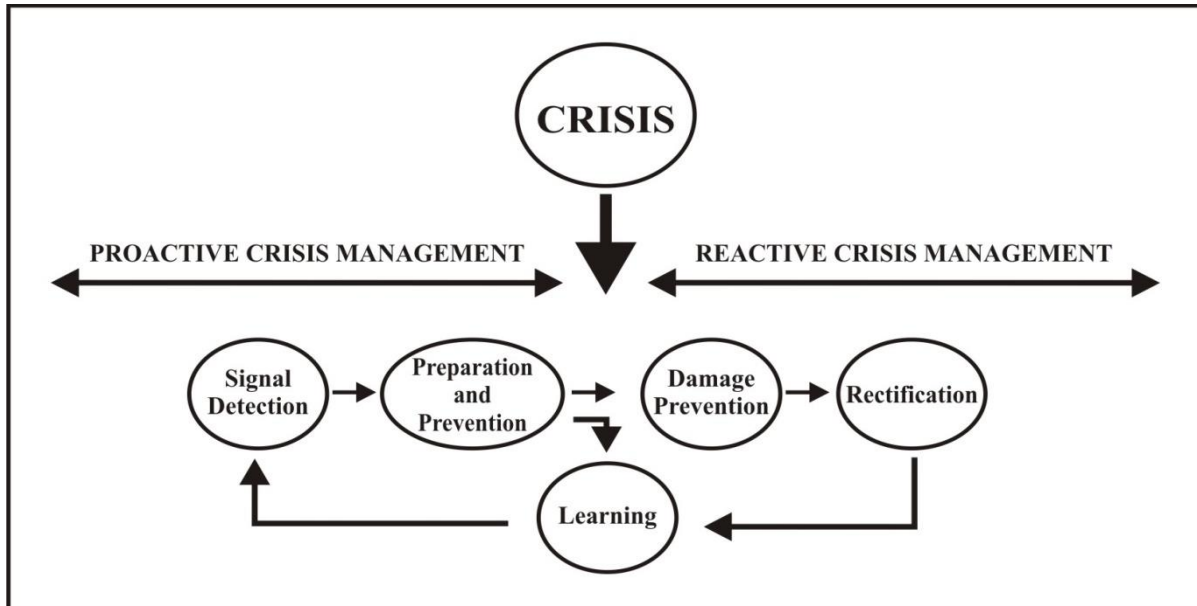
3. EFFECTS OF COVID 19 ON BUSINESS MANAGEMENT

The position and crisis impact of the Covid 19 pandemic, which started as a health crisis, in the context of crisis management for businesses should be revealed. In the crisis management literature, the sources of the crisis are divided into two main groups as internal and external environmental factors. The global crisis, which started with Covid 19, originates from the external environment, and since it causes uncertainty and confusion, it has become obligatory for businesses to engage in crisis management processes (Dinçer, 2007: 408). However, although it is recommended that businesses take proactive measures that are preventive within the scope of crisis management, the measures can be taken against destructive external environmental factors such as earthquake, flood, fire and Covid 19 are very limited (Tutar, 2011: 14). In terms of the stages of the crisis, strategy proposals are put forward by making a classification of three stages: receiving crisis signals, crisis period and post-crisis (Can, 2005: 397; Akıncı, 2010: 110).

As shown in Figure 3, there are preventive strategies, proactive, reactive process during the crisis in crisis management. Accordingly, when an evaluation is made for Covid 19, it is understood that a reactive process should be followed. Because, in the proactive crisis management approach, crisis models are made over possible scenarios, intervention and solution sets are developed. such as, raw materials, cash flow, sectoral contraction, stock, etc. precautions can be taken against a possible crisis by making plans with a prediction on issues (Özden, 2009: 55; Tuz, 2013: 46). However, in such pandemics reactive crisis management strategies should be used, since the possibility of Covid 19 will

not be predicted or resisted. Reactive strategies are generally implemented during and after the crisis (Tuz, 2013: 46-47). For this reason, in the crisis environment caused by Covid 19, business management should turn to some strategies in the context of reducing the effects of the crisis and preparing for the post-crisis. Explanations have been made about these in the continuing title of the study.

Figure 3. Crisis Management Process



Source: Tagraf, H. & Arslan, N. T. (2003). Crisis Formation Process and Proactive Approach in Crisis Management, C.Ü. Journal of FEAS, 4 (1), p. 153.

In terms of the crisis it created, the first important impacts of the Covid 19 pandemic in business management are that it caused investment, market, liquidity and credit risks. Although the level of exposure is different according to the sector or line of business, deterioration has occurred in the financial structure of the enterprises in this period and continues to occur (Lemerle, M. et al., 2020: 3). While the pandemic caused loss of income and debt repayment problems in businesses, decreasing income items caused financial pressures. According to research done by TUSIAD in small businesses of Turkey, are affected very much in the pandemic. These businesses had financial difficulties due to the pandemi and started to close. For example, 35 percent of enterprises with 1-9 employees, 24 percent of enterprises with 10-49 employees and 11 percent of enterprises with 50-249 employees had to close. On the other hand, approximately 60 percent of all existing enterprises have delayed their investment and capacity plans as they started to experience financial difficulties (TÜSIAD, 2020).

In general, as the loss of income of businesses as a natural result of crises causes deterioration in financial processes and balance sheets; Problems arise in issues such as loan provision, debt and repayment, and dept assignment. It can be said that this negatively affects the financial ratios of the enterprises in the near and medium term. Another of the effects of the pandemic is that it causes a decrease in production and supply. The main reason for this is the shrinkage in demand, mandatory restrictions, and disruptions in supply channels and changes in working patterns. For example, Turkish economy and production is suggested to be caused a serious contraction in the pandemic (KPMG, 2020).

The pandemic has also caused significant changes in the way of working. Optional special situations such as short work, remote work, and online work have become mandatory in this process. Employers had to switch to new working models in order to reduce the number of employees in the face of epidemic management, decreasing demand and restricted production in workplaces. Even though government support attempts to prevent layoffs, it is uncertain when exactly the effects of the

pandemic will disappear, so the unemployment risk increases for white and blue-collar workers (McKinsey, 2020).

4. EFFECTS OF COVID-19 ON WORKING LIFE

New working methods, which were not frequently encountered in daily life before, were emphasized and some of them were put into use in the Pandemi time. Working methods that can be described as remote work, digital workforce, and mobile work come first among these.

Due to social distance rules, people should have as little contact as possible. In order to achieve this, the remote working method, which is actually offered as a preference, is used. Out-of-office working options have been developed in sectors such as insurance, finance and education. There are positive and negative opinions about working remotely. For example, there is no consensus on whether working out of the office through online channels in a mobile state improves productivity. However, it is important that working remotely in sectors such as finance and education where face-to-face communication is important, is accepted by consumers, solution partners and other channel members (Deloitte, 2020: 4-5).

On the other hand, performance measurement and evaluation in the human resources management process in the remote working process, regulation of personal rights, redefining leaves and working hours / days, analysis of the situation at the point of organizational commitment, etc. new generation managerial techniques need to be developed. How business managers will manage or exhibit between employees who have to come to the workplace and those who have the opportunity to work remotely are among the issues that need to be resolved and discussed in the new period. The consequences of the possibility that remote working models for protection will become mandatory from preference are uncertain. Choosing this method for reasons such as cost advantage may be a rational decision, but it is also possible that the online situation will lead to problems such as cyber security.

Another application for remote work is the digital workforce. The digital workforce can be composed of professionals who provide expertise and experience when necessary, not members of the business, as in the remote working model. These people can be independent experts or outsourcing / service providers. The main feature of the digital workforce is that they can work through online channels regardless of the workplace. For example, a report, project, study etc. on a subject, they are not obliged to be in the office while preparing (Deloitte, 2020a: 4-5).

It is seen that research, theory, proposition and conceptual explanations have been made in the field of business management with the pre-acceptance that those who work in traditional and even modern management understanding are largely (maybe completely) in the workplace. For example, organizational commitment, organizational citizenship, motivation, organizational climate, organizational culture, etc. it is accepted that those who work in studies where many concepts are the subject of are always in the workplace. However, it can be said that the issue of how to implement a management strategy remotely for a workplace that continues to operate in the new period may come to the fore (Deloitte, 2020a: 3).

In addition, quantitative and qualitative assessment techniques may need to be reviewed for managers in terms of motivation tools and techniques. For example, according to the quantitative data, besides the motivators, the communication, participation, effort, etc. motivers identified and allocated based on support points may need to be adapted to new digital workforce and telework models. In general, in the EU member countries, remote working models have been gradually introduced in some sectors recently, and it has been found that advantages have been gained in issues such as cost and time loss. Remote working can be recommended in knowledge-based enterprises, educational institutions and financial services (Kavi & Koçak, 2010: 81; Doğan, Bozkurt, and Demir, 2015: 379). According to a survey made during the pandemi in Turkey, remote / home / sectors where the most widely used digital study models and rates of these working models are shown in Table 1.

Table 1. Remote Employment Sectors in Turkey

Sectors	From Home	Partially From Home	Usually in The Workplace
Media and Advertising	%87,5	%12,5	%0,0
Service Sector	%80,3	%16,7	%3,0
Technology	%70,8	%25,0	%4,2
E-commerce	%62,5	%37,5	%0,0
Energy Sector	9661,1	%27,8	%11,1
Educational Sector	%50,0	%50,0	%0,0
Holding Companies	%50,0	%50,0	%0,0
Medicine	%50,0	%50,0	%0,0
Tourism	%50,0	%50,0	%0,0
Building Sector	%42,9	%50,0	%7,1
Durable Consumer Goods	%37,5	%50,0	%12,5
FMCG Industry and Retail	%33,3	%58,3	%8,4
Logistics	%28,6	%57,1	%14,3
Public Institutions	%25,0	%50,0	%25,0
Financial Institutions	%22,2	%75,0	%2,8
Manufacturing / Industrial	%20,7	%56,9	%22,4
Food Industry	%20,0	%80,0	%0,0
Others	%37,5	%50,0	%12,5

Source: Deloitte, (2020b). The Future of Work: Maintaining Organizational Resilience in Telecommuting System, <https://www2.deloitte.com/content/dam/Deloitte/tr/Documents/human-capital/isin-future-distant-calisma-sisteminde-organizational-dayanikliligi-protect.pdf>, Access date: 09.06.2020

Along with the changes in working patterns due to the pandemi, the anxiety of being unemployed has also caused great stress on individuals. However, it has become difficult to maintain work-life balance and women have experienced the most difficulties in this regard. For example, while the rate of strain on work-life balance is 21% for men, this rate rises to 34% for women (TÜSIAD, 2020).

From the point of view of Turkey, it is seen that businesses with fewer employees are closing more. According to the study conducted by TÜSIAD in May 2020, 35% of the businesses in the 1-9 range, 24% of the businesses in the 10-49 range, and 11% of the businesses in the 50-249 range have closed. However, more than 60% of Turkish businesses have delayed their growth and investment plans. However, businesses may face not only the problems they are experiencing but also the problem of not being ready for a possible second wave as shown in Table 2 (TÜSIAD, 2020).

Table 2. Risks Expected For September 2020 Period

	Low Risk %		High Risk %	
	1	2	3	4
2020				
Inability to Pay Debt	34	26	24	17

Inability to Borrow / Find Credit	37	24	21	18
Lack of Foreign Demand (Contraction in Export Markets)	26	17	27	30
Lack of Domestic Demand	9	19	37	34
Disruption of The Supply Chain	20	36	29	16
Investors Reduce Their Investments	15	16	36	34

Source: TÜSİAD, (2020). The Effects of Covid-19 Crisis on Business, Second Survey Result Report, Istanbul.

As shown in Table 2, in the third quarter, the management of the business ranked first on debt issues regarding the most important risk factors, followed by insufficient demand and disruptions in the supply chain. On the other hand, the effects of the outbreak on the management activities of businesses are not limited to the way they work. In particular, reduced demand, limited commercial environment, deteriorating supply chain, delayed deliveries, shrinking financial structure, etc. they are the major factors that cause uncertainty at the organizational level. It can be stated that the exit from the crisis is also due to macro developments, as this situation requires the search for solutions in the context of crisis management, but the whole system has deteriorated. The expectation that the effects of the outbreak will last for more than a year causes the main factors of pressure on Business Management to be experienced in financial terms (KPMG, 2020b: 12).

5. STRATEGIES FOR BUSINESS MANAGEMENT DURING COVID-19

The fact that the pandemic was effective in all sectors and presented a form of crisis interrupted routine business activities and caused an uncertainty. At this point, it can be stated from two angles: operational activities and managerial strategies. It is possible to summarize the managerial methods that should be taken into consideration by the business management in their ordinary / routine activities in general as follows (Kawakami, 2016: 15-16; MDHSS, 2020: 15);

- Identifying critical functions that may be affected by the decrease or absence of employees. For example, production, sales, accounting, etc. in case of possible dismissal of employees in their departments, ensure that those with critical duty remain in the business.
- Planning the rate of absenteeism (leave, partial work, etc.) up to 30-40% of current employees and transferring jobs at horizontal level with cross training of employees in critical functions. For example, IT staff processing and organizing basic financial information.
- Identifying and defining functions that can be performed off-site or from home / remotely, and transfer them to remote work. For example, dispatch, monitoring, reporting, inventory, etc. other than critical tasks. Directing jobs to remote work.
- Tightening the prevention measures. For example, expanding screening and isolation procedures for visitors and employees.
- Redefining and updating key suppliers and customers' contact information and methods. For example, supply chain members, customers, etc. development of new communication rules and processes.
- Restricting and stopping the businesses and processes that are likely to be affected by the pandemic. For example, reducing business trips as much as possible, transferring the interviews to online channels.
- Outsourcing some units or processes. For example, engaging third party businesses in operations such as purchasing.

- Taking special precautions regarding the critical duty owner, director or shareholder who will pose a problem in the brand, share value and commercial field for the enterprise when affected by the pandemic.
- Sharing the measures taken with customers, including solution partners, and ensuring their adaptation to the new era. For example, online communication instead of face-to-face meetings.
- Possible scenarios arising from the pandemic and making action plans accordingly. For example, assigning pandemic related people for the business.

Although it is not possible to put forward a general solution proposal against the crisis caused by the Covid19 Pandemic, the following strategies can be suggested in the management of this situation causing the crisis (MDHSS, 2020: 15; PWC, 2020; EY, 2020);

Financial Strategies; in terms of receivables, inventory and debt management, it is necessary to reach critical levels in raw materials and inventory. Because it is not clear how long the pandemic will last and the effects on other sectors may also be reflected, a balanced inventory management should be made. In receivables management, it may be beneficial to collect as much as possible with discounts and other incentives when necessary and to closely monitor risky receivables.

Labor force management and Labor Health Strategies; health plans should be made in accordance with official explanations and practices. Meetings, visits, etc. face-to-face contact should be reduced in processes. However, in order to ensure business continuity, the working conditions of the employees in critical positions must be adjusted according to the rules.

Supply chain; due to the fact that businesses have to work together with a large number of suppliers and Solution Partners, a contraction in supply channels and processes can be achieved during the crisis period. A number of long-term commitments could also be put on hold as the channel will become leaner in relations with its members.

Legal processes; official practices such as short work incentives in the pandemic process should be rigorously observed. The guidelines must be followed to avoid facing legal and administrative sanctions due to the crisis, especially business contracts.

Customer relations; since the impact of the Pandemic on all sectors is in question, more selective and careful consideration should be taken in the risk rating in the event of this crisis.

Crisis management team; since the pandemic is an ongoing crisis, it is useful to create a crisis management team that will provide information, management and planning about all processes.

In general, it is possible to summarize the strategy to be applied in the pandemic crisis in three steps and these are shown in Table 3 (KPMG, (2020b);

Table 3. Strategy in Pandemic Crisis

EVALUATION	FABRICATION	TAKING ACTION
<ul style="list-style-type: none"> • Determining the working capital needs that will occur in the future period. • Review and prioritization of contracts • Detection of cash surplus or congestion in the business. • Managing financial and treasury management from a single source. 	<ul style="list-style-type: none"> • Informing all stakeholders about the situation of the business in the face of crisis. • Keeping communication channels open, establishing transparent relations with stakeholders. • Getting new processes with suppliers and creditors in a new situation concept. • Determining action plans 	<ul style="list-style-type: none"> • Determining the road map according to the first two processes. • Making regular checks in line with the road map drawn and making revisions when necessary. • Implementing action plans and determining control points. • Providing continuous information by updating when

	with solution partners.	necessary.
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Source: KPMG, (2020b). Cash Management in Covid-19 Process, <https://assets.kpmg/content/dam/kpmg/tr/pdf/2020/04/covid19-surecinde-nakit-yonetim.pdf>, Accessed on: 04.07.2020

CONCLUSION AND EVALUATION

The situation, which became a pandemic in a short time with the spread of the Covid 19 virus, was a health crisis, but it affected all sectors, especially service. The biggest consequence and pressure of the pandemic on businesses and business managers has been financially. The contraction in the flow of funds, the decrease in production and the loss of demand have created a chain effect in the whole system, especially the small enterprises caught unprepared for this situation have come to the stage of closure. Another effect of the pandemic has been in the way they work. In the management science literature, there has been a mandatory transition to telework models, which are usually voluntary or employee-employer consensus.

Covid 19 pandemic is a global health crisis and has affected all sectors heterogeneously. In this process, it can be suggested that businesses should do more effective and qualified studies on crisis management. In this context, business continuity should be provided, albeit at a minimum, as well as fight against the crisis. It may be necessary to conduct stress tests and analyzes on regular employees, managers and ratios. Additional measures may be taken for the points where the pressure is concentrated. However, it is beneficial to establish crisis management teams that can provide strong and cross-responses by closely monitoring economic and social effects. Since the abundance of data and information in crisis periods may cause confusion, business management should be able to make optimum decisions over qualified and functional information.

Finally, since businesses continue their activities through their employees, different working models should be adapted to the business within the scope of response to the crisis in this period. Because of this, it would be appropriate to use suitable options such as working remotely and telework systems. There are great differences between the crises experienced in the past years and the new situation for businesses, and the inexperience of those working in this field manifests itself as an important challenge. On the other hand, the alleviation of the effects of the crisis and the fact that the return to the normal will take more than a year according to the general opinion shows that the difficulties which businesses will face in the pandemic will continue.

This study is a literature assessment based on theoretical information generally accepted in the literature regarding the Covid-19 pandemic. In this field, there is a need for development in terms of both theoretical and research based.

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OPPORTUNITIES AND OPERATIONAL CHALLENGES FOR INDIAN MSME'S IN THE NEW NORMAL: A TRIANGULATION EFFECT**Mr. Kushal DEY**

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ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) has played a decisive role in Indian economy through high contribution in domestic production, significant export earnings, low investment requirements, competitiveness in domestic and export markets and generate new opportunities for entrepreneurs by providing knowledge and training. Employment potential at low capital cost and the labour intensity of the MSME sector is much higher than that of the large enterprises which is the major advantage of this sector. The COVID-19 pandemic has created havoc, affecting not only public health but also the world economy. The aftermath of this ripple effect has hit the MSMEs as well alongwith the corporates larger, not just immediately but also over the years to come. The lockdown of 54 days across the country has also affected manufacturing activities much and the supply chain. The post lockdown period has seen geopolitical tension with neighbouring countries which has forced the government to become self-reliant. The Government has taken strategic steps like providing infrastructure facilities, developing various industrial parks and technology incubators under MSME cluster development programmes, creating networks of organizations that help provide training to skilled workforce to improve productivity, encourage entrepreneurship and competency in management, funding R&D investments, technology advancement and introducing promotional policies for MSME's to increase competitiveness of the sector. As there are various opportunities available in the development of MSME's, this sector can also attract the foreign investment and technology. There are more possibilities of employment through the development of MSME's. After considering customers' expectations primarily the MSME's will be able to persuade their needs up to a great extent. Migration of rural youths can stop by providing them chance to work at their place. The mutual change in technology amongst the different types of MSME's, financial and technical assistance, liberal labour laws, training and skills formation will assist in the development of MSME's. This survey of literature study has revealed that there are critical barriers like lack of labour, lack of raw materials for production, unavailability of imported goods, bottleneck in supply chain management, lack of awareness in people regarding COVID 19, lack of buyers, perception of scarcity among masses, increased shortage for perishables, slow credit flow from banks and non-banking financial companies, lack of cash flow, pressure from local laws enforcement, e-pass issues which have impacted the supply chain and the economy of this country. This paper intends to analyse the causes of these operational challenges and compare the opportunities prevalent in the new normal across different industry segments under MSME's in India in the light of different forecasting business models.

Introduction:

Since independence Indian economy has observed a paradigm shift in its structure and performance. As the aftermath of liberalization of Indian economy in 1991 GDP growth of the country accelerated and rose sharply. Over the past recent years though the world economy was facing a very critical phase and financial crisis. India had grown and emerged as a powerful economy. Presently Indian economy is the seventh-largest economy in the world measured in terms of GDP and the third largest

in terms of purchasing power parity (PPP) (www.economytimesofindia.indiatimes.com). MSME sector that consists of small, micro, and medium enterprises plays a significant role to accelerate the growth of an economy. According to revised classification by government of India for a manufacturing or service based company is considered as a micro when its investment is less than 1crore and turnover is up to 5crore, similarly if investment is less than 10 crores and turnover is less than 50 crores for a company it is considered as a small industry and less than 20 crores of investment and less than 100 crores turnover for a company is considered as medium industry (www.economicstimes.indiatimes.com).

Backdrop of the study:

The average annual GDP growth went up to 7.3% in 2000s from 5.7% in 1990s (www.blogs.worldbank.org). It continued to rise in a decent way up until 2015 as shown below

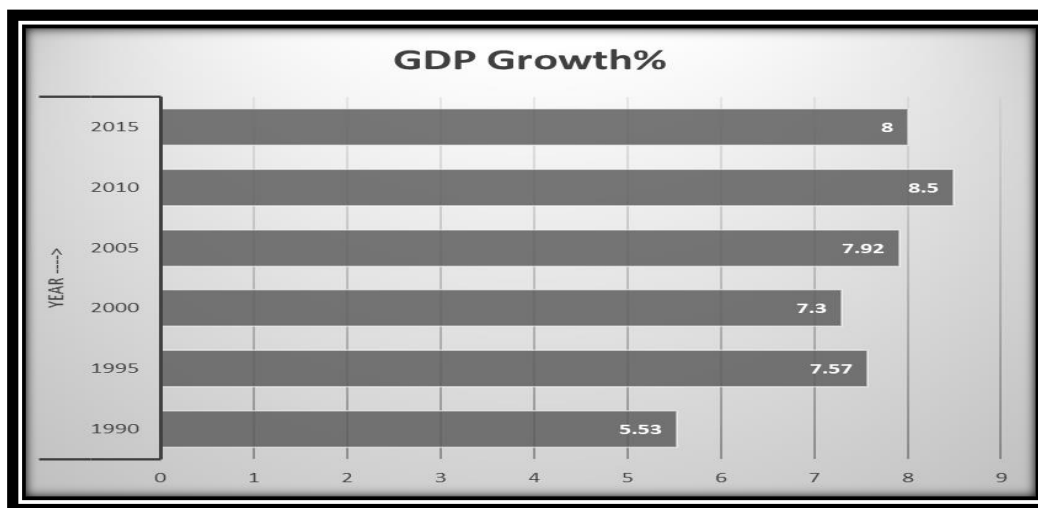


Figure 1: India's GDP growth rate analysis from 1990-2015 (data taken from www.macrotrends.net and www.blogs.worldbank.org)

India's GDP accounts for 3.34 percent of the world in fiscal year 2018-19 (www.wikipedia.org). Service sector contributes 54.40% of total India's GVA (Gross Value Added) of 169.61 lakh crore Indian rupees in 2018-19 whereas manufacturing sector and agriculture contributes 29.73 per cent and 15.87 per cent respectively (www.statisticstimes.com). The share of manufacturing sector in GDP must go up as this will create mass jobs in the economy. In India, the gross enrolment ratio (GER) in higher education is only 26.3 percent in 2018-19 (www.business-standard.com) and school dropout ratio from class 1st to 12th is also very high in present time. From the above data it is identified that rising of service sector is not only the solution for creating employment in India. Development of the manufacturing sector will ensure a sustainable growth in GDP and will enhance the entrepreneurship. As MSMEs are considered as a backbone of an economy it cannot be neglected in the economic growth process of India.

Significance of the study:

India's growth rate year 2000 onwards has been, by and large, stable, and resilient across broad based sectors: agriculture, industry, and services. The growth is also linked to increased productivity both labour as well as total factor productivity. The diversified trade basket and trading partners have given India a cushion, which insulates from slowdown at any part of world. One of the major highlights of India's GDP growth has been the continuous tilt towards services away from agriculture. India's Economic growth has slowed from beginning from late 2017-18 onwards. The GDP growth of India during the period 2017-18 quarter four to 2020 quarter one is depicted in Fig 2.

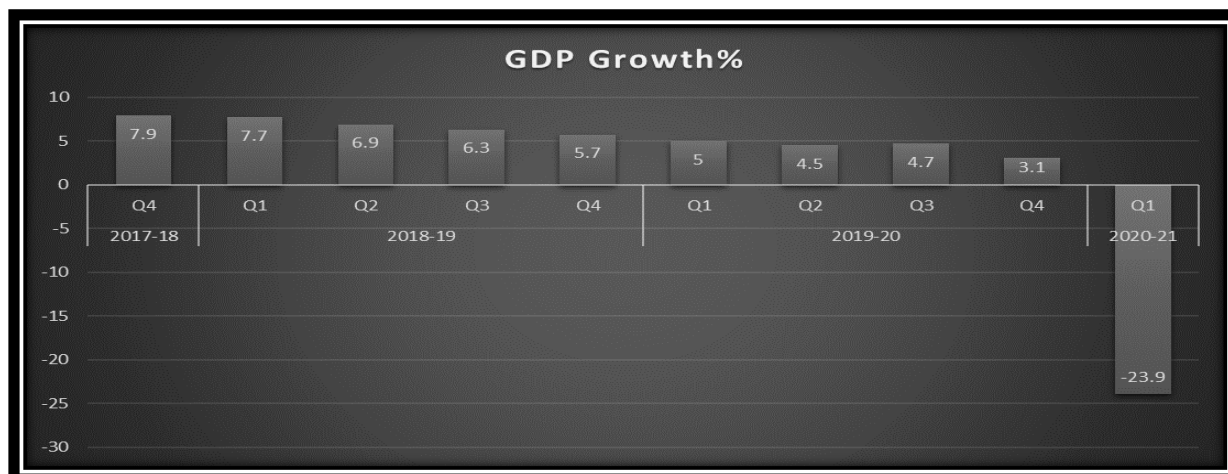


Figure 2: India's GDP growth rate analysis from 2017-18 fiscal year quarter 4 to 2020-21 fiscal year quarter 1 (data taken from www.macrotrends.net and www.blogs.worldbank.org)

The GDP growth of Indian Economy slipped 5.8% growth in January-March, although in nominal terms India's GDP grew by 7.99% which is also lowest since December 2002. Key sectors of Indian Economy slowed down are Agriculture, Automobile, Real Estate, FMCG, among others. The economic growth rate is probably the slowest in last many years. However, as per global standard Indian Economy is not in recessionary stage. The UK and the European Union consider an economy in recession only when real GDP growth turns negative over two consecutive quarters. Considering 2020-21 GDP growth of the quarter India is not far behind from that which is a serious concern for Indian economy. All four economic growth accelerators – domestic consumption, foreign consumption or exports, private investment, and government spending – are hit by the slowdown. In the first quarter of this fiscal year, domestic consumption decreased to 6.66% as against 8.41% in the same period last fiscal; exports as a share of the Gross Domestic Product was down to 19% from 20%; and fixed capital formation decreased from about 31% of the GDP to 29.8%, signalling a slowdown in the industry as well (www.mbauniverse.com). The cause of the problem as shared by some of the experts consists of supply-side shocks. Besides, important contributors to this problem include collapse in private consumption and investment freeze leading to double whammy, the effect of demonetization, too much debt, rollout of GST, global slowdown, retreat of globalization, ride out the storm and last but not the least lockdown due to COVID 19 in Indian economy.

Pandemic and its impact on Global Economy:

After the great depression of 1930, presently global economy is passing through a difficult time and facing the worst recession ever due to pandemic of corona virus. The Coronavirus (Covid-19) pandemic has created health crisis globally and it is a greatest challenge we have faced since world war two. The deadly virus has spread to almost every continent and cases are rising daily in many countries. Approx. 23 million people are affected by this disease and with 3 million affected people India is on third position in terms of numbers of affected people as per third week data of august 2020 (www.google.com). All the countries are rushing to control the spread of the virus in various ways like increasing the testing and treating patients carrying out contact tracing, limiting travel, quarantining citizens, and avoiding large gathering such as sporting event, concert, school, and universities. Developed countries like America, Italy, Spain were failed to manage the situation. The pandemic is still passing through all over the world like a wave. Almost all the countries across the globe focusing on social distancing as advised by world health organisation (WHO). Social distancing is the only way to control the spread of the virus. Though many countries still have steadily into lockdown, over 213 countries and territories around the world have reported a total of 23,130,443 confirmed cases of corona virus and a death toll of 803,374 (www.worldometers.info: updated on 22nd

August 2020). In a report by KPMG named “Potential Impact of COVID-19 on Indian Economy” mentioned March Purchasing Managers' Index (PMI) data for both services and manufacturing as social distancing causes a sharp decline in demand it reflects in increasing economic stress. This pandemic will significantly affect extant social behaviours, spending pattern, travel habits, supply-chain, country interdependence, and service delivery models with consequential impacts on lifestyles, market, and global economy and as production is curtailed around the world. It is also forecasted in the above-mentioned report that many firms will suffer shortage of necessary inputs and severe demand shock is underway particularly discretionary spending. This virus outbreak has affected mainly manufacturing supply chains; energy and commodity demand has also sharply declined. The VIX is an important tool for economists to model the knock- on effects of market selloffs on capital spending. A higher VIX occurs in times of stock market sell-off.

The Market Volatile (VIX Index) at Global Financial Crisis (GFC)

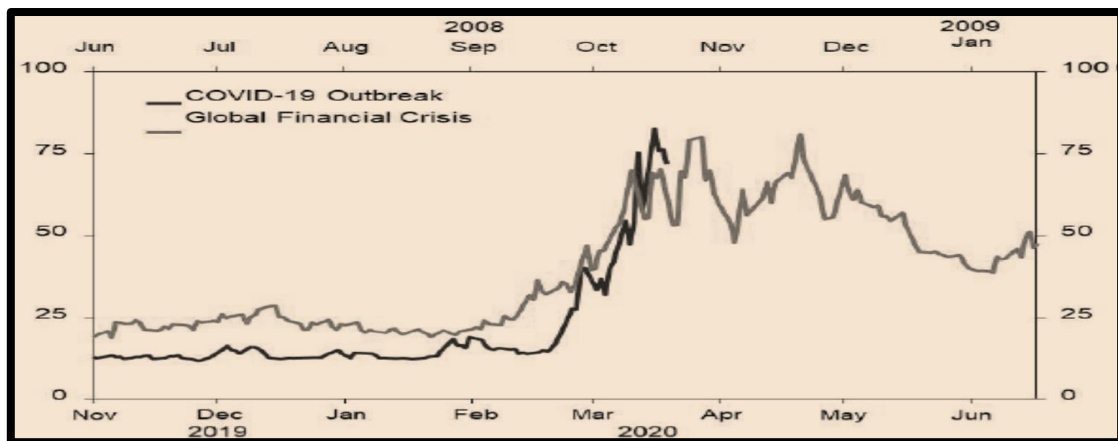


Figure 3: Wall street journal (19th March), Haver analytics, secondary research done by KPMG's 2020 analysis

An elevated VIX is associated with wider corporate bond spreads which indicate the higher borrowing costs reduce corporate investment which in turn reduces GDP. Across the world shops, theatres, restaurants are closing. Every day people are losing jobs, and nobody knows when the normal lifestyle will begin. The International Labour Organisation estimates that 195 million jobs could be lost. Even most of the powerful developed countries are also helpless because they have become too late to implement the decision of social distancing. Italy the world top health service facility has been collapsed. Beds have been shortage to admit affected person with virus and world is facing a horrible situation it both the extreme ways economically and Healthwise.

Review of literature:

MSME plays a significant role to accelerate the growth of Indian economy. But the position of MSME will be very unimaginable and unpredictable after this epidemic. The state of Uttar Pradesh has the largest number of estimated MSME with share of 14.20% of total MSME's in the country. West Bengal comes as close second with a share of 14% followed by Tamil Nadu and Maharashtra at 8%. For survival of Indian Micro, Small and Medium enterprises desperately looking for immediate assistance. Normal business activities are being completely stopped for all type of business organization. This standstill due to the spread of COVID 19 for couple of months will be a very crucial for Indian MSME. However, if the pandemic proliferates and prolonged lockdown would exacerbate economic trouble. India's growth may fall below 3% in financial year 2021 under this scenario (KPMG report). Coronavirus outbreak is having a stark effect on small business businesses as the situation drags on (National Federation of Independent Business). There will be unemployment situation rises sharply in the coming couple of months since people displaced from their jobs for maintaining social distancing guidelines. But for some businesses the impact may be positive. Those businesses which deal with essential items which is required for livelihood experiencing stronger sales due to Sharp rise in demand for product. Consumers are buying essential commodity more than

necessary which ultimately leads to exponential growth in sales. The stutter buying in huge quantity of essential commodity leads to increase the price of commodity due to lower supply and high demand. For packaged food business this critical situation has some opportunity to expand their business. Every family have been quarantined in their home. They are not allowed to move from one place to another. In this time business who deals with packaged food can grab the opportunity by making home delivery and create a healthy relationship with society. SMEs who deals with export, there will be slow down of export business. Service sector is also slowing down since more people opting social isolation like salon shop. MSME sector in India will face the problem like low liquidity or cash flow and lack of workforce since daily-wagers have gone to their villages. Lack of workforce will have to be a negative impact on production. Lower production means lower supply and lower supply will create the inflation environment.

Research Rationale:

COVID-19 with global shutdown and quarantine has severely affected the supply side of economy without collateral damage to the demand side. However, mankind history is replete with several instances of not only recovering but also coming back strongly from several pandemics including two world wars. To calculate impact on demand, correlations between demand, lockdown and spread were considered. In the below mentioned table impact of COVID-19 on supply and demand in various sub sectors of economy also has been analysed in a recent study “FOCUSED INTERVENTIONS FOR ‘MAKE IN INDIA’ POST COVID 19” published by Technology Information, Forecasting & Assessment Council (TIFAC), MAY 2020 edition.

Table 2:

Analysis of Demand and Supply for different MSME sectors in present context

Sector	Category	COVID-19 Impact on Supply (FY21)	COVID-19 Impact on Demand (FY21)
Agriculture	Crop and animal production, hunting, and related service activities	Medium-High	Low
	Forestry and logging	Medium-High	Low
	Fishing and aquaculture	Medium-High	Medium
Mining	Mining of coal and lignite		High
	Extraction of crude petroleum and natural gas	High	Medium
	Mining of metal ores	High	High
	Other mining and quarrying	High	High
	Mining support service activities	High	Low
Manufacturing	Manufacture of food products	High	Medium
	Manufacture of beverages	High	High

Manufacturing	Manufacture of tobacco products	High	Low
	Manufacture of textiles	Medium	Low
	Manufacture of wearing apparel	High	High
	Manufacture of leather and related products	High	High
	Manufacture of wood and wooden products, except furniture	High	High
	Manufacture of paper and paper products	High	High
	Printing and reproduction of recorded media	High	High
	Manufacture of coke and refined petroleum products	High	Medium
	Manufacture of chemicals and chemical products	High	Medium
	Manufacture of pharmaceuticals, medicinal chemical and botanical products	Medium	None
	Manufacture of rubber and plastics products	High	High
	Manufacture of another non-metallic mineral products	High	Medium
	Manufacture of basic metals	High	High
	Manufacture of fabricated metal products, except machinery and equipment	High	High
	Manufacture of computer, electronic and optical products	High	None
Manufacture of electrical equipment (motors, generators, transformers)	High	Low	
Manufacture of machinery and	High	High	

	equipment n.e.c.		
	Manufacture of motor vehicles, trailers and semi-trailers	High	High
	Manufacture of other transport equipment	High	Medium
	Manufacture of furniture	High	High
	Other manufacturing	High	High
	Repair and installation of machinery and equipment	High	None
Electricity & Gas	Electricity, gas, steam, and air conditioning supply	Low-Medium	High
Water supply & Sewerage	Water collection, treatment, and supply	Low-Medium	None
	Sewerage	Low-Medium	None
	Waste collection, treatment, and disposal activities; materials recovery	Low-Medium	None
	Remediation activities and other waste management services	Medium-High	None
Construction	Construction of buildings	High	High
	Civil engineering - Roads / Railways and Projects	High	High
	Specialized construction activities	High	High
Wholesale & Retail trade	Sale of Motor vehicles and repair of motor vehicles and motorcycles	Medium-High	High
	Wholesale trade, except motor vehicles	Low-Medium	Medium
	Retail trade, except of motor vehicles and motorcycles	Medium-High	High
Transportation & Storage	Land transport and transport via pipelines	Low-Medium	High

	Water transport	Low-Medium	High
	Air transport	Low-Medium	High
Transportation & Storage	Warehousing and support activities for transportation	Medium-High	None
	Postal and courier activities	Low-Medium	High
Hotel & Food	Accommodation	Low-Medium	High
	Food and beverage service activities	Medium-High	High
Information & Communication	Publishing activities	Low-Medium	None
	Motion picture, video and television programme production, sound recording	Low-Medium	None
	Broadcasting and programming activities	Low-Medium	Positive
	Telecommunications	Low-Medium	Positive
	Computer programming, consultancy and related activities	Low-Medium	Medium
	Information service activities / Portals	Low-Medium	Positive
BFSI	Financial service activities, except insurance and pension	Low-Medium	Medium
	Insurance, reinsurance, and pension funding	Low-Medium	None
	Other financial activities	Low-Medium	High
Real Estate	Real Estate	Medium-High	High
Professional & Technical	Legal and accounting activities	Low-Medium	Low
	Activities of head offices; management consultancy activities	Low-Medium	Low
	Architecture and engineering activities	Low-Medium	Medium
	Scientific research and	Low-Medium	Positive

	development		
	Advertising and market research	Low-Medium	Medium
	Other professional, scientific, and technical activities	Low-Medium	Medium
	Veterinary activities	Low-Medium	High
Administrative and Support	Rental and leasing activities	Low-Medium	High
	Employment and Recruitment activities	Low-Medium	High
	Travel agency, tour operator and other reservation service	Low-Medium	High
	Security and investigation activities	Low-Medium	Low
	Services to buildings and landscape activities	Low-Medium	High
	Office administrative, office support and other business support	Low-Medium	Medium
Public Administration and Defence	Public administration and defence. compulsory social security	Low-Medium	Positive
Education	Education	Low-Medium	Medium
Healthcare and Social Work	Hospital activities	Low-Medium	Positive
	Residential care activities	Low-Medium	Positive
	Social work activities without accommodation	Low-Medium	Positive
Entertainment & Recreation	Creative, arts and entertainment activities	Medium-High	Medium
Entertainment & Recreation	Libraries, archives, museums, and other cultural activities	Medium-High	Medium
	Gambling and betting activities	Medium-High	Medium
	Sports activities and amusement and recreation activities	Medium-High	Medium
Other Services	Activities of membership organizations	Medium-High	Medium

	Repair of computers and personal and household goods	Medium-High	Medium
	Other personal service activities	Medium-High	Medium
Activities of households	Activities of households as employers of domestic personnel	Medium-High	Medium
	Undifferentiated goods- and services- producing activities of private households	Medium-High	Medium
Extraterritorial organizations	Activities of extraterritorial organizations and bodies	Medium-High	Medium

Table 1: “FOCUSED INTERVENTIONS FOR ‘MAKE IN INDIA’ POST COVID 19” published by in Technology Information, Forecasting & Assessment Council (TIFAC), MAY 2020 edition

It is inferred from the above analysis that supply side in the sectors of Mining, Manufacturing, construction, food, entertainment and recreation have been badly impacted whereas in sectors like agriculture, textile, electrical equipment, education and healthcare services, the demand is not so affected.

Objectives of the Study:

The objectives of this study are

- To identify the critical factors which has impacted the supply chain mechanism of the country with respect to MSME sector so badly. Indian MSME sector was already passing through a tough situation and now the outbreak of COVID 19 virus is creating a new challenge for this sector.
- Though some of the MSMEs are doing well and some of them struggling to adopt the changes. This article intends to analyse the causes of these operational challenges and compare the opportunities prevalent in the new normal across different industry segments under MSME's in India.
- To validate the challenges and opportunities in the post new normal times of Indian MSME sector with a business model.

Research Methodology:

Qualitative research is a kind of research that relies on unstructured and non-numerical data. The data may take the form of field notes written by the researcher in the course of observation, interviews, audio or video recordings carried out by the researcher in natural settings or interviews, documents of various kinds like publicly available or personal; paper-based or electronic; already available or elicited by the researcher and even material artifacts (www.wikipedia.org). The use of these data is enlightened by various methodological or philosophical assumptions, as part of various methods, such as ethnography (of various kinds), discourse analysis (of various kinds), interpretative phenomenological analysis and other phenomenological methods. A qualitative systematic review leads together research on a topic, systematically searching for research evidence from primary qualitative studies and drawing the findings together. The systematic literature review (SLR) methodology has been talked about in detail elsewhere (Tranfield et al., 2003; Pittaway et al., 2004; Denyer and Neely, 2004). Therefore, it is briefly explained how the methodology was used in the context of the study. The basic principles of SLRs, as applied in management research, are transparency, clarity, equality and accessibility and that it is focused and unified (Thorpe et al., 2006).

Systematic review of papers are different types structured review focusing on widely used methods, constructs and theories namely, structured review focusing on widely used methods, constructs and theories (Canabal & White III, 2008; Kahiya, 2018; Paul & Singh, 2017; Rosado-Serrano et al., 2018), framework-based (Paul & Benito, 2018), a hybrid-narrative type that sets a framework for identifying future research agenda (Kumar et al., 2019; Paul et al., 2017), theory-based (Gilal et al., 2019; Paul & Rosado- Serrano, 2019), a meta-analysis (Knoll & Matthes, 2017), bibliometric review (Randhawa et al., 2016), a review aimed at the development of a model or framework (Paul, 2019; Paul & Mas, 2019) and morphological review (Ritchey, 2011; Sunder et al., 2018; Zwicky, 1969). Tranfield et al. (2003) stated that the systematic review of literature is becoming one of the crucial scientific activities for reviewing previous research works. The framework for dealing with multiple searches for both new reviews, and review updates were similarly laid out by a single diagram where results from multiple searches would be added together. This is the simplest option, summarizing the searching activity for the reader in the least complicated way. It is not a true reflection of the searching activity, in that multiple searches will almost certainly have been conducted; however, the dates of individual searches could be included in the diagram if desired.

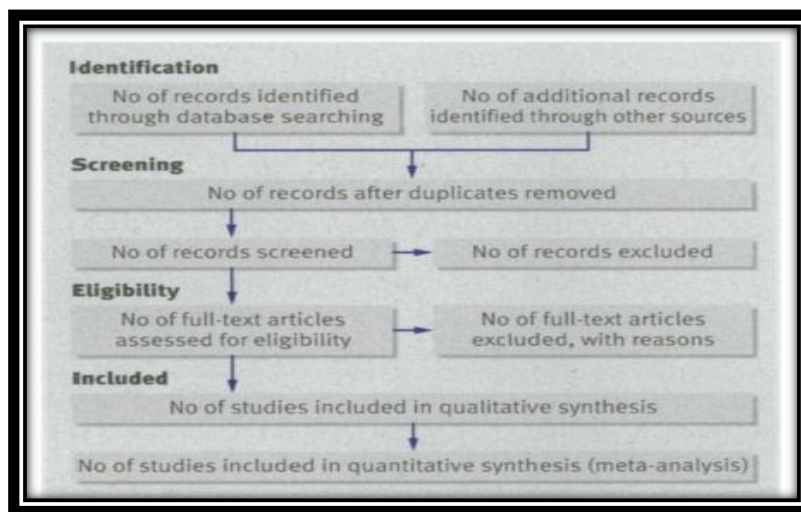


Figure 4: Adapted study flow diagram for systematic literature review

(“Preferred reporting items for systematic reviews and meta-analyses: the PRISMA Statement” by David Moher, Alessandro Liberati, Jennifer Tetzlaff and Douglas G Altman, 1981)

Table 2:

Stages of the relevant SLR Process in the present context

Stages	Description	Included	Excluded	Duplicates
Stage:1	Overall review of 400 nos. research papers for analysis of preliminary content.	200	100	100
Stage:2	Review of 200 nos. research papers for analysis of title.	100	50	50
Stage:3	Review of 200 nos. research papers for analysis of abstract			

	A ranked:	50	10	10
	B ranked:	50	10	10
	C ranked:	50	5	5
Stage:4	Categorization of relevant research papers by refining of 197 Nos.			
	Type I (Present India Economic Scenario)	25	10	12
	Type II (MSME Scenario in India)	20	7	10
	Type III (Impact of Pandemic in Indian Economy & MSME's)	30	9	7
	Type IV (Challenges of MSME in India)	15	10	8
	Type V (Opportunities of Indian MSMEs)	20	8	6
Stage:5	Methodology Formulation of refined 75 research papers based on objective	40	20	15
Stage:6	Identification of factors which can eliminate barriers for MSMEs in India in new normal by analyzing 100 Nos. research papers.	50	25	25
Stage:7	Finally conclude from the analysis done in Stage:7	-	-	-
Stage:8	Limitations and future scopes by self-realization and analysis of 50 research papers	30	10	10

Analysis and Findings:

The public goods are provided by government and the government needs tax revenues to supply them, and these depend upon national income. Then there is employment. A demand for labour increases when there is a demand for goods. So, growth is important if employment is to be assured. This economic slowdown directly affects the Indian MSME sector and they are facing huge challenges like procurement of raw materials at a competitive cost, high cost of credit, collateral requirements, limited access to equity capital, inadequate infrastructure facilities, including power, water, roads, etc., lack of skilled manpower for manufacturing, services, marketing, etc., lack of access to global markets, low technology levels and lack of access to modern technology, lack of business know-how, complacency (lack of motivation), legal constraints, monopoly- protectionism. The impact of lockdown will be very discomfort for Indian MSME because in India most of the small business

transactions are done in cash and payment to the workers and laborers are also made in cash. Small businesses are not very much comfortable to adopt digital practices in its business. Due to this crisis small businesses will try to adopt digital practices in its business. There are chances to arise the problem of liquidity crunch and without adequate liquidity the small business might be close in coming future. Considering these challenges Indian government has started taking some initiative to keep the MSME segment afloat. The RBI recently introduced long term repo operation (LTRO) worth 100000 crore, as a result bank can increase lending at cheaper interest rate. Such type of initiative will give some help to MSME sector. Those SME's which are listed in BSESME exchange there is a possibility to decline the share price. People will hesitate to invest in SMEs stock after this epidemic as a result supply will be greater than demand which leads to decline the share value. They took several steps like changing MSME definition, less capital intensive, finance and subsidies from government, produced goods are promised to be purchased by government, export channelization, collateral-free automatic loans, subordinate debt for stressed MSMEs, equity infusion through fund of fund, global tenders to be disallowed up to 200 crore, marketing and liquidity help, 2500 crore EPF support for business & workers for 3 more month, reduction in EPF contribution, liquidity through TDS/TCS rate reduction, direct tax measure etc. which are definitely creating hopes for MSMEs. A triangulation study was conducted between challenges, opportunities and pandemic environment and we studied the effect of these three factors on Indian MSMEs

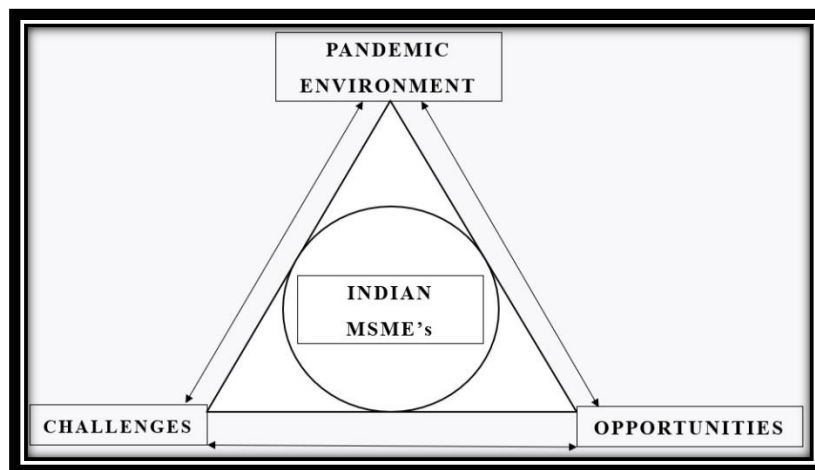


Figure 5: Triangulation analysis on Indian MSME sector considering challenges, opportunities, and pandemic environment

The current COVID-19 pandemic is Global but the solutions to the challenges must be Local. It is crucial that we urgently rethink, refocus our priorities and plan fundamental changes in the way we do business and support economy. Recovery of Indian economy will depend upon adoption of appropriate measures e.g. Policy support to unconventional strategies, depth & breadth of foreign partnerships, leveraging international partnerships in important sectors like: agriculture (viz. partnership with Israeli companies), MSMEs (with German companies) and large manufacturing tie ups with US and Japan under Start up India etc. Planning would warrant a detailed understanding of sector wise business imperatives, demand supply position, technology status in India, existing capacity, its further strengthening, and initiatives (long term & short term). In this paper we have analyzed the Indian MSMEs sector hindrances, opportunities during pandemic environment which are crucial to country's perspective namely: health, manufacturing, e-commerce, agriculture & food processing, hotels, restaurants and tourism, FMCG, chemical, education at a macro level. The nationwide lockdown will have significant impact on agriculture sector. Farmers are worry about government procurement and their ability to sell their agricultural product. Even markets are still closed, order from the home ministry to exempt all farming activities from shutdown. Unless the government acts soon, farmers in India will face bleak future leading to bankruptcies and they will suicide. Automotive sector was already witnessing a sluggish demand for last one year. The present situation has further aggravated the problem and compounded the situation with an acute liquidity

crunch. China account for 27% of India's automotive part import. Wuhan is the major auto hub the supply chain of automotive sector has been hit significantly. Demand of hotels, restaurants and tourism has decline substantially due to complete lockdown. Owners are struggling to recover fixed cost. There will be no demand of hotels around 5 to 6-month, people will try to avoid travelling which leads to lower demand to hotels. India is a beautiful cultural and historical tourism attract domestic and foreign national throughout the year. The entire tourism value chain, which includes hotels, restaurants, and agents have been stopped. Tourism industry is likely taking a massive hit and people will generally avoid movement for tourist purposes in foreseeable future. In India, the service sector account for 55% of GDP. It is estimated that the loss to tourism and hospitality industry will be \$2.1 billion for March and April alone. Apparel and Textile sector contributes 2% of GDP. China is the production hub of cotton. India is totally dependence on china for textile raw material includes synthetic yarn, synthetic fabric, buttons, zippers, and hangers. India also exports cotton yarn to china in bulk quantity. Now due to the outbreak there is poor demand in china as result price to come down in India. Garment manufacturer can look at local sourcing opportunities. Textile and apparel sector production is expected to decline by 10-12 percent in April- June quarter. This sector is one of the largest employers in the country, employing over 45 million (direct jobs) as well as large number of daily pay workers. Temporary closures of factories and lay-off have already begun among low-wage worker. After the lockdown announcement, demand for essential FMCG product has been increased owing to panic buying. Groceries items milk, bread, and hygiene products etc. have a huge demand, as a result supply has been shortage which leads to increase in price. Several e-commerce players Flipchart, Amazon, Myntra etc. are unable to fulfillment customer requirement due to absence of delivery man. They are not accepting new orders however companies are trying to service essential items on priority basis. But the story is not end here, consumer buying habit is going to be change after this event, consumer will avoid large gathering as in traditional shop. Most of the consumer will prefer online shopping. Hence there is lots of opportunity to expand business in near future. Construction work in different sites has been stopped. Estimated job loss of 30% in real estate sector. Fresh equity investments into the country's real estate sector would slow down. India is 6th largest chemical and petrochemicals producer in world, contribute 3.5% of global chemical industry (2018-19). Raw material price for petrochemicals are falling primarily driven by crude price. Imports are expected to fall as major import sources, Middle East and China are highly impacted by Covid-19. Majority of the chemical producing units are SMEs and they do not sudden increase working capital requirement. Extension of credit to customers and suppliers alongside falling revenue in the short to medium term is expected to adversely affect cash flows. All the education institution is closed to avoid large gathering. In India there are 39931 colleges and 933 universities (2018-19). Schools around the country have been impacted by Covid-19, closures of schools last several weeks during the crucial period of academic year ending. Low-fee private schools especially are likely face larger impact on teaching and learning. In higher education, most higher education institute are not fully geared to implement online learning. Factors identified causing hindrance in post covid-19 recovery using SLR cuts in spending on durable goods (e.g. cars, appliances), extent of behavior shift (e.g. restaurant spend, gym activity), extent of travel reduction (% flight cancellations, travel bans), late payments/credit defaults, stock market & volatility indexes, purchasing managers' index, initial claims for unemployment, bounce-back in economic activity in countries that were exposed, early in pandemic, Early private and public sector actions during the pandemic to ensure economic restart. The recovery factors identified for Indian MSMEs in Post pandemic through analysis technology clusters across the country to be established for homogenous job creation, identify technologies in champion sector: Segment wise solution- Aggregation platform as single window, develop incubation for building a monetization exchange Technology for startups, promote import substitution, indigenous innovation in association with academic institutions and research centers (Link the funding support to identified technology translation), evolve technology platforms in solar technologies, e -vehicle, and innovative agri-processing, in association with Israel, Japanese and German COE, affordable Technologies development/downsizing/adoption for rural areas: onsite agri processing, hydroponics, aquaculture, mobile test centers, e-vehicle, distancing learning & knowledge platform, extensive application of telemedicine for outreach to rural areas on a PPP model, a technology ready repository to be maintained. Individual different Indian industry segments have technology needs for their respective sectors. The correlations between various sectors were evaluated

to understand the impact of one sector on the output of all sectors in the below mentioned business model proposed by Technology Information, Forecasting & Assessment Council (TIFAC).

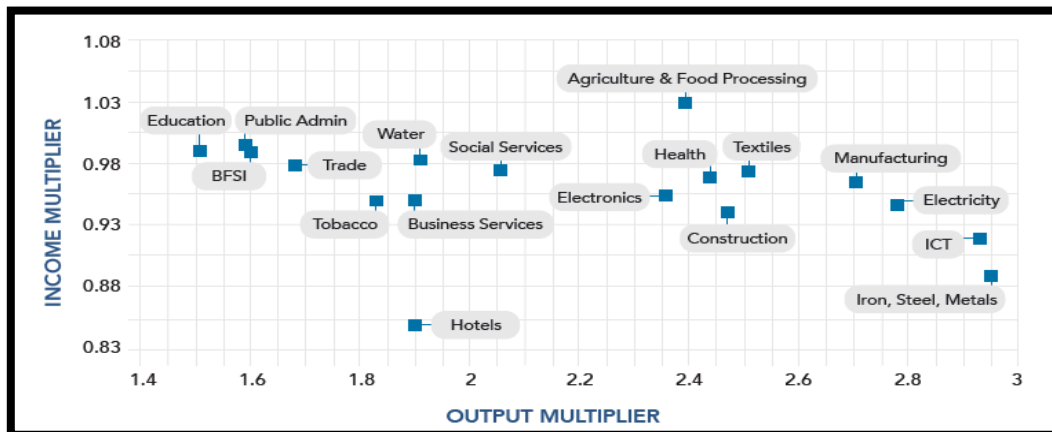


Figure 6: Business model proposed by Technology Information, Forecasting & Assessment Council (TIFAC) in “FOCUSED INTERVENTIONS FOR ‘MAKE IN INDIA’ POST COVID 19”, MAY 2020 edition

As derived from the above model we can see certain sectors with high output multiplier and decent income multiplier that deserve a special focus in form of technology intervention. However in post COVID scenario the factors which shaping the world business are identified as follows shift towards localization, ‘Digital’ gets a real push, ‘Cash is king’ for businesses, move towards variable cost models, building sensing and control tower capabilities, supply chain resilience is key, building agility

Conclusion:

In our analysis it is found though this pandemic has caused havoc still there are opportunities for MSME sectors. However challenges prevalent-high cost of credit, difficulty of procurement of raw materials at a competitive price, inadequate infrastructural facilities, and lack of labors, Early private and public sector actions, Bounce-back in economic activity in exposed countries, Stock market & volatility indexes, Purchasing managers' index, Spending cuts, Behavior shift, Travel reduction, Credit defaults, unemployment and opportunities galore-collateral-free automatic Loans, subordinate debt for stressed MSMEs, equity infusion through fund of fund, global tender restriction, marketing and liquidity help, reduction in EPF contribution, liquidity through TDS/TCS rate reduction, direct tax measure. Providential opportunity to fill this space provided it takes measures to improve its production ecosystem and design new global alignments. For this, proactive, large-scale, and integrated measures across all policy areas are necessary to make strong and sustained impacts.

Limitation:

The study is descriptive in nature and validation of the identified factors could not be exercised due to paucity of time and money. Study does not reflect the gap which may exist due to the non-validation of the factors. Hence based there remains an opportunity to validate the factors with respect to primary data collection and quantitative analysis.

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**AN EARLY IMPACT ASSESSMENT OF THE NEW CORONAVIRUS
(COVID-19) OUTBREAK ON THE TURKISH ENERGY SECTOR****Assoc. Prof. Dr. Seyfi ŞEVİK**

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ABSTRACT

The aim of this study is to evaluate the current and future impacts of the epidemic that COVID-19 was firstly reported in Wuhan, China, called new coronavirus (COVID-19) on the Turkish energy sector. This study gathers the latest evidence on how the COVID-19 pandemic is affecting energy use around the world and particularly in Turkey, as a way of sense-check the past and making future predictions. In order to assess the impact of COVID-19 on Turkey energy sector, in the light of the January-June data announced of 2020, an assessment was made on the decrease in electricity demand as well as assumed industrial production cuts, economy, and other restrictions. Coal and gas sectors were the most affected by COVID-19. Negative impacts; Decreasing demand (for the producer), profit margin (for the producer), investments, supply chain, fossil energy sources, labor, electricity consumption, production, and unemployment. Positive impacts; Decreasing demand (from the consumer perspective), falling prices, interconnected reliability, renewable energy sources, energy bill, and fossil energy resources (environmentally). Turkey's GDP growth was not affected in the Q1 of 2020. Electricity consumption contracted 15%, 16.3%, and 0.4% from April to June, respectively. Based on pioneer indicators, a contraction of 10.5% in GDP was forecasted in for Q2 2020. Although residential electricity consumption increases during the stay at home, it is not difficult to predict a sharp decline in the industrial sector where most of the electricity is consumed. On the other hand, although there are positive expectations from the second half of 2020, it can be specified that stagnation and stay home issues for economies in Turkey and other countries are not an immediate concern, but could definitely become a problem if the disease control measures continue further. In this case, it can be said that it will reduce the likelihood that Turkey will achieve its goal of commissioning 3.7 GW worth of renewable energy projects scheduled until 2021.

Keywords: COVID-19; Coronavirus; energy sector; outbreak; electricity consumption; Turkey**YENİ KORONAVİRÜS (COVID-19) SALGINININ TÜRK ENERJİ SEKTÖRÜ ÜZERİNDEKİ
ERKEN ETKİ DEĞERLENDİRMESİ****ÖZET**

Bu çalışmanın amacı, ilk olarak Çin'in Wuhan kentinde bildirilen yeni koronavirüs (KOVİD-19) salgınının Türkiye enerji sektörü üzerindeki mevcut ve gelecekteki etkilerini değerlendirmektir. Bu çalışma, KOVID-19 salgınının geçmişi kontrol etmek ve geleceğe yönelik tahminler yapmak için dünyada ve özellikle Türkiye'de enerji kullanımını nasıl etkilediğine dair en son kanıtları bir araya getirmektedir. KOVID-19'un Türkiye enerji sektörü üzerindeki etkisini değerlendirmek için, açıklanan Ocak-Haziran 2020 verileri ışığında, elektrik talebindeki düşüş ve endüstriyel üretim kesintileri, ekonomi ve diğer varsayımlar üzerinde bir değerlendirme yapıldı. Kömür ve gaz sektörleri COVID-19'dan en çok etkilenenlerdi. Olumsuz etkiler; Azalan talep (üretici için), kar marjı (üretici için), yatırımlar, tedarik zinciri, fosil enerji kaynakları, emek, elektrik tüketimi, üretim ve işsizliktir. Olumlu etkiler ise; Azalan talep (tüketici perspektifinden), düşen

fiyatlar, birbirine bağılı güvenilirlik, yenilenebilir enerji kaynakları, enerji faturası ve fosil enerji kaynaklarıdır (çevresel olarak). Türkiye'nin GSYİH büyümesi 2020 yılının ilk çeyreğinde etkilenmedi. Elektrik tüketimi Nisan'dan Haziran'a sırasıyla %15, 16.3 ve % 0.4 daraldı. Öncü göstergelere göre, 2020'nin 2. çeyreğinde GSYİH'de % 10.5'lik bir daralma öngörülmüştür. Evde kalma sırasında konut elektrik tüketimi artmasına rağmen, elektriğin çoğunun tüketildiği sanayi sektöründe keskin bir düşüş öngörmek zor değildir. Öte yandan, 2020'nin ikinci yarısından itibaren olumlu beklentiler olsa da, Türkiye ve diğer ülkelerdeki ekonomiler için durgunluk ve evde kalma sorunlarının acil bir endişe kaynağı olmadığı, ancak hastalık kontrolü durumunda kesinlikle bir sorun haline gelebileceği belirtilebilir. Önlemler daha da devam etmektedir. Bu durum, Türkiye'nin 2021 yılına kadar planlanan 3.7 GW değerinde yenilenebilir enerji projelerini devreye alma hedefine ulaşma olasılığını azaltacağı söylenebilir.

Anahtar kelimeler: KOVID-19; Koronavirüs; enerji sektörü; salgın; elektrik tüketimi; Türkiye

1. Introduction

COVID-19 is not the only serious health threat facing humanity, many outbreaks have occurred throughout human history. Cholera epidemic in the 19th century, Spanish flu in 1918, Asian flu (H2N2) in 1957–1958 and Hong Kong flu (H3N2) in 1968, severe acute respiratory syndrome (SARS-CoV-1) outbreak in 2002–2004, influenza A (H1N1) pandemic in 2009–2010, Middle East respiratory syndrome (MERS-CoV) in 2012, Ebola virus disease (EVD) in 2013–2016, and finally new coronavirus (SARS-CoV-2) that appeared at the end of 2019 led to the death of many people. The name of the virus was determined as "severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)" on February 11, 2020. Although COVID-19 is genetically related to the coronavirus in the 2003 SARS outbreak, it should be noted that both viruses are different. The name of the disease is temporarily named as 2019-nCoV, then it was announced as "coronavirus disease (COVID-19)" and on March 11, the World Health Organization (WHO) officially characterized the Coronavirus, 2019 (COVID-19) as a pandemic [1]. COVID-19 is a single chain RNA virus belonging to the coronavirus family [2]. A novel coronavirus, named COVID-19 (CO: corona, VI: Virus, D: Disease, 2019), was first detected in Wuhan, China at the end of 2019. It is stated that COVID-19 case fatality rates are high, between 0.6% and 3.5% [3] and it is considerably harder to intervene in cases with SARS-CoV-2 due to high contagiousness [4]. With the globalization of the world, the speed and effect of outbreaks have increased. Its impacts on different sectors are yet to be fully understood but the coronavirus COVID-19 (2019-nCoV) epidemic deeply affects social life globally, which causes significant changes in many areas such as individual, institutional, social, economic, and environmental. Kissler et al. (2020) [5] stated that it will not be possible to get rid of the new coronavirus epidemic in a short time, social isolation can be maintained until 2022 and an infectious revival could be possible until 2024. As of August 15, 2020, there are currently 21 million confirmed cases and about 756 thousand deaths due to the COVID-19 outbreak throughout the world and are rising rapidly [6].

In the literature, many studies have been conducted on the impact of the COVID-19, these are; Impact on tourism [7-8], impact on air pollution for China [9], impact on plastic waste [10] and impact on financial markets [11], impact on the emergency dental services [12], and impact on socio-economic [13]. Erbach (2020) [8] stated that there will be a huge loss in international tourism revenues because the outbreak reduces global tourist mobility. While the number of air passengers in Europe decreased by 88% between February 24 and March 22, 2020, this decrease was 98% in Italy in the same period. Wang et al. (2020a) [9] investigated whether the COVID-19 had an effect on air pollution and stated that anthropogenic emissions are dropped due to reduced activities during the COVID-19 outbreak. Although a reduction in air pollution has been recorded, medical waste consumed during the COVID-19 outbreak can pose a danger to the environment and human health. Klemes et al. (2020) [10] noted that there was a sharp increase in demand for medicinal products and packaging products during the COVID-19 outbreak. Also, Rajkumar (2020) [14] reported that the current literature was limited to a few affected countries and the COVID-19 outbreak caused psychological reactions such as anxiety, depression, and stress. The above-mentioned studies examine the impacts of COVID-19 on various events, however, there are also events in which some events affect COVID-19. It has been posited that temperature significantly affects COVID-19 transmission [15] and COVID-19 mortality [16].


Yet there have been no attempts, thus far, to quantify the consequences of COVID-19 on electricity

demand. This paper aims to present an assessment of data that show not only the impacts of the COVID-19 outbreak on the energy sector, but also discuss the solution proposals that have allowed relevant institutions to adapt resiliently to the sudden changes. In this study, firstly, since there is a correlation between economic growth, epidemic, and electricity consumption, an overview is presented about the course of the epidemic, economic contraction, investments, and unemployment. Then, the current and future impacts of the COVID-19 outbreak on the Turkish energy sector are evaluated. Although the paper is mainly focused on a local interest, the study provides documentation to help not only Turkish authorities but also those who are faced with a similar situation take measures and manage the process well, and in addition, it contains sufficient contributions to the literature from an international perspective.

2. Material and Method

The energy sector is an economic area that manages the underground and surface resources and increases its importance with the industrial revolution. It affects many sectors and is also affected by many sectors. During the epidemic, it is in the affected position. To understand how it is affected and the process of being affected, it is necessary to look at the outbreak process. The first case reported in December 2019 in Wuhan, China. European countries such as Italy, Spain, France, and the UK have been locked-down to prevent the epidemic since 9 March, 15 March, 17 March, and 24 March respectively. In these countries, the first case, in general, was detected at the beginning of February. The timeline regarding the COVID-19 of Turkey is given in Table 1. On 11 March 2020, Turkey confirmed its first COVID-19 case. On March 12, President of the Republic of Turkey held an emergency meeting as the detection of the first COVID-19 case. Schools (primary, secondary and high schools) was closed for two weeks as of March 16 and students continued their education through the internet and television channels from home. Universities were temporarily closed for three weeks starting from March 16th however, this period was extended later. Overseas ban for public officials. All activities were banned. A circular containing COVID-19 measures was sent for 81 provinces. Disinfection has started in places where there is intense human circulation, buildings, and public transportation. Restrictions were imposed on international flights. The first death due to COVID-19 was recorded on March 15, 2020. A circular was issued on March 21, 2020. A curfew began on March 21 for citizens aged 65 and over who have low immune systems, chronic lung disease, asthma, COPD, cardiovascular disease, kidney, hypertension and liver disease, and those who use drugs that disrupt the immune system. On April 5, Curfew has started under the age of 20. Also, free mask distribution has begun. Ministry of National Education supported Vocational Education and Training (VET), it became one of the main suppliers of medical equipment and played a major role in preventing social turmoil. VET high schools produce 10 million masks per month at 37 Campus in 21 provinces [25]. Volunteer service is provided for vulnerable people. Turkey is implementing a curfew on weekends. As of June 1, 2020, the controlled normalization process has begun. Travel restrictions have been lifted. The curfew, which applies to those aged 0-18, 65 and older, continues.

Table 1. The timeline regarding COVID-19 outbreak in Turkey [6, 17, Author's own work).

WORLD			
December 2019 The first case, Wuhan, China	January 4 The first overseas case, Singapore	January 5-Present It has surrounded the whole world. As of the beginning of March 2020, Cases have been reported in over 100 countries worldwide [18]. It is seen in all countries. As of August 15 2020, there are currently 21 million confirmed cases and 756 thousand deaths [6].	
TURKEY			
January 6 Operation Center was	January 10 The COVID-19	January 14 The first version of the	January 21 The first sample was

established within the General Directorate of Public Health of the Ministry of Health.	Scientific Advisory Board was established within the Ministry of Health. The first meeting was held.	2019-nCoV Disease Guide has been prepared.	taken from a suspected case.
January 24		January 14	February 1
Thermal camera scanning was launched for flight passengers.	Travel advisory was published by the Ministry of Foreign Affairs.	"2019-nCoV Disease Guide" has been published by the Scientific Advisory Board of the Ministry of Health.	The evacuation plane carrying Turkish citizens came to Turkey from Wuhan, China.
February 3	February 12	February 23	February 29
Mutual flights with China are banned.	Native diagnostic kits were produced for COVID-19 detection.	Turkey-Iran border was closed because the number of people who died from COVID-19 rose to 8 in Iran.	All flights related to China, Iran, Iraq, South Korea and Italy were stopped.
March 3	March 11, 2020, first case	March 12	March 14
In the return of Umrah, quarantine application was started for 14 days.	Turkey confirmed its first COVID-19 case. The information that the person received the virus through the European theme was shared. The COVID-19 was declared as a pandemic by WHO.	Primary and secondary schools and high schools and Universities were closed. Overseas ban for public officials. A ban has been imposed on all events. A circular containing COVID-19 measures was sent for 81 provinces.	A decision was made to stop flights with 9 European countries. A 14-day quarantine application was launched. Annual leave of health workers was stopped until a second order. "ALO 184 line" opened.
March 15, 2020, first death	March 16	March 21	March 30
The first death due to COVID-19 was recorded. All the passengers returning from Umrah were quarantined in student dormitories in Ankara and Konya.	6 new flights were suspended and the number of countries with banned flights has reached 20. Also, the public was invited to stay at home.	A circular was issued on March 21, 2020. Curfew for people over 65 and those with chronic disorders. Prayers in mosques were suspended.	A big donation campaign announced.
April 1	April 5	April 8	April 9
Turkey has also donated medical equipment/aid to many countries, including Italy and Spain to assist in fighting the pandemic [19].	Curfew has started under the age of 20. Also, free mask distribution has begun.	The construction of two field hospitals with 1000 beds to be built in 45 days has started.	It was decided to distribute free masks to citizens. Diagnosis and treatment of pandemic cases were accepted as emergency health services [20].
April 10	April 14	April 17	April 20
A curfew was declared in 30 metropolitan cities and one disadvantaged city (three-quarters of	Turkey delivered medical equipment for medical staff in the United Kingdom [21].	The bill, which includes new measures for alleviating the effects of the COVID-19 on social and economic life was	Curfew was declared in 30 metropolitan cities and one disadvantaged city for 4 days (one day public holiday and weekend, 23-

Turkey's population) for the weekend.		published [22].	26 April).
April 27	April 29	May 3	May 4
The automotive industry started production again after a 1-month break. Curfew was declared in 30 metropolitan cities and one disadvantaged city for 4 days in 1-3 May.	Turkey has sent medical supplies to the USA to be used in the fight against the epidemic COVID-19, USA is the 55th country where the medical supplies are sent [23].	As of May 3, 2020, confirmed cases: 126045, recovered/discharged case: 63151 and deaths: 3397 [24].	A gradual normalization transition plan was announced. The number of provinces with a ban on the weekend was reduced from 31 to 24. As of May 11, some restrictions will be lifted.
May 11	Jun 1		
Restrictions on some places have been lifted.	The controlled normalization process has begun. Travel restrictions have been lifted. The curfew, which applies to those aged 0-18, 65 and older, continues.		

By establishing a relationship between economic growth, epidemic and electricity consumption, current and future effects of COVID-19 outbreak on the Turkish energy sector are evaluated. The timeline of the outbreak was created, in parallel, energy sources, investments, industrial production, capacity utilization, unemployment, and especially electricity consumption data were obtained. The data presented in this study were acquired from the publishing institutions that provided statistics, these are; electrical energy statistical from [26-27], energy sources from [28-30], energy bill from [31], GDP growth from [32-34]. These datasets are the leading indicators that reveal the economic outlook. They help read the current situation and take measures for the future. Then the data were transformed into visuals and the results were evaluated. Finally, the 2020 Q2 growth forecast was carried out using time-series and econometrics models.

3. Results and discussion

3.1. Impact on the economy

While the COVID-19 outbreak offers a chance to change production systems for some sectors, it disables or dismisses some sectors altogether. While there has been an unprecedented increase in mask, disinfectant and video game sales, e-commerce, courier traffic, online game, online video, etc., incredible drops are recorded in some areas such as social events, events, food industry, economy, and unemployment. The volume of all traffic on the road, in the water and the air, has dropped sharply due to COVID-19. The biggest blow to the COVID-19 has been to the health, tourism, and economy. The outbreak is so effective on the economy that economic activities are now considered pre- and post-COVID-19. To prevent this distinction and overcome the COVID-19 and its economic impact, countries have to act quickly and strongly by implementing supportive macroeconomic policies. Otherwise, there may be downside risks and the economic growth may be much weaker for a long time.

According to UNCTAD data, by the end of 2020, direct foreign capital investment flow is expected to decrease by 30-40% [35]. It is stated that there may be 5 million to 25 million job losses worldwide due to the economic crisis caused by COVID-19, and a loss of income from 1 trillion to 3.4 trillion dollars by the end of 2020 [36]. The International Monetary Fund (IMF) has announced a \$ 50 billion package for financing [37]. The World Bank Group (WBG) will provide up to 160 billion dollars of financing [38]. In March 2020, the European Central Bank (ECB) unveiled Pandemic Emergency Purchase Programme

(PEPP), which will provide 750 billion euros aid. Also, many countries have initiated unprecedented support and incentive measures to save economies. According to a study by the OECD, the world economy is projected to contract by at least 2.4% in 2020. The Fed has launched unprecedented bond purchases to prevent the U.S. economy downturn in March 2020. World economic growth in the first quarter of 2020 is likely to be negative, however, it can up to around 3.5% in 2021 as the effects of the COVID-19 decrease [33]. The Chinese economy, which is the locomotive of the world, severely shrank 6.8% year-on-year in the Q1 of 2020, after a 6% growth on both Q3 and Q4 of 2019, therefore, these data may justify the OECD's expectation of negative growth. Ayittey et al. (2020) [39] examined the effects of the virus on the Chinese and the world economy, and stated that the virus would damage the Chinese economy by approximately 62 billion dollars in the Q1 of 2020 and the world economy over 280 billion dollars.

GDP figures for the first quarter of 2020 clearly show the impact of COVID-19 on world economies. China, where the virus first appeared, entered a major economic recession, China's GDP growth was an unprecedented decline of 6.8% for Q1 2020 [40]. After the SARS, the Chinese economy grew by 10%. A similar growth can be seen after COVID-19. Baker et al. (2020) [41] predicted that there will be a contraction in the GDP of the USA is 9% in Q2 of 2020 and 11% in Q4, using an empirical model. Singapore, whose first international case was seen, faced a bigger economy contraction. Singapore's GDP to have contracted by about 2.2% compared to the year-on-year contraction, while the quarter-on-quarter contraction was 10.6% for Q1 2020 [42]. CO₂ emissions in China was decreased by about a quarter during the pandemic [8]. Pre-COVID-19 estimates of GDP growth suggested CO₂ output might rise, but in Post-COVID-19, it would result in a serious annual fall in CO₂ emissions. Countries can achieve their goals to reduce greenhouse gas emissions. Fig. 1 shows the GDP growth performance on a quarterly basis of Turkey and the World.

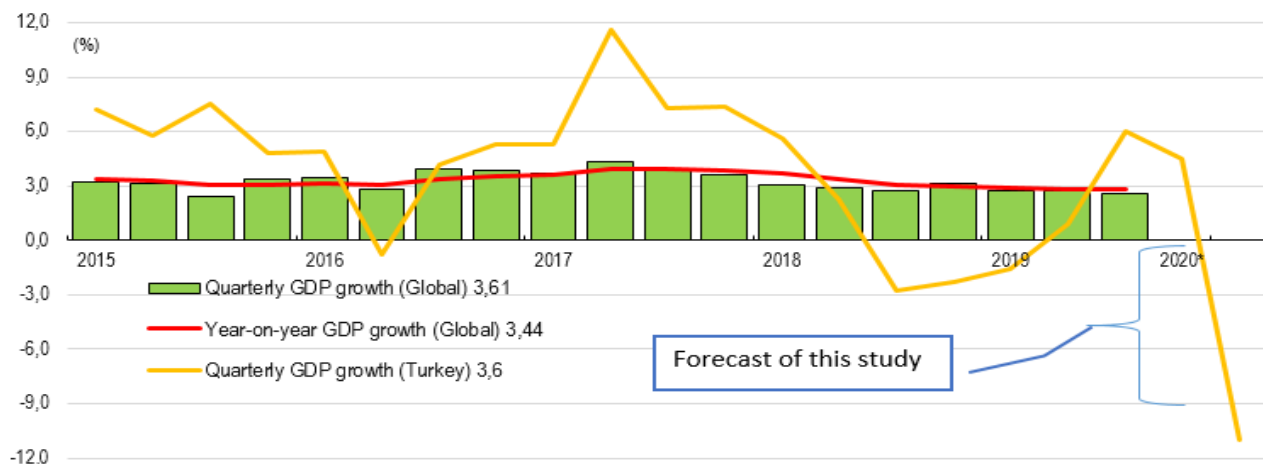


Fig. 1. Economic growth comparison on a quarterly basis (Adapted from [34], *Forecast of this study)

Meanwhile, IMF, World Bank, and others initially (before the crisis) had been forecasted more than 3% of the 2020 GDP growth of Turkey, however, the situation has been reversed all over the world. While the International Monetary Fund (IMF) lowered the global growth forecast for 2020 due to the economic recession caused by the COVID-19 outbreak, which is predicted to contract sharply by -3% in 2020, however, it increased its expectation for 2021, with normalization, it is predicted that it will grow 5.8% in 2021. Likewise, Turkey's economic growth is forecasted to be -5% in 2020 as reported by IMF, however, it is projected to stand at 5.0 % in 2021 [32]. Fig. 2 shows the growth data for the years 2020 and 2021. According to the report of the IMF, China's economic growth forecast for the year 2020, where the COVID-19 epidemic occurred, was reduced from 6% to 1.2%, while it increased from 5.8% to 9.2% in 2021. GDP Growth forecasts are revised in a downward direction. The growth forecast for the USA was reduced from 2% to -5.9% in 2020, while it increased from 1.7% to 4.7% for 2021. For the UK, the 2020 growth forecast was reduced from 1.4% to -6.5%, while the forecast for 2021 was increased from 1.5% to 4%. The growth forecast for the Eurozone was decreased from 1.3% to -7.5% for 2020, while it increased

from 1.4% to 4.7% for 2021. The economic growth forecast for Italy for 2020, which was most affected by the COVID-19 epidemic in Europe, was decreased from 0.5% to 9.1%, while it increased from 0.7% to 4.8% for 2021. The growth forecast of Germany, one of the leading economies in Europe, was decreased from 1.1% to -7% for 2020, while it increased from 1.4% to 5.2% for 2021. The growth forecast of emerging economies decreased from 4.4% to -1% in 2020, while it increased from 4.6% to 6.6% in 2021. Meanwhile, the US 2020 first-quarter the GDP growth (Advance estimate) data has been released. The author's projection is that Q2 2020 will be worse than the Q1. According to "Advance Estimate" data released by the U.S. Bureau of Economic Analysis, the GDP dropped by 4.8% in Q1 2020, the sharpest contraction since Q4 2008 [43]. However, the US economy shrank by 5% in the first quarter of 2020 due to the impact of the COVID-19 outbreak, which is above market expectations.

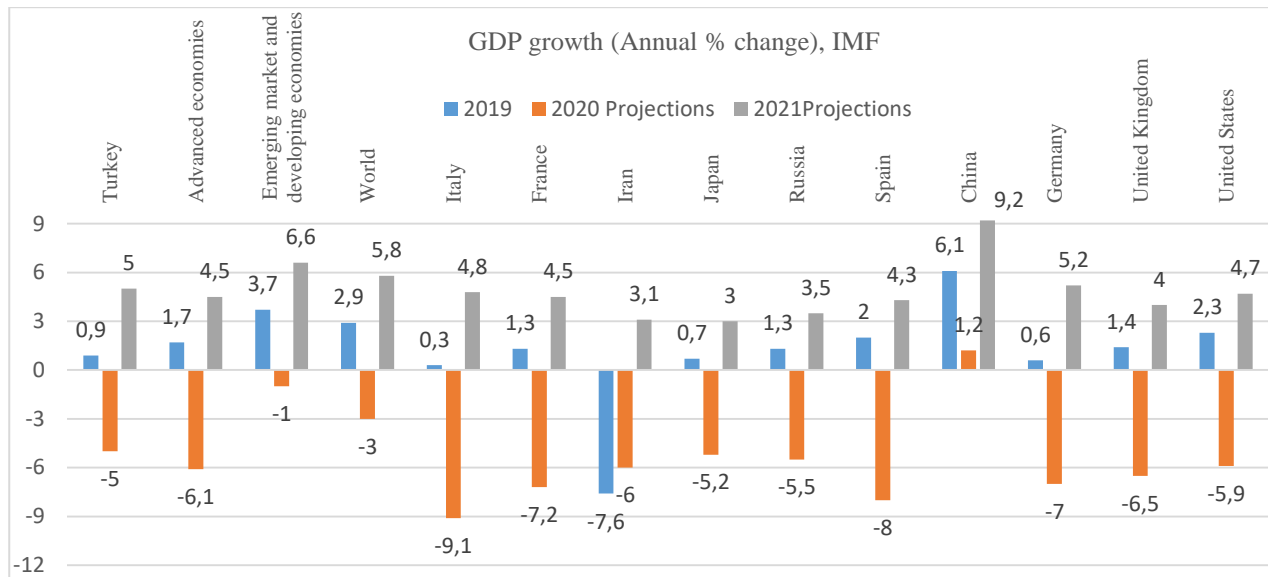


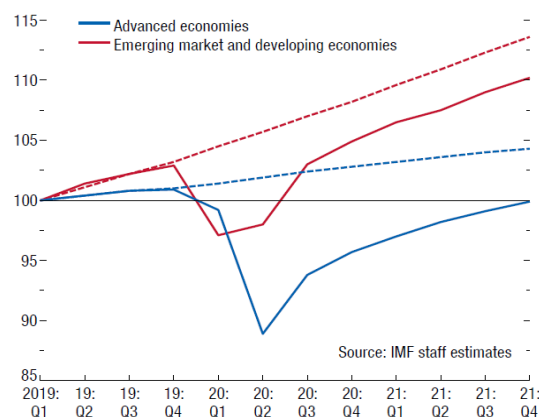
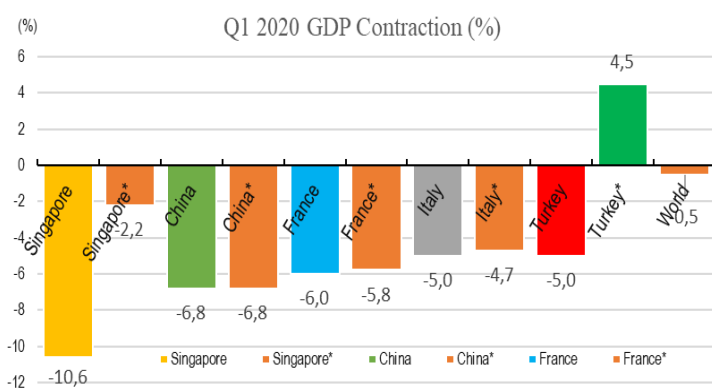
Fig. 2. GDP Growth forecasts for 2020 and 2021 [32]

GDP growth projections for 2020 and 2021 are listed in Table 2. Turkey is an emerging market and is one of the twenty most important economies in the world. In all the year except for the last quarter of 2019, Turkey's economy was in a bad situation however, Turkey's economy has entered a trend of improvement before the outbreak of COVID-19 has an advantage. Turkey was caught to the outbreak crisis when economic activities in the country started to rise again. Turkey did not shut down its economy fully due to the outbreak although early widespread testing, contact tracing, and the closing down of some places such as schools, restaurants, and shopping malls. While GDP growth in the 4th quarter of 2019 was achieved at 6%, made at 4-5% growth forecast for 2020, a growth of about 4-5% was expected for 2020, industrial production was rose by 7.9% in January 2020, and the capacity utilization rate in industry was increased to 76% in February. However, the epidemic reversed this situation. GDP contraction for some countries and post-COVID-19 economic growth forecasts are given in Fig. 3. 2020 Q2 growth rate of Germany and the US were contracted by about 10%. On the other hand, while the Eurozone was contracted by 12%, the growth rate of England and Spain were contracted by about 20% in the same period.

Table 2. GDP Growth projections for 2020 and 2021 [32]

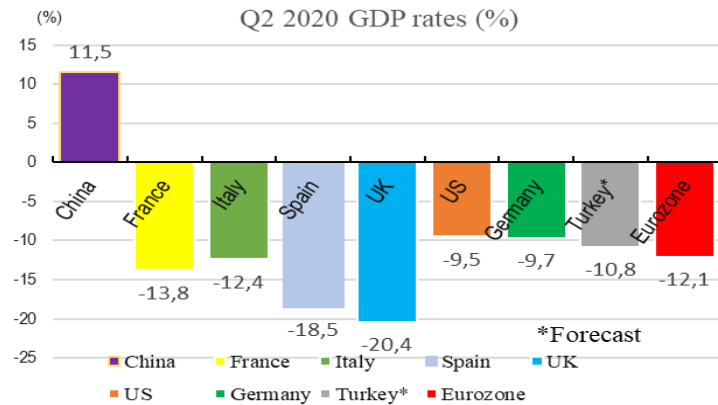
GDP growth (Annual % change)	Projections			Difference from January 2020 WEO Update*		Difference from October, 2019 WEO*	
	201	202	2021	2020	2021	2020	2021

	9	0					
Turkey	0.9	-5	5	-7.9	3	-8	3
Advanced economies	1.7	-6.1	4.5	-7.7	2.9	-7.8	2.9
Emerging market and developing economies	3.7	-1	6.6	-5.4	2	-5.6	1.8
World	2.9	-3	5.8	-6.3	2.4	-6.4	2.2
Italy	0.3	-9.1	4.8	-9.6	4.1	-9.6	4
France	1.3	-7.2	4.5	-8.5	3.2	-8.5	3.2
Iran	-7.6	-6	3.1	--	--	--	--
Japan	0.7	-5.2	3	-5.9	2.5	-5.7	2.5
Russia	1.3	-5.5	3.5	-7.4	1.5	-7.4	1.5
Spain	2	-8	4.3	-9.6	2.7	-9.8	2.6
China	6.1	1.2	9.2	-4.8	3.4	-4.6	3.3
Germany	0.6	-7	5.2	-8.1	3.8	-8.2	3.8
United Kingdom	1.4	-6.5	4	-7.9	2.5	-7.9	2.5
United States	2,3	-5.9	4.7	-7.9	3	-8	3



a) GDP contraction around the World due to coronavirus in Q1 2020 [40], *Realized

b) Quarterly World GDP (dashed lines indicate estimates from Update) [32]



c) Q2 2020 GDP rates

Fig. 3. GDP contraction for some countries

Before the COVID-19, Turkey managed to maintain an almost stable unemployment rate over the past decade, except in 2009. Unemployment rates were about 17% in August 2019, although February fell to 14%, when COVID-19 was active on March 22, it was started to climb again. The expected rapid rise in unemployment was driven by the measures taken to minimize the COVID-19 outbreak in Turkey, which have led to extensive closures of shopping malls, restaurants, and some workplaces as well as restricting travel, freezing the transport and tourism sector. Therefore, post-COVID-19, a significant spike in unemployment is expected.

The negative impact of the COVID-19 outbreak on the labor market began to reflect on the data. Fig. 4 illustrates the impact of COVID-19 on industrial production. In April and May 2020, industrial production contracted by 31.3% and 19.9% compared to the same month of the previous year, respectively. While industrial production in May fell on an annual basis in line with the expectations, it increased by 17.4%. Industrial production in the EU fell 17.3% in April compared to March and 27.2% compared to the same period of 2019. In April 2020, the Turkey CUR across the manufacturing industry decreased by 13.7 points to 61.6% compared to the previous month. Seasonally adjusted capacity utilization rate (CUR-SA) decreased to 61.9% decreased by 14.3 points compared to the previous month. Thus, the level of 60.8%, which was the lowest level seen during the 2009 crisis, was approached quite. In addition, the capacity utilization rate in the manufacturing industry fell to 65.4% in June in the 1994 crisis and 68.5% in April during the 2001 crisis. In April, when economic activity slowed sharply all over the world due to the outbreak, while Turkey's exports decreased by 41.4% however, imports increased by 28.3% compared to the same month last year [44].

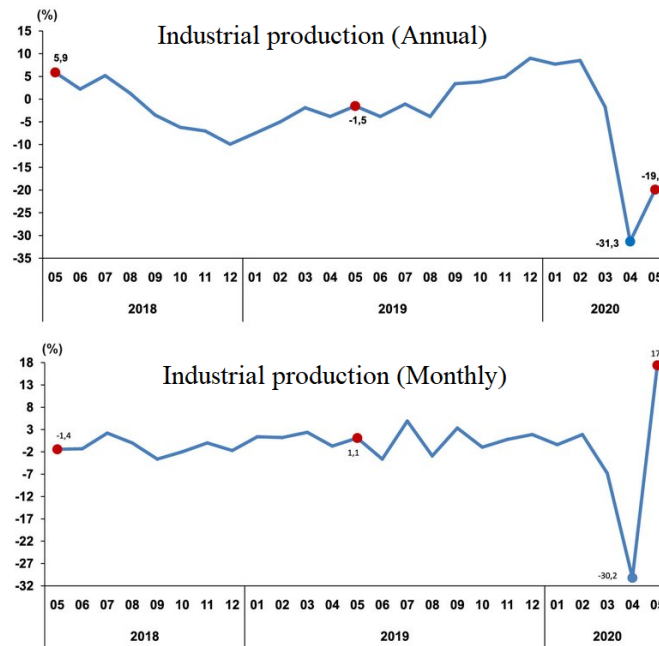


Fig. 4. Industrial production, Turkey [31]

Turkey has taken a series of measures against health-related COVID-19. Turkey takes a different COVID-19 approach such as weekend lockdowns and age-specific restrictions. As of March 21 and Jun 1, the stay-at-home order only applies to those over the age of 65 or under 20, respectively. Weekends in April, Turkey implemented a curfew for 31 provinces, effecting three-quarters of the population of Turkey. A partial lockdown can provide an advantage for the economy to maintain some economic functions while trying to contain the outbreak. Economic measure packages worth ₺200 billion were announced. To minimize the risk of COVID-19, Turkey's national income ratio of financial incentives announced is low, this amount will not be enough if the outbreak process is prolonged. In the fight to COVID-19, Turkey has rapidly developed programs to manufacture and distribute medical materials not just within itself, but overseas as well, sending medical equipment to 55 countries, including the UK, the USA, Italy, and Spain [23]. Vocational Schools and some military facilities have been turned into workshops producing personal protective equipment.

Turkey, the world's seventh most visited country of which about 34.5 billion dollars in revenue (4% of the share of tourism revenues in GDP) and 52 million in tourist numbers [45], it will suffer huge losses due to COVID-19. Akca, (2020) [46] investigated the measures taken in the aviation sector and the economic impacts on the aviation industry of the epidemic. She stated that the effects of COVID-19 on the aviation sector will be at a different level than the previous terrorism, epidemic, war, crisis and disaster situations.

3.2. Impact on the energy industry

3.2.1. Impact on the global energy industry

The spread of COVID-19 has also visible impacted the energy industry, like many industries and economies during the Q1 of 2020. One of the energy fuel types most affected by the COVID-19 outbreak was oil. Fig. 5 illustrates the volatility of Brent oil prices between 2000 and 2020 and the effect of the epidemic on prices. Crude oil prices have declined significantly since the beginning of 2020. The COVID-19, which has caused low Brent type oil consumption, and the rapid increase in stocks, the price of international Brent crude oil fell below \$30 per barrel. From February 24 to March 30, 2020, a barrel of Brent oil was traded for \$24, with a 60% drop. It caused the WTI benchmark to drop to negative prices for the first time in history on April 20. WTI oil futures contracts dropped to -\$37/barrel, while Brent oil price, which was around \$70/barrel in early 2020, dropped to \$20/barrel. On April 21, Brent oil prices also recorded a first, tumbling below 20 US per barrel [47]. For the Q1, Q2, Q3, and Q4 of 2020, projections see an oil demand decline of 750000, 392000, 246000, and 125000 barrels per day, respectively.



Fig. 5. Brent oil prices, 2000-August 2020 [48]

Coal and gas sectors will be most impacted by COVID-19. On the other hand, green energy technologies produced more than one-third of the world's power in 2019 [49]. A decrease is expected in the installation of green energy technologies in 2020. The biggest share in the total renewable energy capacity belongs to the sun and wind. Global forecasts for solar capacity additions in 2020 are estimated that global additions would reach 108 GW (previous forecast; 121 GW) to 143 GW (previous forecast; 152 GW) [50]. Likewise, in the clean energy industry, over 106000 people lost their jobs due to the COVID-19 in the US, in March 2020 [51]. Reminding that other factors that affect demand beyond the COVID-19 outbreak should not be forgotten, it is a fact that its decreases in production, consumption, price, and investments have a great impact. Since more than 80% of the annual photovoltaic (PV) market demand is provided by PV manufacturers of China, in 2021, there may be a decrease in PV production capacity and a 10-20% increase in PV module prices [52]. In Q1 2020, all of the sectors have been severely impacted by the COVID-19 outbreak due to the top solar panel manufacturers in China and other Asian countries.

3.2.2. Impact on the Turkey energy sector

As noted the previous section of this study, the energy sector has been significantly affected since the outbreak began. In the first quarter of 2020, domestic coal plants produced less electricity compared to the same period of the previous year, while imported coal plants produced more electricity. Fig. 6 presents natural gas consumption in Turkey by years. Natural gas consumption is increasing rapidly despite the fall in 2009. Natural gas exports to Turkey reached 45 bcm in 2019. According to the predictions made by EMRA before the epidemic, Turkey's natural gas exports are expected to reach in 2020 to 52 bcm [28]. As of May 31, 2020, 22 bcm natural gas was consumed. A small part of natural gas is used in electricity production. As electricity production from natural gas increases every year (except for the last 3 years), the share of the electricity production from hydraulic sources in total production reached 29% in 2019, the highest rate in the last 15 years. However, the share of the electricity production from natural gas has dropped below 20%, for the first time in 23 years. Compared to the previous year, natural gas consumption increased by 6%, and electricity consumption increased by 4% in January 2020. In March 2020, Turkey's natural gas consumption decreased by 9.71% compared to the previous year, and almost half of the consumption was in residences. The total natural gas consumption between March 1 and April 19 decreased by 13% in the same period of the previous year.

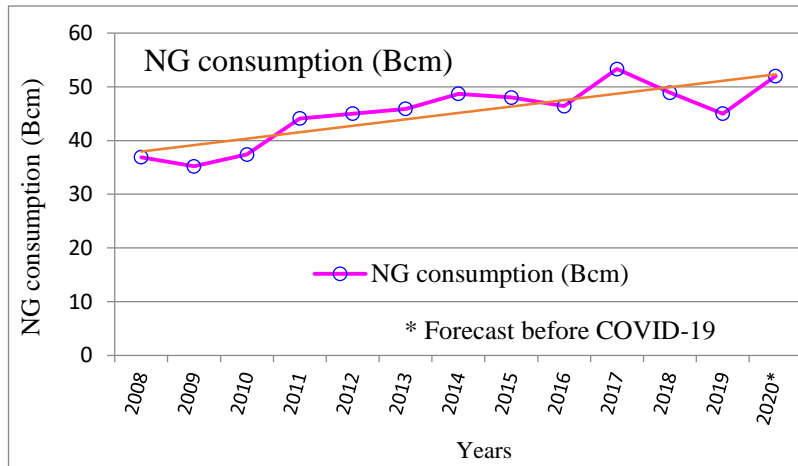


Fig. 6. Natural gas consumption in Turkey [28]

Fig. 7 shows the consumption change of different fuels from January to August 2020. Turkey's natural gas consumption has decreased by 20% in April. While it decreased by 53% and 27% in power plants and organized industrial zones respectively, it increased by 2.5% in houses. As of February 11, with the warming of the air, the gas consumption has decreased. As of March 22, electricity, gasoline, and diesel consumption started to decrease due to COVID-19 outbreak.

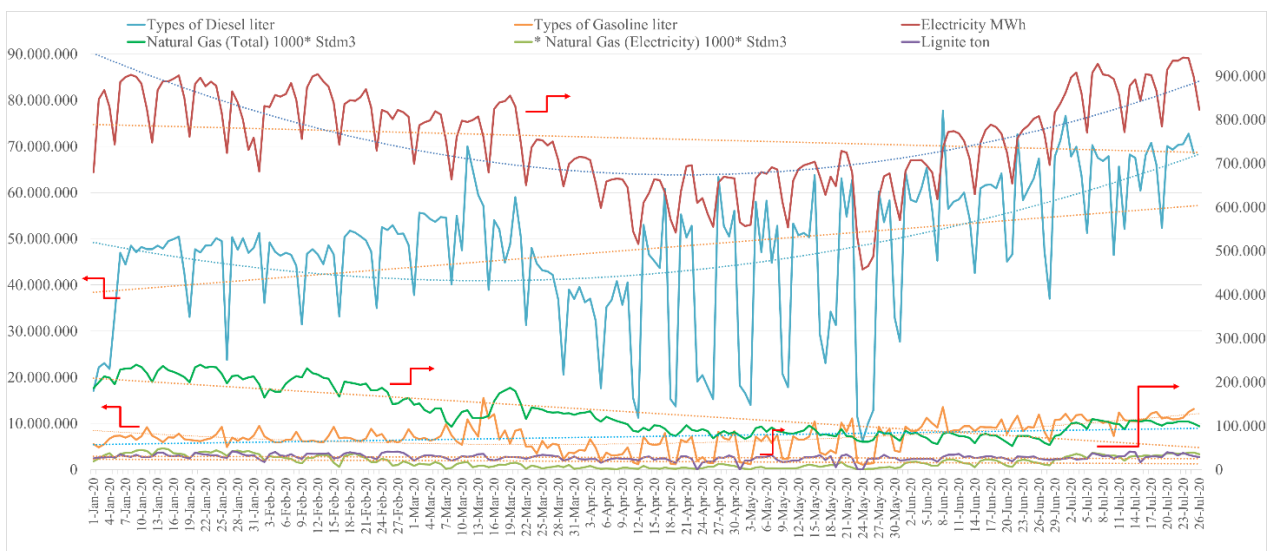


Fig. 7. The consumption data of different fuels from January to June 26, 2020 (*This figure was derived from the energy statistics of the [29])

Fig. 8 shows Turkey's energy imports. In the figure, while estimating the bill value for 2020 is given, the rates of increase in energy bills paid in the Q1 2020 compared to the previous year is indicated. It is observed that the Q1 energy bills fell sharply compared to the previous year.

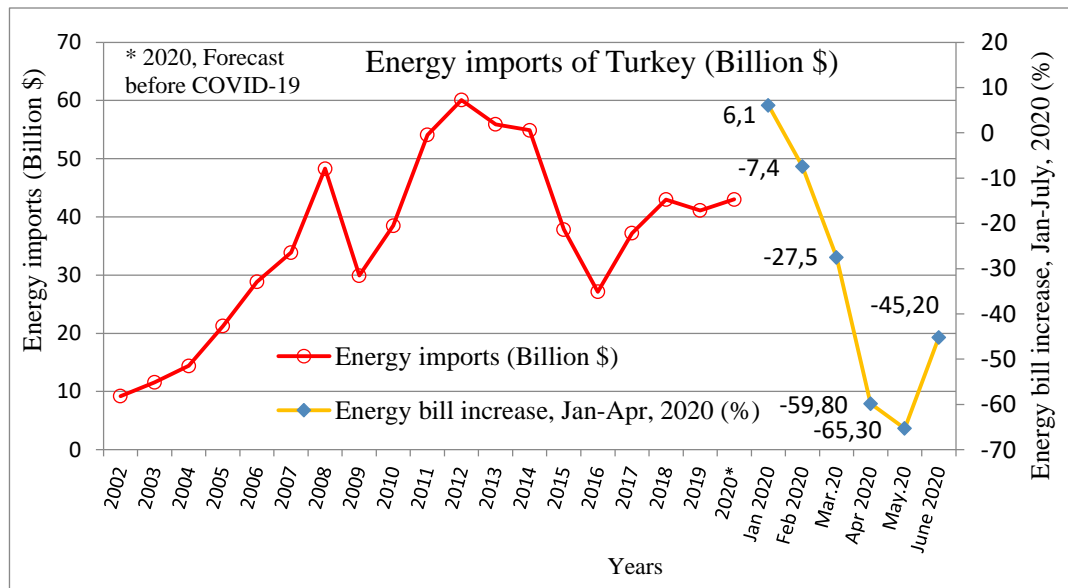


Fig. 8. Turkey's energy imports [31]

Considering the impact of energy prices on production and consumption processes, affordable energy prices are vital for consumers, manufacturers, and countries. The impact of the epidemic on electricity prices has not been assessed yet, since information on energy pricing is not available, however, it can be said to be a considerable increase in energy prices in Turkey ahead of the COVID-19 outbreak. In the second half of 2019 (pre-COVID-19), the price paid by households in the EU countries increased compared to the same period of the previous year 1.3% for electricity and 1.7% for natural gas. In the same period, electricity prices in Turkey increased by 20.2%, natural gas prices showed an increase of 24.5% (53). During the epidemic, supports were provided for the protection of the mining, oil exploration, and oil production sectors. Due to the decrease in industrial production, energy production prices decreased by 11.3% compared to the same month of the previous year and decreased by 8% in April 2020 compared to the previous month. In the electricity, gas production and distribution sector, production costs increased by 12.9% compared to April of the previous year and increased by 0.3% compared to the previous month [31]. Accordingly, while there was a sharp decrease in energy production prices due to the epidemic, production costs were not affected by this situation. Domestic electricity, water and natural gas consumption increased slightly during the closing period. There is an increase in the amount of water supplied to Istanbul, which has a population of approximately 16 million, compared to last year. Accordingly, the amount of water consumption in Istanbul in June and July of last year has caught up in April 2020. Of course, this increase may not be directly related to COVID-19 because the amount of water consumption varies with weather conditions. There is an increase in the amount of water supplied to Istanbul, which has a population of approximately 16 million, compared to last year. Accordingly, the amount of water consumption in Istanbul in June and July of last year has caught up in April 2020. Of course, this increase may not be directly related to COVID-19 because the amount of water consumption varies with weather conditions. A sub-sector-specific analysis could not be made due to the lack of data, but it can be stated that some energy sub-sectors will be hit harder than others.

Fig. 9 illustrates the annual increase of electricity installed capacity of Turkey. Fig. 10 shows the development of the installed capacity of renewable energy sources over the years. While the installed power of the power plants producing electricity from renewable energy sources reaches 44870 MW, this rate corresponds to 48.7% of the total installed capacity. Purchase guarantees provided under the Renewable Energy Resources Support Mechanism (RERSM, In Turkish YEKDEM) cover only a 10-year period [30], which is a threat to my renewable energy investments. Due to the virus outbreak, YEKDEM's effective date can be postponed to 31 December 2021 and new support mechanisms can be explained. An investment of approximately 1300 MW in wind energy was expected to be put into operation in 2020 however, due to the virus epidemic, all investments have stopped almost. Due to the virus epidemic, all investments are nearly halted, which is not good for the future of renewable energy. In Turkey, 2500 MW

in wind energy, 600 MW in hydroelectric power, 450 MW in solar energy, 170 MW in geothermal energy and the investment, with a total value of 7 billion Euros, is working with full force to benefit from the Renewable Energy Resources Support Mechanism (YEKDEM in Turkish) [54]. At its meeting dated 02/04/2020, EMRA has decided to extend an extension of 3 months for electricity generation investments [28]. Investors will raise prices to built plants, achieve a high return on investment, and secure their supply chain security, as prices of some critical equipment would continue to rise. After a rapid capacity increase in 2019, the renewable energy sector may face the impact of the COVID-19, specifically wind and solar, which can witness lower capacity additions in Q2 2020 due to postponed or completely stopped manufacturing and construction works. In turn, since some investments have reached the stage of completion pre-COVID-19 outbreak, 200.6 MW capacity was put into operation in April, all based on renewable energy sources.

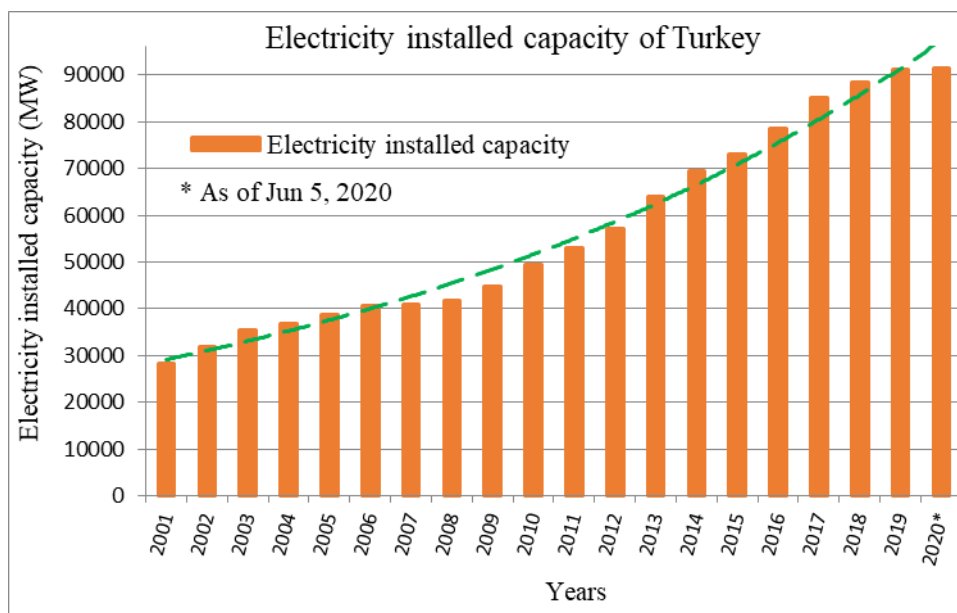


Fig. 9. Annual development of electricity installed capacity of Turkey [26]

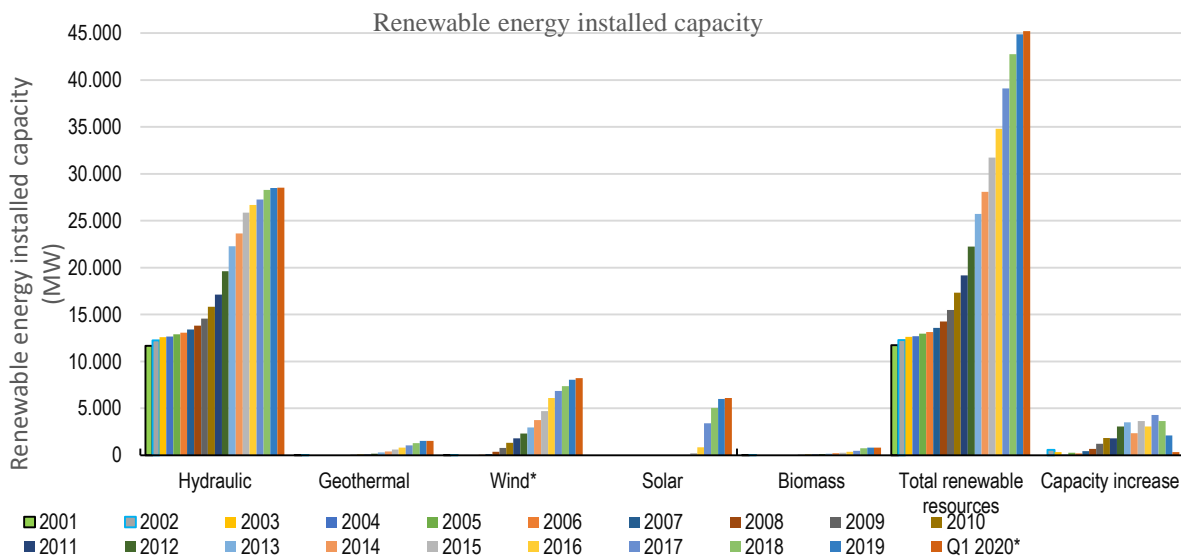


Fig. 10. Renewable energy installed capacity [26]

Countries and even the cities can differ greatly among themselves in terms of population, economic

development, culture, and technology. Therefore, although it is difficult to determine the correlation between electricity consumption and economic growth, there is harmony between electricity consumption and economic growth [55-59]. Fig. 11 shows this relationship between them. Although Turkey faced two major economic crises between 2001 and 2010, total electricity consumption increased by around 60%, however, demand fell in the 2008-2009 due to the global economic crisis [55]. Since the data showing the effect of Covid-19 has not been formed yet, it is not seen in the graph. Although economic growth parallels with electricity consumption, while GDP growth is affected by electricity consumption, electricity consumption is not affected by GDP growth [60].

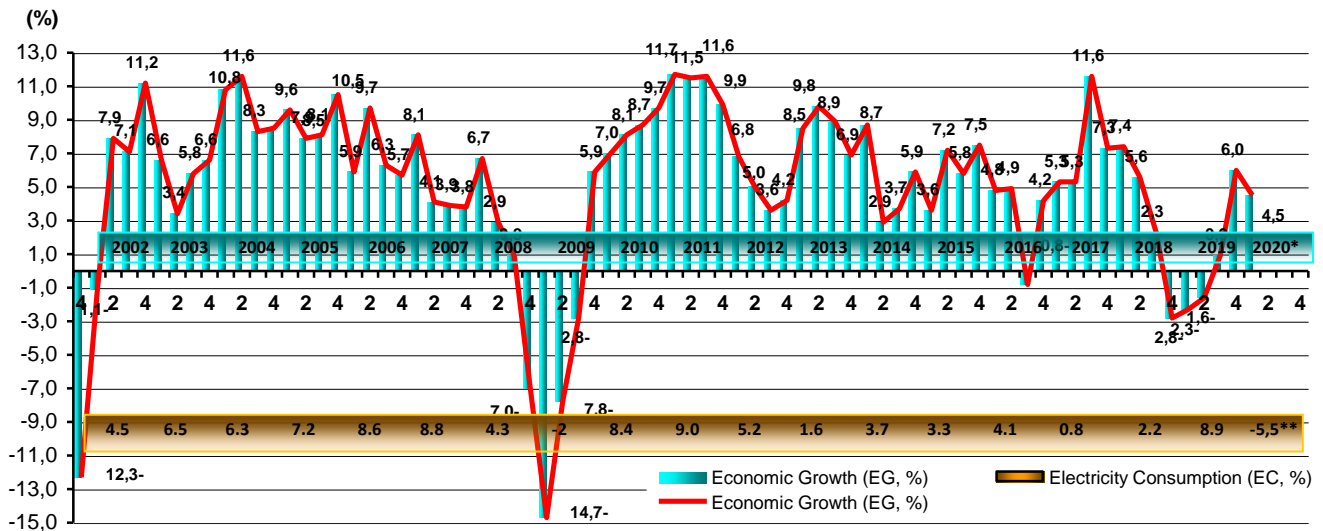


Fig. 11. Relationship between electricity demand and GDP growth, Turkey, 2001–2020 [26, 31, 55]. *Notes for Fig. 2:* Economic growth rates on a quarterly basis, annual electricity consumption increase rates. *: Forecast [32]: -5.0% (2020), 5% (2021), **: Forecast [Author's own calculations]: -5.5% (2020).

In 2020, to understand how electricity demand will react to the COVID-19 crisis, it is significant to first understand Turkey's energy demand structure. The industrial sector accounts for approximately 50% of the electricity used in Turkey, whereas the commercial sector and households account for approximately 25% each. Ding et al. [61] in their study published in 2017 using 2012 data, discussed the relationship between household consumption activities and energy consumption in China. They stated that household energy consumption activities have the second-largest share in energy consumption and there are many sectors that it indirectly affects. Therefore, when indirect effects are added to the share of 25%, it rises to a serious rate. Besides, during the epidemic, almost all people in the world were closed to their homes, and consequently, household energy consumption increased. Moreover, as the share of trade and industry decreased, its ratio in total energy consumption increased. Although residential electricity consumption increases during the stay at home, there is a sharp decline in the industrial sector where most of the electricity is consumed. As the commercial sector only accounts for 25% of electricity demand, its impact on total electricity consumption will be limited. Production losses in both sectors during the first half of the year can be compensated for the rest of the year, thereby balancing the system.

In Table 3, the percentage change in electricity consumption compared to the same week of the previous year is given. Given the circumstances, it does not come as a huge surprise that Turkey's electricity consumption had a very good February 17 and March 9, as Table 3 shows. A similar situation prevails across the world. European countries and Turkey continued to experience a drop in power demand between 17 February and 13 April 2020 due to industrial and commercial closures to prevent the spread of the new

coronavirus. Table 3 illustrated that almost all countries examined had now succumbed to a demand drop of more than 20% in the first half of April 2020. Power demand in the country, which has been hit the heavy by the COVID-19, has dropped by more than 30% compared to its previous year for April during the two weeks due to lockdown.

Table 3. Percentage change in electricity consumption compared to the same week of the previous year [26, 62]

	Electricity Consumption				Percentage change compared to the same week of the previous year			
	Germany	Spain	Italy	Turkey	Germany	Spain	Italy	Turkey
February 17	102	97	98	106	2	-3	-2	6
February 24	101	99	97	95	1	-1	-3	-5
March 2	99	101	102	100	-1	1	2	0
March 9	99	98	93	98	-1	-2	-7	-2
March 16	97	92	78	116	-3	-8	-22	16
March 23	92	90	74	94	-8	-10	-26	-6
March 30	93	79	69	89	-7	-21	-31	-11
April 6	85	71	67	83	-15	-29	-33	-17
April 13	90	89	68	78	-10	-11	-32	-22

In TEPAV's study [62], the weekly and daily electricity consumption in Turkey, Italy, Spain, and Germany were discussed comparatively (Fig. 12). Electricity consumption is based on between 08 and 18 hours on weekdays. Electricity consumption in the same week in the previous year and consumption in 2020 were compared. Turkey, compared with the three European countries, after Italy and Spain, electricity consumption is seen as the country with the largest decline. Because of the impact of measures to combat the COVID-19 epidemic began a drop in electricity consumption in Turkey on March 11. The contraction in production and trade also affects electricity consumption. Although natural gas and electricity consumption data increase in houses, the contraction in production and trade affects total consumption data downward. Electricity consumption in Turkey in January and February increased by approximately 5% compared to the same period of the previous year. However, in the period of March 11-April 11, total electricity consumption in Turkey has recorded at 5.6% decrease compared to the same period of the previous year. Between January 1 and April 11 (100 days), 81.33 billion kWh of electricity consumed in Turkey, this figure corresponds to an increase of 0.36% compared to the same period last year. Turkey's electricity consumption, the third week of April decreased by 22% compared to the previous year due to the COVID-19 outbreak.

Another effect of the outbreak on electricity consumption is the change in electricity consumption hours in the houses during the day. The electricity demand increase curve remained largely constant between 7.00 am and 10.00 am in March and April, while the tendency to rise before the epidemic and falling after 10 pm in the evening, however electricity consumption after the epidemic extended to later hours.

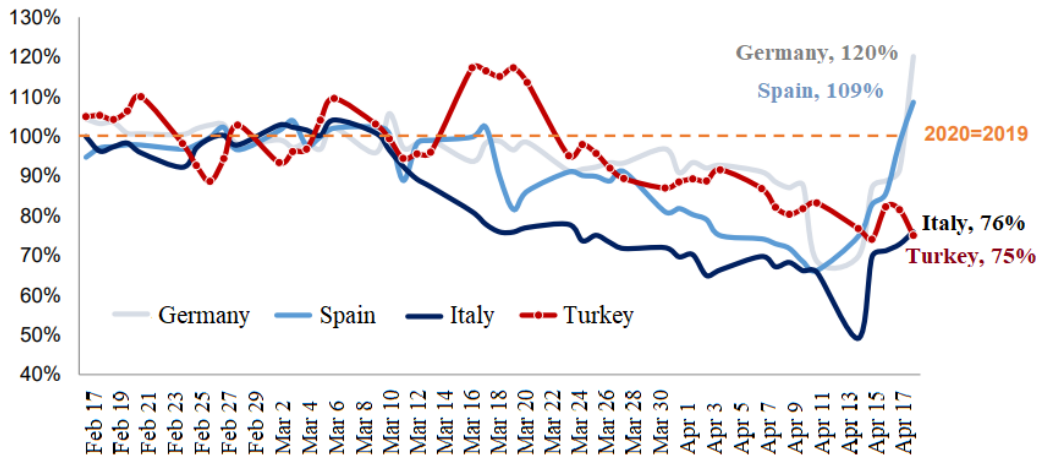


Fig. 12. Daily electricity consumption rates between the dates of 17 February-17 April 2019 and 2020 [62]

Fig. 13 shows Turkey's electricity production and consumption between January and August 15, 2020. Electricity production was stopped in some power plants due to a decrease in electricity demand. The share of natural gas in electricity production decreased from 29% to 7.7% from January to April 2020, similarly, the share of coal has decreased, however the share of wind and solar has increased. Turkey's total electricity demand, which started with a serious rise in January 2020 (3.17% increase), increased by 6.99% in February compared to the same period of 2019, it regressed rapidly since March 11 with the determination of the first COVID-19 case, and remained almost the same compared to the previous year throughout March, after which consumption decreased by 15% in April. The electricity consumption decreased by 16.3% in May, as commercial and industrial operations are far outweighed from residential demand. This declining trend can be ascribed to the COVID-19 process in Turkey started in March. Due to the COVID-19 pandemic, there has a slowdown in the industrial operation of Turkey, which in turn has affected the electricity consumption in industrial. In addition, the gas demand is seeing a decreasing trend for Q2 of 2020. Average electricity demand increased by 21% in the first week of Jun, because of last year's Ramadan Feast (4-6 June 2019). In the first half of 2020, electricity consumption contracted by 3%. According to unconfirmed data, electricity consumption contracted by 1.3% in Q1 and 10.6% in Q2 of 2020.

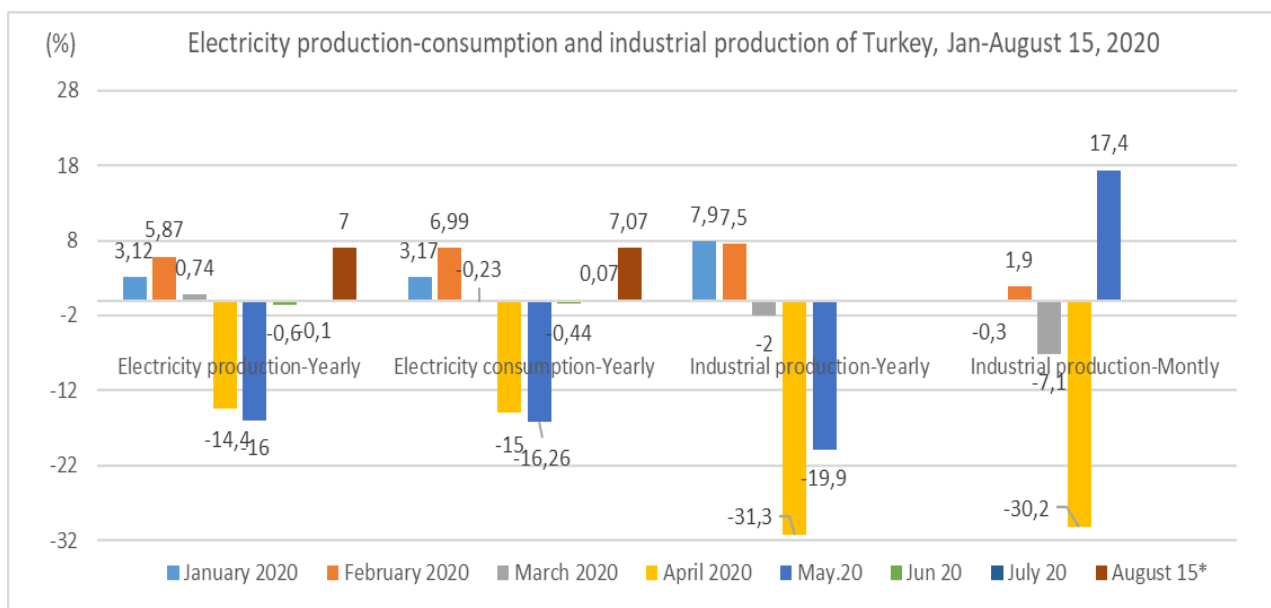


Fig. 13. Turkey's electricity consumption and consumption between January and August 15, 2020 (*This

figure was derived from the energy statistics of the [26]

As you have shown in Fig. 11, the energy demand and GDP growth could be kind of decoupled during the crisis and rebound after the crisis. The relationship between energy demand and GDP growth, it might not be a good method to infer GDP through energy/electricity demand. Therefore, it is necessary to look at the daily electricity consumption data that reacts faster. Fig. 14 shows the change in electricity consumption during the COVID-19 pandemic in Turkey period between January and Jun 4. The figure clearly reveals the drop in electricity consumption. This was likely due to calls to reduce the spread of COVID-19 by staying at home and the weekend curfew announced for 31 of the country's major cities and a critical city. Experienced in the electricity consumption of a small decline in March shows that Turkey will not affect the GDP growth in Q1 2020. However, electricity consumption, which declined as of March 22, indicates that Q2 2020 GDP growth will decrease significantly. Before and after coronavirus measures, a major change in Turkey's daily electricity consumption is experienced. In January and February of 2020, when economic growth has been observed, electricity consumption has increased while there has been a great decrease in electricity consumption in March and especially in April when people were completely at home. On Sunday, April 12, which was a curfew in 31 provinces (three-quarters of Turkey's population), when the curfew is spread across the country, it clearly shows what kind of situation it will face. On May 24, 2020, 90% of Turkey's electricity production was generated from domestic and renewable energy sources since reasons such as a) measures taken against the COVID-19 outbreak, b) decrease in electricity demand (hence the decline in total electricity production), c) the priority of the electricity generation facilities based on renewable resources to enter the grid, d) the facilities that are first deactivated when electricity demand decreases, are the natural gas and coal plants that produce at the highest cost per unit and f) 4-days curfew on Ramadan Feast. In the first six months of 2020, electricity production in Turkey has been stretched about 4% compared to the same period of the previous year. While 51.2% of the generation in this period was carried out in thermal power plants, the rate of electricity generation based on renewable energy sources was 48.8%. Under normal circumstances, the daily electricity production in Turkey was around 800 million kWh, daily electricity production declined dramatically, due to the measures taken against the epidemic COVID-19. During the days of curfews, daily electricity production has also fallen below 500 million kWh. In the first five months of 2020 (January-May 2020), the share of indigenous and renewable energy sources in Turkey's electricity production have been realized as 66%. Europe's largest economy Germany's primary energy use was decreased by 7% in the first quarter of 2020 compared to the same period of the previous year due to the favorable weather conditions and coronavirus quarantine measures.

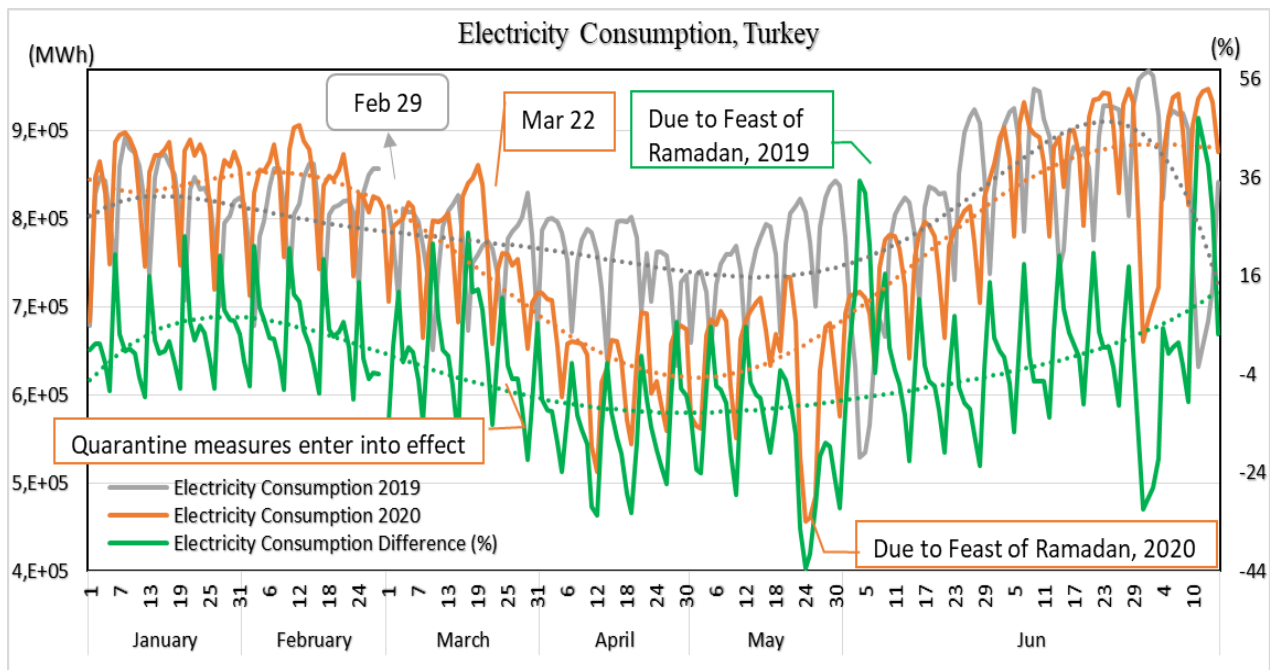


Fig. 14. The impact of the COVID-19 outbreak on electricity consumption (*This figure was derived from the energy statistics of the [26], Also, last data [27] include only licensed production sources, and they are temporary and open to retrospective revisions)

Within the scope of combating coronavirus; Greenhouse gas emissions dropped rapidly as a result of travel and other restrictions and a decrease in coal and oil demand. In January-April 2020 period, Turkey's daily greenhouse gas emissions decreased by 17.4% [63]. Although this situation seems positive in terms of climate change, the downtrend should be maintained in a continuous and regular manner with long-term plans for the future.

The duration and scale of this economic contraction cannot be predicted due to the uncertainty of the pandemic period. However, with the consumption of electricity, which is a leading indicator, estimates can be made by using data from the realized periods. Electricity consumption contracted 15% and 16.3% in April and May, respectively. Based on this leading indicator, a contraction of more than 10% can be expected in Q2 2020. This study suggests to the relevant institutions that there is a serious deterioration in the economy of Turkey could be expected if the COVID-19 period is continued.

Also, it was collected basic data such as GDP, population, and energy consumption for the short-term model. Many researches have been made on the short-term forecast of electric demand [64-66]. They stated that electricity consumption is significantly influenced by day type and meteorological variables. It was constructed a model to forecast energy demand for the period Q2 2020 in Turkey and occurred a time-series analysis of energy consumption data. The econometrics model is a method that estimates the energy demand based on the realized results. The energy demand and GDP growth forecasts were carried out with the Model for Analysis of Energy Demand (MAED) for the short term. The population and GDP growth were defined. GDP and GDP growth rates are interlinked. The input time series provides by the user for only one of the parameters, and the program automatically calculates the other. The elasticities that measure the demand response to activity elasticity are calculated by statistical regressions on actual values. Outputs occur by using inputs and elasticities.

$$\text{Forecasted energy demand} = \text{Demand last period} * (1 + \text{GDP growth rate (\%)} * \text{Elasticity} / 100\%) \quad (1)$$

$$\text{GDP growth rate (\%)} = ((\text{Forecasted energy demand} - \text{Demand last period}) / \text{Demand last period}) * 100 \quad (2)$$

Demand (D) is defined as a function of variables GDP, electricity consumption (EC), industrial production (IP), population (P), Temperature (T), lockdown (LD), demand last period (LP):

$$D = f(GDP, EC, IP, P, T, LD, LP) \quad (3)$$

Model function;

$$e^D = s.e^{GDP} . e^{EC} . e^{IP} . e^P . e^T . e^{LD} . e^{LP} \quad (4)$$

It may not be logical to directly map GDP and demand for some countries, (such as the US) but this is not the case for Turkey. The GDP in the Turkey has been continuously growing over the past years, and the total electricity consumption has seen a constant increase.

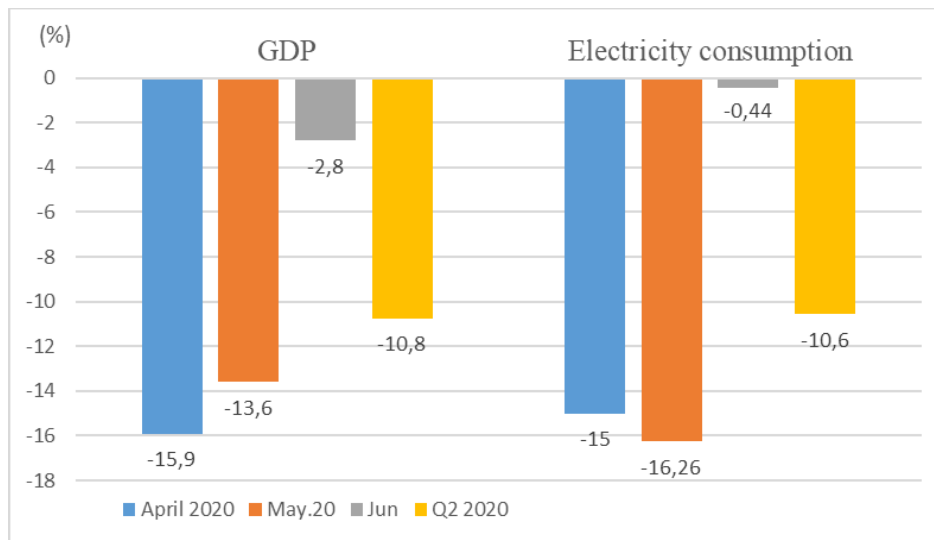


Fig. 15. Forecast of energy demand and GDP for the period Q2 2020 in Turkey

4. Conclusion

This comparative study provides reasons to think about the likely impacts of the COVID-19 period and the Q2 data presented in this study give an idea that major economic destruction will occur in the other quarter of 2020. It is difficult to calculate the economic cost of the COVID-19; the time it takes to control this outbreak will be a determining factor. While the impact of the COVID-19 crisis on the energy sector is still not clear, it can be predicted that new energy projects throughout the world will grind to a halt, a decline effect in other economies in the periods to come, as economies of China and USA continues to fluctuate against the pandemic. The study shows that the COVID-19 will create losses that can be felt for a long-term in the economies of the country and that the energy sector will be directly affected by this situation. In Turkey, since the first cases confirmed on March 11 and the first partial lockdown took place on March 16, the country was not exposed to the negative effects of the epidemic in 2020 Q1. Turkey's electricity consumption in January and February increased by 3.17% and 6.99%, respectively. There was a negligible change in March compared to previous year. Accordingly, electricity consumption increased by 5% in the Q1 of 2020. Electricity consumption contracted 15% and 16% in April and May 2020. The measures taken within the scope of the fight against COVID-19 caused a decrease in Turkey's electricity supply and demand. Export figures (41% decline), industrial production (30% decline) and electricity consumption (15% decline) announced in April 2020 indicate a significant loss of production. Turkey's economy is expected to shrink more than 10% in the Q2 of 2020 as the outbreak fuels worse-than-expected hit to the production. This study suggests to the relevant institutions that there is a serious deterioration in the economy of Turkey could be expected if the COVID-19 period is continued.

It should be noted that this study is based on an early assessment and requires refinement when new data is available since the outbreak process is unpredictable and the situation changes with each incoming data. During the COVID-19 period, people will focus on regional and local consumption, create the smallest carbon footprint possible, avoiding travels, save more, use energy more efficiently, in short, the current

crisis also teaches good things and it can do much faster than governments and protesters can. Some habits acquired during COVID-19 seem like it will continue post-COVID-19.

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COVID-19 SÜRECİNİN ULAŞIM DAVRANIŞ VE TERCİHLERİNE ETKİLERİNİN İNCELENMESİ

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ÖZET

Bilindiği üzere COVID-19 süreci tüm dünyayı etkisi altına almış ve günlük yaşam içerisinde pek çok unsuru değiştirmiştir. Bu süreçten toplumun ulaşım davranışları ve tercihleri de etkilenmiştir. Çalışma kapsamında, toplumun ulaşım davranış ve tercihlerinin COVID-19 süreci öncesi ve sonrasındaki durumu incelenmiştir. Bu çerçevede bir anket çalışması gerçekleştirilmiştir. Anket çalışmasına 472 kişi katılmıştır. Ankette genel olarak ulaşım sistemleri tercihi, günlük kullanım durumu, toplu ulaşım kullanım oranı, gelir durumu, COVID-19 süreci sonrasındaki tercihler vb gibi toplam 30 adet soru yöneltilmiştir. Bu sorulara verilen cevaplar sınıflandırılarak değerlendirilmiş ve istatistik olarak genel durumları analiz edilmiştir. Elde edilen sonuçlara göre kullanıcıların COVID-19 sürecinden önemli seviyede etkilendikleri ve ulaşım sistemi tercihlerini değiştirdikleri belirlenmiştir. Ayrıca bu değişikliğin COVID-19 süreci sonrasında da devam edebileceği anlaşılmıştır. Anket sorularının tamamı detaylı olarak ayrı ayrı değerlendirilmiş ve elde edilen bulgular çalışma kapsamında raporlanmıştır. Bu çalışmada elde edilen sonuçlara göre gelecekteki ulaşım sistemi tasarımlarının kullanıcı tercihlerine göre yeniden düzenlenmesi gerektiği, bunun yanında eğitim ve çalışma koşullarının da değişebileceği anlaşılmıştır.

Anahtar Kelimeler: Covid-19, ulaşırma, kullanıcı davranışı, sistem tercihleri

INVESTIGATION OF THE EFFECTS OF COVID-19 PROCESS ON TRANSPORTATION BEHAVIORS AND PREFERENCES

ABSTRACT

As it is known, the COVID-19 process has affected the whole world and changed many factors in daily life. The transportation behavior and preferences of the society were also affected by this process. Within the scope of the study, the situation of the transportation behavior and preferences of the society before and after the COVID-19 process was examined. A survey was conducted within this framework. 470 people participated in the survey study. In the survey, a total of 30 questions were asked such as transportation systems preference, daily usage status, public transportation usage rate, income status, preferences after COVID-19 process, etc. The answers given to these questions were classified and evaluated and their general situation was analyzed statistically. According to the results, it was determined that users were significantly affected by the COVID-19 process and changed their transportation system preferences. It is also understood that this change may continue after the COVID-19 process. All of the questions were evaluated separately and the findings were reported within the scope of the study. According to the results obtained in this study, it was understood that future transportation system designs should be rearranged according to user preferences, as well as changes in education and working conditions.

Keywords: Covid-19, transportation, user behavior, system preferences

GİRİŞ

COVID-19 ilk olarak Çin'in Wuhan Eyaleti'nde Aralık ayının sonlarında ortaya çıkmıştır. COVID-19 öncelikle insan sağlığı olmak üzere, ekonomi, ulaşım, gelişim vb. yaşamsal her şeyi etkilemiştir. Genel olarak tüm alışkanlıklarımızı değiştiren, yeni arayışlara sürükleyen ve yeni yaşam biçimleri bulmamıza mecbur bırakan bir salgın olduğu için, dünya genelinde tüm ülkelerin anket şirketleri COVID-19'un insanların her alanda nelere yöneldiğine, nelerin değiştiğine dair araştırmalar yapmıştır.

IBM 'nin çalışmasında, Nisan ayında 25.000'den fazla ABD'li yetişkinin, COVID-19'un perakende harcamalar, ulaşım, büyük mekanlardaki etkinliklere gelecekteki katılım ve işe dönme de dahil olmak üzere bir dizi konudaki bakış açılarının nasıl etkilendiği incelenmiştir. Sonuçlar, ankete katılan ABD'li tüketicilerin sadece virüsler sonrasında yaşamları ve çalışma biçimleri üzerinde önemli değişiklikler yapmayı planlamakla kalmayıp, aynı zamanda bu tüketicilerin nerede bulunduğuna bağlı olarak bu planlarla ilgili bölgesel zıtlıklar içerdiğini ortaya koymuştur. Anket sonuçları, tüketicilerin toplu taşımaya yönelik tutumlarının belirgin şekilde değiştiğini göstermektedir. Düzenli olarak otobüs, metro veya tren kullanan katılımcıların yüzde 20'sinden fazlası artık kullanmayacaklarını, yüzde 28'i ise toplu taşımayı daha az kullanacaklarını söylemiştir (<https://newsroom.ibm.com/2020-05-01-IBM-Study-COVID-19-Is-Significantly-Altering-U-S-Consumer-Behavior-and-Plans-Post-Crisis>).

Covid-19'un yayılımını ve etkilerini sınırlamak için getirilen kısıtlamaların, insanların yaşamları ve enerjinin tüm ekonomilerde kullanım şekli üzerinde yaygın bir etkisi olmuştur. En büyük etkilerden biri, toplu taşıma türlerini kullanırken virüse yakalanma ve yayılma korkusu nedeniyle yolcu taşımacılığı talebindeki azalmadır. Yük taşımacılığında da azalma olsa da, mevcut kriz sırasında yük aktivitesinin itici güçleri, hem arz hem de talep yönlü faktörler ve ikincisinde temel hizmetlerin çalışır durumda tutulması gereği nedeniyle etki seviyesi daha kısıtlı kalmıştır. Buna karşılık, yolcu taşımacılığı (hem boş zaman hem de iş seyahati için) genellikle isteğe bağlıdır ve insanların karar verme süreçlerinden daha fazla etkilenmiştir (<https://www.iea.org/articles/changes-in-transport-behaviour-during-the-covid-19-crisis>).

Kriz, otomobillerden ve şehirlerdeki toplu taşıma araçlarından ulusal ve uluslararası otobüslere, trenlere ve uçaklara kadar her türlü taşımayı etkilemiştir. Küresel karayolu taşımacılığı faaliyeti, Mart 2020'nin sonuna kadar 2019 ortalamasının neredeyse% 50 altında ve ticari uçuş faaliyeti Nisan 2020'nin ortalarına kadar 2019'un neredeyse % 75'inin altındaki seviyelerde kalmıştır (<https://www.milliyet.com.tr/yazarlar/umit-unker/corona-virusun-covid-19-sektorlere-etki-endeksi-6194151>).

Belirli ulaştırma türleri için doğrudan talep azaltmalarına ek olarak, önceki krizler ayrıca insanların bir kriz sırasında ve hemen sonrasında, bir dizi faktöre bağlı olarak bazen kalıcı olabilecek yeni ulaştırma uygulamalarını benimsediğini göstermektedir. Sürdürülebilir ulaştırma davranışlarını güçlendirmek için önlemler almak, ekonomik aktiviteyi canlandırmanın, istihdamı desteklemenin ve sağlık sorunlarını iyileştirmenin daha etkili yollarından biri olabilir.

Sonuç olarak; Covid-19 krizi, havacılık ve toplu taşıma kullanımındaki büyük düşüşler ve bisiklet kullanımındaki önemli büyüme ile insanların ulaşım davranışlarını dramatik bir şekilde değiştirmiştir. Önceki krizlerden elde edilen kanıtlar, kriz olaylarının hemen ardından, insanlar farklı ulaşım modlarının maliyetlerini ve faydalarını yeniden değerlendirdikçe ulaşım davranışlarının değişeceğini göstermektedir.

Seattle kentinde (ABD) mart ayı ortasında gelen verileri kullanarak araç/km'de %13'lük bir azalma ve yolculuk süresinde %26'lık bir iyileşme tespit edilmiştir. Analiz edilen tüm yayınlanmış veriler; hareketliliğin tüm dünyada virüsün yayılması artmış ve sınırları aşmıştır. TomTom tarafından yapılan analiz tıkanıklığı çalışmasında, mevcut tıkanıklık seviyelerinin %10'un altında olduğunu tespit etmiştir. Bu şehirlerdeki tipik tıkanıklık seviyelerinin normalde %50-70 civarında olduğu belirtilmiştir. Wuhan(Çin) veya Delhi(Hindistan) kentlerinde kayıtlı kullanıcı sayısında %80-90 civarında azalma olduğu tespit edilmiştir. Toplu taşıma araçlarının kullanımındaki bu düşüş, hem kullanıcıların kendilerinin hem de toplu taşıma araçlarının kullanımlarından mümkün olduğunca kaçınmak için sağlık yetkililerinin önerileri olan bisiklet gibi bireysel ulaşım araçlarının kullanımının tavsiye edilmesi sonucu ortaya çıkmıştır. Veriler İstanbul'da (Türkiye) kaza oranlarında %35'lik düşüşler

ortaya koyan sonuçların olduğunu göstermiştir (<https://uttri.utoronto.ca/news/assessing-the-impact-of-covid-19-on-travel-behaviour-and-demand-in-the-gtha/>).

Yukarıda özetlenen bazı çalışmaların sonuçlarından anlaşılacağı üzere, ulaşım sektörü ve insanların seyahat aktivitesi salgından en çok etkilenen alanlar olmuştur. Havacılık neredeyse durma noktasına gelirken Türkiye'deki toplu taşıma sistemleri de kullanıcıların tercihlerinden önemli seviyede etkilenmiştir.

YÖNTEM

Çalışma kapsamında, toplumun ulaşım davranış ve tercihlerinin COVID-19 süreci öncesi ve sonrasındaki durumu incelenmiştir. Bu çerçevede internet ortamında bir anket çalışması gerçekleştirilmiştir. Anket çalışmasına 472 kişi katılmıştır. Ankette genel olarak ulaşım sistemleri tercihi, günlük kullanım durumu, toplu ulaşım kullanım oranı, gelir durumu, COVID-19 süreci sonrasındaki tercihler vb. gibi toplam 30 adet soru yöneltilmiştir. Bu sorulara verilen cevaplar sınıflandırılarak değerlendirilmiş ve istatistik olarak genel durumları analiz edilmiştir.

Anket soruları ve formu çalışmanın ekinde verilmiştir.

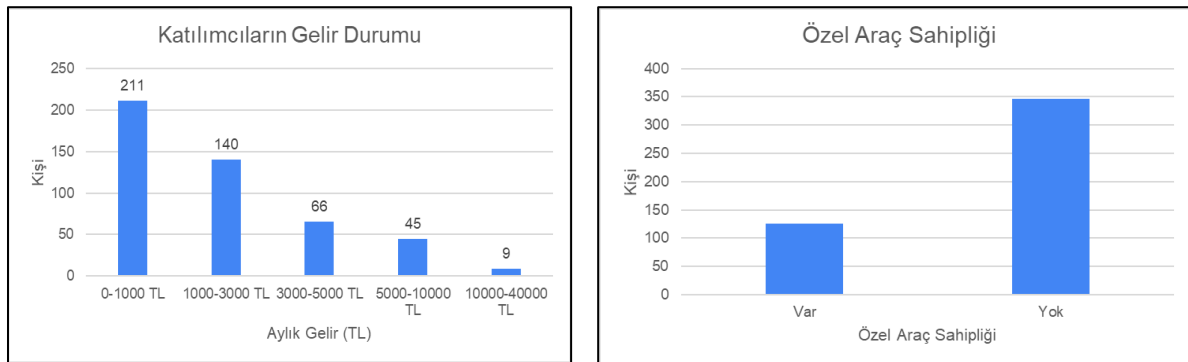
ANALİZLER

Anket için hazırlanan sorulara verilen cevaplar sınıflandırılarak değerlendirilmiş ve aşağıda açıklanmıştır. Tablo 1'de ankete katılanlar ile ilgili temel bazı bilgiler özetlenmiştir.

Tablo 1 Katılımcılara ait bazı bilgiler

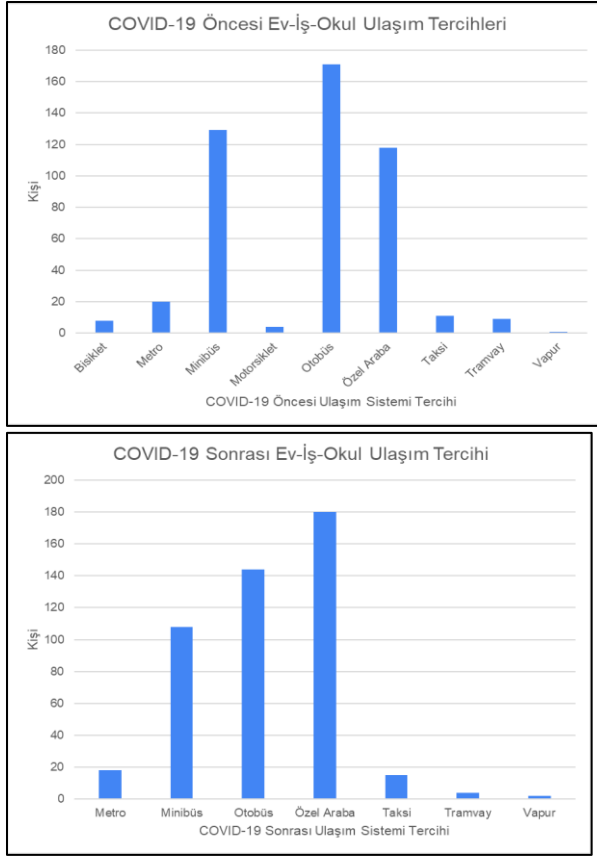
Eğitim Seviyesi		Cinsiyet		Medeni Hal		Çalışma Durumu	
İlkokul	11	Erkek	277	Bekar	407	Çalışan	132
Ortaokul	12	Kadın	186	Evli	64	Çalışmayan	49
Lise	63	Cevapsız	8			Öğrenci	290
Üniversite	368						
Yüksek Lisans	17						

Tabloda görüldüğü üzere, ankete katılanların çoğunluğu bekar, erkek ve öğrencidir. Ayrıca eğitim düzeylerinin üniversite seviyesinde olduğu anlaşılmaktadır. Bunlara ek olarak, anketten elde edilen veriler aşağıdaki grafikler ile açıklanmıştır. Şekil 1'de katılımcıların gelir durumu ve özel araç sahipliğine ait sonuçlar özetlenmiştir. Şekilden katılımcıların çoğunluğunun gelir durumunun 0-1000 TL aralığında olduğu ve özel araçlarının bulunmadığı anlaşılmaktadır.

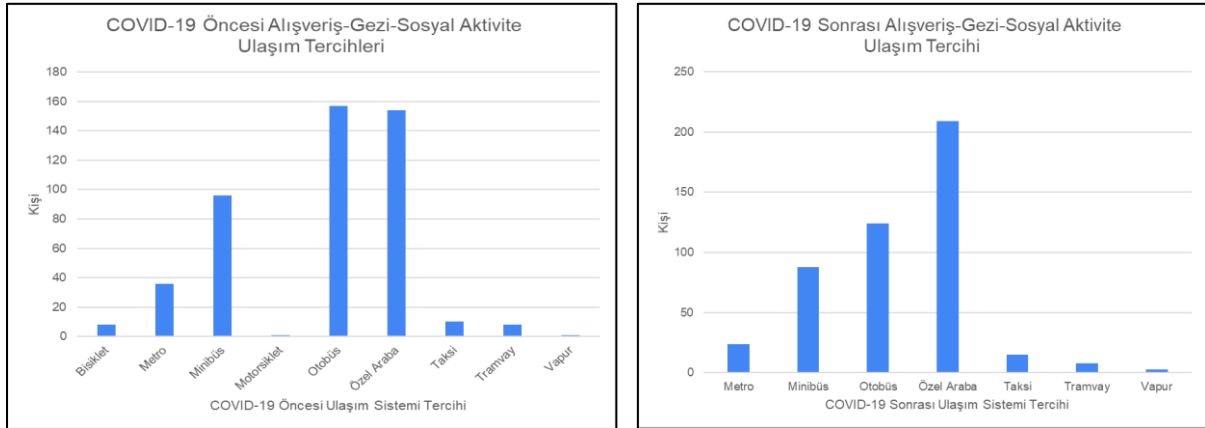


Şekil 1 Gelir durumu ve özel araç sahipliği'ne ait sonuçlar

Anket çalışmasında, katılımcılara yaşadıkları kentteki ulaşım seçenekleri sorulmuş ve Şekil 2'de gösterilen sonuçlar elde edilmiştir. Şekilde, katılımcıların büyük çoğunluğunun minibüs, otobüs ve taksi seçeneğine sahip olduğu görülmektedir.

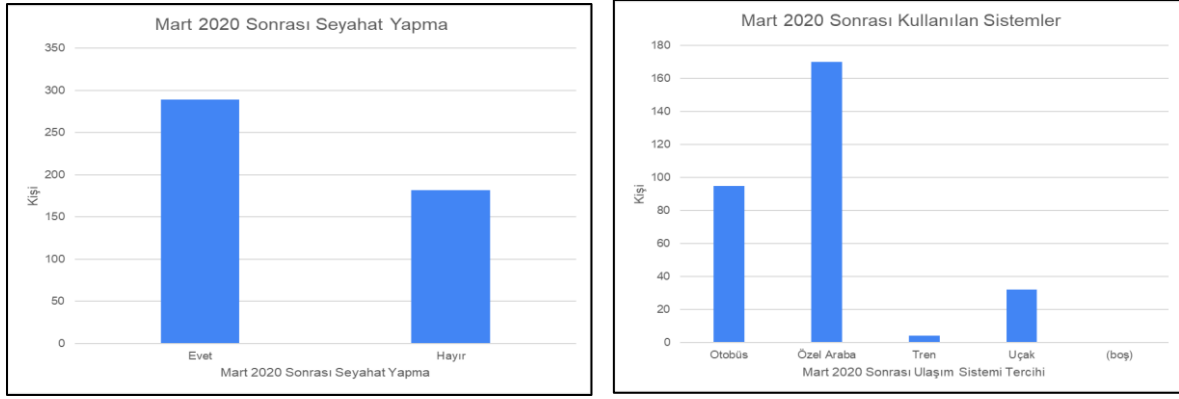


Şekil 4 COVID-19 öncesi ve sonrası ev-iş-okul yolculukları için ulaşım tercihleri

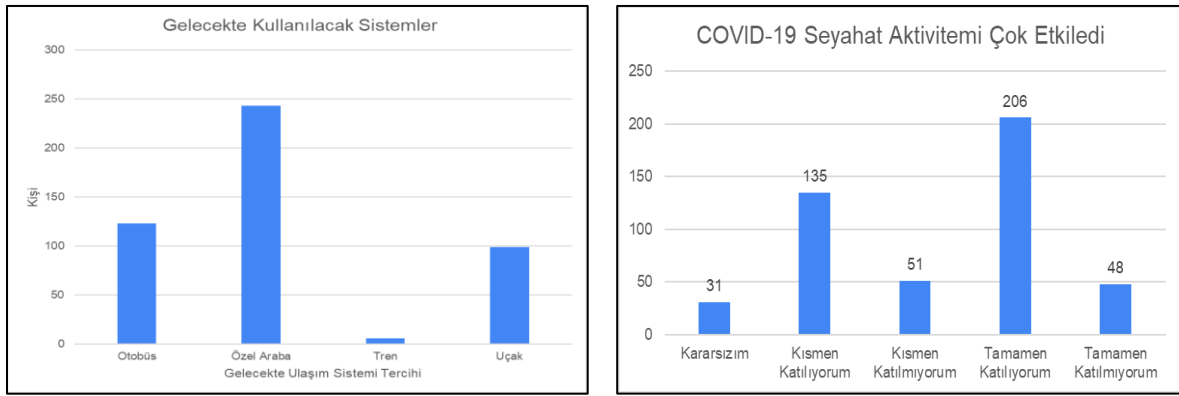


Şekil 5 COVID-19 öncesi ve sonrası alışveriş-gezi-sosyal aktivite yolculukları için ulaşım tercihleri

Anket katılımcılarına çalışma kapsamında özellikle ülkemizde sokağa çıkma yasağı uygulamasının yaygın olduğu Mart 2020 dönemi ve sonrasında kentler arası seyahatleri ve kullandıkları sistemler sorulmuştur. Bu sorulara alınan cevapların dağılımı Şekil 6'da gösterilmiştir. Bu dağılımlara göre katılımcıların çoğunluğu Mart 2020 sonrasında kentler arası yolculuk yapmış ve çoğunlukla bu yolculuklarında özel araç kullanmayı tercih etmiştir. Bu sonuç, Şekil 4 ve Şekil 5 teki sonuçları desteklemektedir. Ulaşım sistemi tercihinde salgın etkisiyle özel araç kullanımı artmıştır. Bu bulguyu gelecek için sorgulamak amacıyla anket katılımcılarına gelecekte kullanılacak sistemler ve COVID-19 sürecinin seyahat aktivitesine etkisi sorulmuş ve Şekil 7'deki sonuçlar elde edilmiştir. Elde edilen sonuçlara göre, kentler arası yolculuklar için özel araç tercihinin daha fazla olacağı ve katılımcıların önemli bir kısmının seyahat aktivitelerinin COVID-19 sürecinden olumsuz etkilendiği anlaşılmıştır.



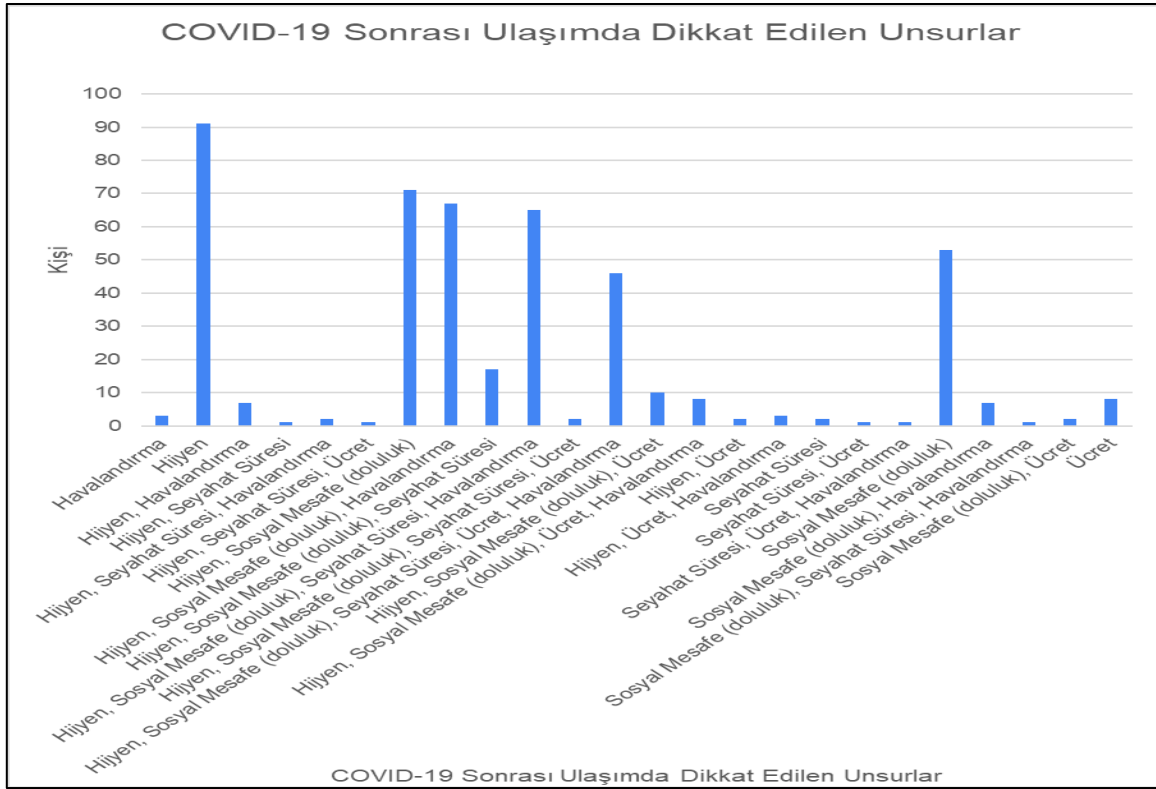
Şekil 6 Mart 2020 sonrası seyahatler ve kullanılan sistemler



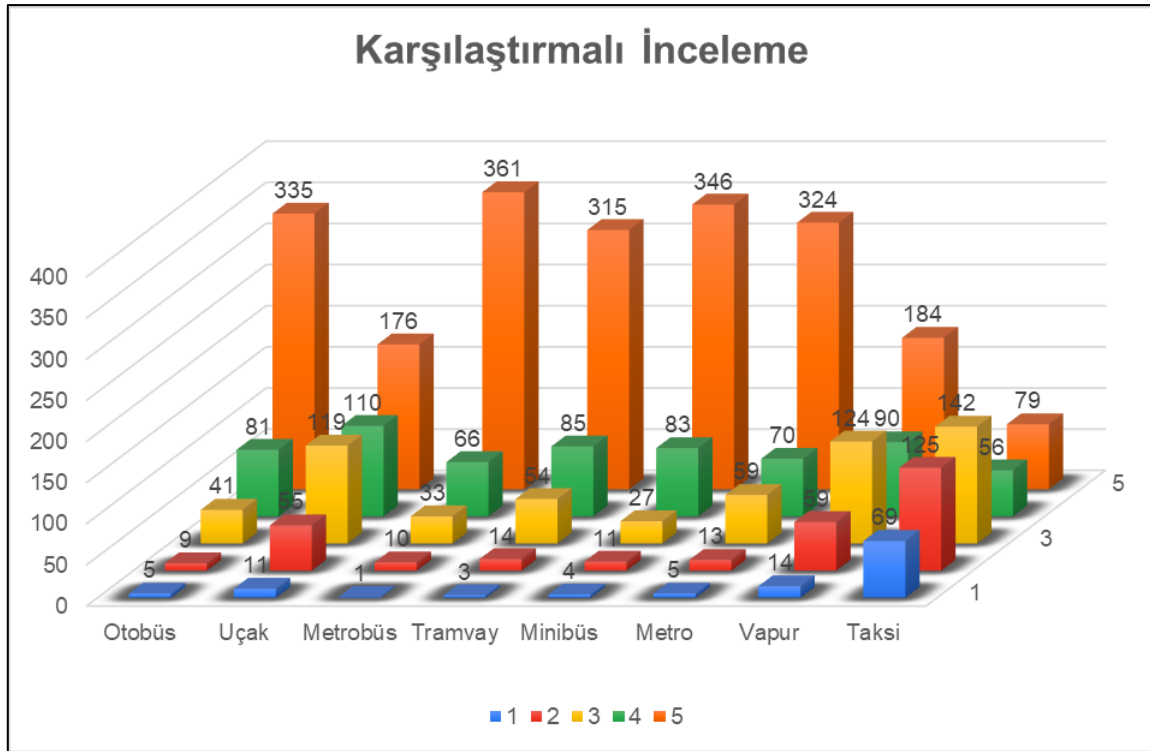
Şekil 7 Gelecekte kullanılacak sistemler ve COVID-19 sürecinin seyahat aktivitesine etkisi

COVID-19 sürecinin toplumun ulaşım davranışı ve sistem tercihindeki etkilerinin diğer boyutlarını da incelemek amacıyla, katılımcıların COVID-19 süreci sonrasında kullandıkları ulaşım sistemlerinde dikkate aldıkları unsurlar sorulmuştur. Şekil 8'de bu sorgulama için verilen cevapların dağılımı gösterilmiştir. Sonuçlar incelendiğinde, özellikle hijyen unsurunun öne çıktığı, bu unsuru fiziki mesafe (doluluk oranı) ile havalandırma unsurlarının takip ettiği anlaşılmıştır. COVID-19 öncesinde daha çok dikkat edilen ücret ve seyahat süresi gibi unsurların ise süreç sonrasında sıralamasının açık olarak değiştiği anlaşılmıştır. Bu durum, salgın sürecinin toplumun tercihlerini nasıl etkilediğini ifade etmektedir.

Anket çalışmasında katılımcılara ulaşım sistemlerinin COVID-19 açısından risk değerlendirmesi sorulmuş ve Şekil 9'daki dağılım elde edilmiştir. Risk değerlendirmesinde, 1 en risksiz olmak üzere, 1 ile 5 arası puanlama yapılmıştır. Şekildeki dağılımda da görüldüğü üzere taksi dışındaki tüm ulaşım sistemleri genel olarak çok riskli bulunmuştur. Metrobüs sistemi ise en riskli olarak değerlendirilmiş, bu sistemi sırayla minibüs, otobüs, metro ve tramvay sistemleri izlemiştir.

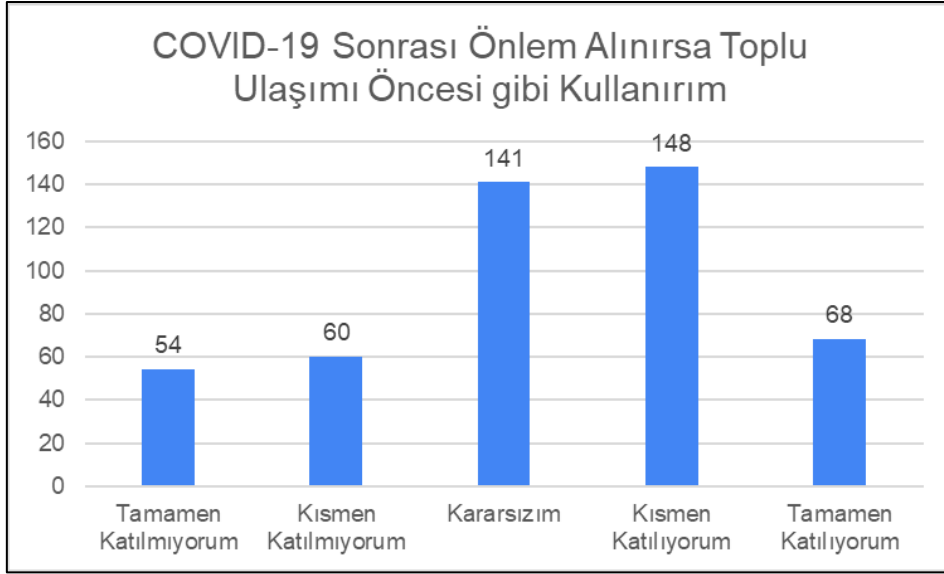


Şekil 8 COVID-19 sonrası ulaşımında dikkat edilen unsurlar



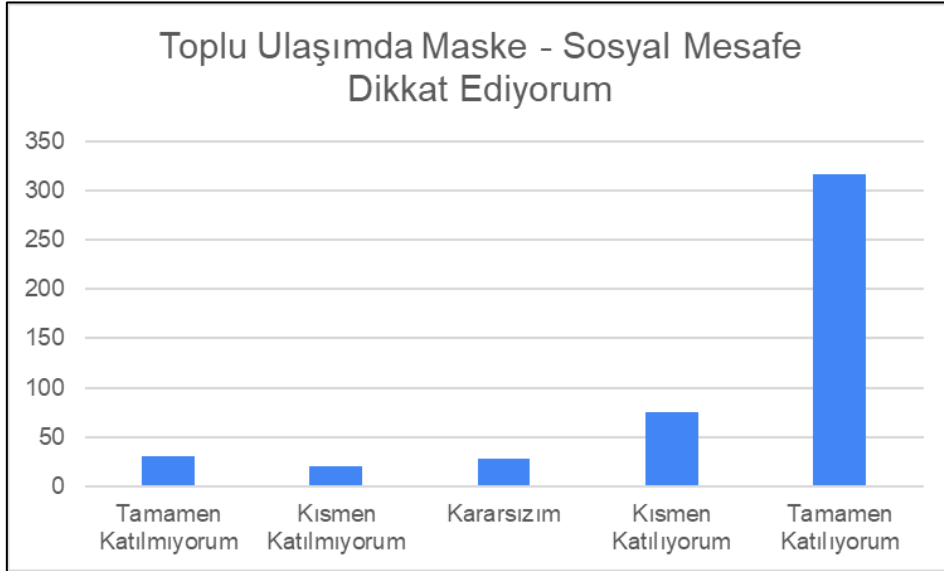
Şekil 9 Ulaşım sistemlerinin COVID-19 açısından risk durumlarının değerlendirilmesi

Çalışma kapsamında, COVID-19 sonrası gereken önlemlerin alınması halinde, kullanıcıların tekrar salgın öncesindeki gibi toplu ulaşımı kullanma durumları sorgulanmıştır. Bu sorunun cevabına ait dağılım Şekil 10 da verilmiştir. Sonuçlara göre salgın öncesindeki toplu ulaşımı kullanma durumuna kolayca geri dönülemeyeceği, katılımcıların önemli bir kısmının henüz kararsız olduğu anlaşılmıştır.

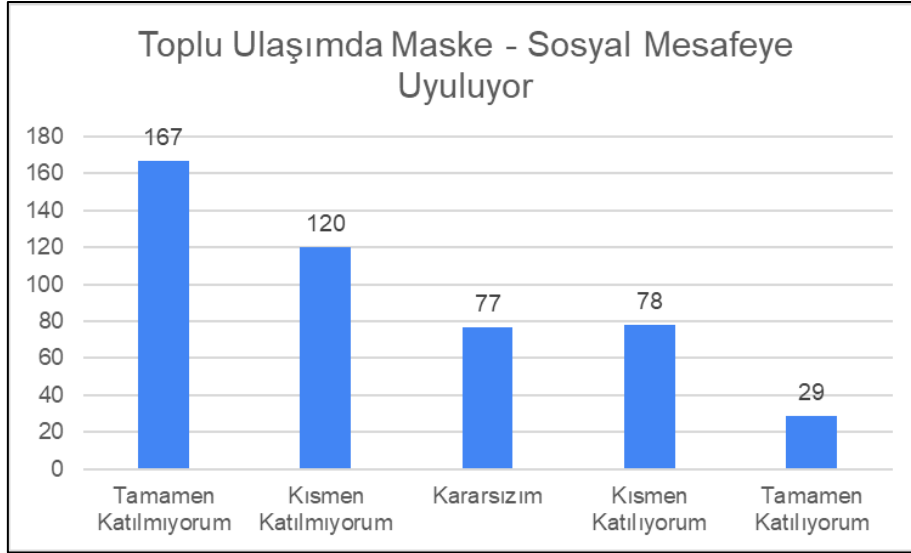


Şekil 10 COVID-19 Sonrası önlemlere göre Toplu Ulaşımı tekrar kullanma durumu

COVID-19 sürecindeki en etkili önlemlerin maske ve mesafe kuralına uyulması olduğu bilinmektedir. Bu önlemlere katılımcıların ne oranda uydukları anket kapsamında incelenmiştir. Şekil 11 de verilen sonuçlara göre anket katılımcılarının büyük çoğunluğu (%82) bu önlemlere dikkat etmektedir. Bununla beraber, diğer kullanıcıların durumları sorgulandığında ise, katılımcıların yarısından fazlasının kendileri dışındaki kullanıcıların bu önlemlere yeterince dikkat etmediğini düşündükleri ortaya çıkmıştır.



Şekil 11 Toplu ulaşımında Maske ve mesafe kuralına uyma durumu



Şekil 12 Toplu ulaşımda diğerlerinin maske ve mesafe kuralına uyma durumu

SONUÇ VE ÖNERİLER

Bu çalışmada COVID-19 sürecinin toplumun ulaşım davranışı ve tercihlerine etkisi anket yapılarak incelenmiştir. Anket çalışmasında katılımcıların temel bilgileri (yaş, cinsiyet, medeni hal vb.) dışında gelir durumu, çalışma durumu ve COVID-19 süreci öncesi ve sonrasındaki ulaşım tercihlerine dair sorular sorulmuştur. Bu sorulara verilen cevaplar sınıflandırılarak incelenmiş ve aşağıda özetlenen sonuçlara ulaşılmıştır:

- Katılımcıların çoğunluğu Denizli, Ankara, İstanbul ve İzmir de yaşamaktadır
- %59'u erkek, çoğunluğu 20-25 yaş aralığındadır
- %86'sı bekar, %76'sı üniversite mezunudur
- %62 si öğrencidir
- %45'in gelir düzeyi 0-1000 TL , %30'un 1000-3000TL aralığındadır
- %75'in özel aracı var, % 25'in yoktur
- Minibüs-otobüs-taksi seçeneği en yaygın ulaşım sistemi seçeneğidir
- COVID öncesinde:
- Ev-İş yolculuğu için %36'sı otobüs kullanmıştır
- Gezi-alışveriş için %33'ü otobüs, %32'si özel araç kullanmıştır
- Ev-iş mesafesi kısa mesafelidir ve 0-10 km aralığındadır
- Günlük ortalama seyahat süresi 20 dakikadır
- COVID sonrasında:
- Ev-iş yolculukları için %29'u otobüs kullanmıştır
- Gezi-alışveriş için %25'i otobüs, %45'i özel araç kullanmıştır
- 280 kişi Mart 2020 sonrası kentler arası seyahat etmiş ve çoğunlukla özel araç kullanmıştır
- Seyahatlerde, en çok dikkat edilen unsur hijyendir, bu unsuru taşıt doluluk oranı ve havalandırma durumu takip etmektedir, ücret ve seyahat süresi ikinci derecede öneme sahip olmuştur
- Yaklaşık %75 oranda katılımcının seyahat aktivitesi COVID-19'dan çok etkilenmiştir
- Toplu ulaşım sistemlerinin riskli olma sıralaması metrobüs, minibüs, otobüs, metro, tramvay ve vapur biçimindedir
- Taksinin çok riskli bulunmamıştır
- Katılımcıların %46'sının COVID-19 sonrası toplu ulaşım kullanımında eski alışkanlığına döneceği anlaşılmıştır
- Katılımcıların %82'si toplu ulaşımda maske ve mesafeye dikkat ettiğini belirtmiştir
- Katılımcıların %61'i diğerlerinin maske ve mesafe kuralına uymadığını düşünmektedir
- Katılımcıların %59'u kullandığı toplu ulaşımı sağlıklı bulmakta, karasızlarda eklenirse bu oran %80 i aşmaktadır

- Katılımcıların %46'sı toplu ulaşımı ekonomi ve alternatifsizlik yüzünden kullandığını ifade etmiştir.

Çalışma sonuçlarına göre, toplu ulaşım sistemlerinde aşağıda ifade edilen bazı düzenlemelerin yapılması fayda sağlayabilecektir:

- Toplu ulaşım sistemleri daha hijyenik olarak ve fiziksel mesafeye uygun olarak yeniden tasarlanmalıdır
- Doluluk oranları ve çizelgeler yeniden düzenlenmelidir
- Filolar genişletilmeli ve böylece fiziksel mesafe açısından avantaj sağlanmalıdır
- Virüs vb salgın durumları için özel tasarımlar geliştirilmelidir
- Özel araç tasarımları da gözden geçirilerek daha küçük ve kompakt araç tasarımlarına yönelmelidir
- Doluluk oranına göre trafik yönetimi ve ulaşım planları geliştirilmelidir.

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EK:

COVID-19 SÜRECİNDE TOPLUMUN ULAŞIM DAVRANIŞLARININ İNCELENMESİ ANKET FORMU

- Yaşadığımız Kent
- Cinsiyet
- Yaş
- Medeni Hal ----(Evli) (Bekar)
- Eğitim Düzeyi ---- İlk Orta Lise...Üniv.....
- Çalışma Durumu ---- Çalışan Öğrenci Çalışmayan
- Meslek
- Gelir Düzeyi ----- 1000- 3000 TL 3000-5000 TL 5000-10000 TL 10000- 40000 TL
- Özel Otonuz var mı ----- Var --- Yok ----
- Yaşadığımız yerdeki ulaşım seçenekleri ----- Minibüs Otobüs Tramvay Metro Vapur Taksi
- COVID-19 Öncesi ev-iş-okul seyahatleri için hangi ulaşım türünü daha sık kullanıyordunuz
Minibüs Otobüs Tramvay Metro Vapur Taksi Özel Oto Motorsiklet Bisiklet
- COVID-19 Öncesi alışveriş-gezi-sosyal aktivite seyahatleri için hangi ulaşım türünü daha sık kullanıyordunuz
Minibüs Otobüs Tramvay Metro Vapur Taksi Özel Oto Motorsiklet Bisiklet
- Ev-iş (veya okul) mesafeniz ne kadar?
0-3 km 3-6 km 6-10km 10-15km 15-45km
- Ortalama seyahat süreniz
0-10 dk 10-20 dk 20-40dk 40-60dk 60-90dk
- COVID-19 Sonrasında ev-iş-okul seyahatleri için hangi ulaşım türünü tercih edeceksiniz?
Minibüs Otobüs Tramvay Metro Vapur Taksi Özel Oto Motorsiklet Bisiklet
- COVID-19 Sonrasında alışveriş-gezi-sosyal aktivite seyahatleri için hangi ulaşım türünü tercih edeceksiniz?

- Minibüs Otobüs Tramvay Metro Vapur Taksi Özel Oto Motorsiklet Bisiklet
17. Mart 2020 den sonra kent dışına yolculuk yaptınız mı?
Evet Hayır
18. 17. Soruya cevabınız evet ise hangi ulaşım türünü kullandınız?
Otobüs Uçak Özel Oto Tren
19. Gelecekte kent dışı yolculuklarda hangi ulaşım türünü kullanmayı planlıyorsunuz?
Otobüs Uçak Özel oto Tren
20. COVID-19 dan sonra ulaşım da aşağıdakilerden hangisi/hangilerine dikkat etmeye başladınız?
Hijyen Sosyal mesafe (doluluk) Seyahat süresi Ücret Havalandırma
21. COVID-19 sürecinde evden mi çalıştınız?
Evet Hayır
22. COVID-19 Seyahat Aktivitemi çok etkiledi
Tamamen Katılmıyorum
Kısmen Katılmıyorum
Kararsızım
Kısmen Katılıyorum
Tamamen Katılıyorum
23. Aşağıdaki ulaşım türlerinin COVID-19 açısından risk değerlendirmesini işaretleyiniz? (5 en riskli)

	5	4	3	2	1
Otobüs					
Uçak					
Metrobüs					
Tramvay					
Minibüs					
Metro					
Vapur					
Taksi					

24. COVID-19 sonrası yeterince sağlık önlemi alınırsa toplu ulaşımı salgın öncesi gibi kullanırım

Tamamen Katılmıyorum
Kısmen Katılmıyorum
Kararsızım
Kısmen Katılıyorum
Tamamen Katılıyorum

25. Toplu ulaşımı kullanırken maske kullanıp, sosyal mesafe kuralına dikkat ediyorum.

Tamamen Katılmıyorum
Kısmen Katılmıyorum
Kararsızım
Kısmen Katılıyorum
Tamamen Katılıyorum

26. Toplumda maske kullanma ve sosyal mesafe kurallarına uyulduğunu düşünüyorum

Tamamen Katılmıyorum
Kısmen Katılmıyorum
Kararsızım
Kısmen Katılıyorum

Tamamen Katılıyorum

27. Kullandığım toplu ulaşım sisteminin yeterince sağlıklı olduğunu düşünüyorum.

Tamamen Katılmıyorum

Kısmen Katılmıyorum

Kararsızım

Kısmen Katılıyorum

Tamamen Katılıyorum

28. Aşağıdakilerden hangisi/hangileri sebebiyle toplu ulaşımı kullanıyorsunuz?

Ekonomi

Seyahat süresi

Otopark problemi

Erişme kolaylığı

Alternatifsizlik

29. COVID-19 sürecinde uzaktan eğitim aldınız mı?

Evet Hayır

30. Uzaktan eğitime devam etmek ister misiniz?

Evet Hayır

PERSISTENT USE OF GADGETS AND INTERNET IN LOCKDOWN ENDANGERS CHILDHOOD?**Khalida NADEEM**

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Nadeem AHMED

Department of MCN, University of Karachi Pakistan

Dr. Engineer Hussain SALEEM**ABSTRACT**

This report deals with the frequent interaction of kids and teenagers with their electronic gadgets which have been causing severe and distressing effects. In the light of the current situation, the study revealed all the mental and physical problems which had contributed in deteriorating the lifestyle of the kids and teenagers through excessive use of social media in Lockdown. This also threatens the future of Pakistan as the excessive use of social media tarnishes the skills and mentality of the youth as well as their routine, and the youth of any country are the most essential part as they are the ones who have to run the country in the near future and no country could prosper with unskilled and poorly trained and unorganized set of people. The study critically analyzed the major reasons which have contributed in lack of productivity and the time is spent in social media. It can be concluded that teenagers spend daily on social media at an average of 7-8 hrs. The overall purpose of the study was to let people aware of the mishap which had been created through this unexpected situation in the country and what consequences it would have to deal in the near future. This study analyzes secondary data such as journals, reports, newspapers, relevant national and international research or news article. It is recommended that parents should know the activities of their kids and have to be vigilant and attentive in encouraging children to maintain their routine. Social media had also contributed in promoting vulgarity and if it continues it won't be long when modesty gets eradicated and vulgarity becomes common.

Keywords: Lockdown, Vulnerable to Social Media, COVID-19, Mental and Physical Health, Pakistan.

INTRODUCTION:

“I think our dependence on social media for better or for worse has increased tenfold since COVID-19,” said Kimberley Lee, vice President of Resource Developing and Branding at the mental health association in Springfield.

With the beginning of 2020, humanity met with their most dreadful fate. It was not long that this epidemic was declared as pandemic by the WHO. In order to prevent further influence of COVID-19, measures were taking by the government of Pakistan and lockdown was declared. People were asked to self- quarantine themselves to prevent it from spreading.it aimed to prevent further loss of lives through the spreading of this pandemic. The youth of this generation, especially the younger kids became addicted to social media because of boredom and accessing social media in younger age means getting vulnerable to all the “Not - So-Kids” Sites.

Children are now more involved in online games, which may be fun and great time killers. But, at the other side of the coin, it makes them rage and rage so hard that it breeds anger in their young, learning

and yet developing minds which makes them aggressive, disrespectful and furious at all times. It also lessens sympathy and empathy and sensitivity for others from their hearts.

“Scientists have investigated the use of violent video games for more than two decades but to date there is very limited research addressing whether violent video games cause people to commit acts of criminal violence” said task force chair Mark Appelbaum in a statement. (Sifferlin, 2015). Moreover, as the technology advances people usually prefer mobile phones or tablets than computer themselves because it can be carried. However, it creates Hazardous and fatal health diseases. And, in this quarantine, being more attached with the electronical gadgets makes them more prone to diseases for example as the child looks directly on those small screens, that can here severe effects on eyes and can also lead to permanent blindness. Furthermore, as peoples usually either, lean, or lay is unusual positions, it damages their spine, which further weakens their whole body, as well as their reflexes. It can also cause fatigue in the body.

Kids get psychologically ill, depressed or stress over virtual world which also leads to physical illness. Such as Laziness, obesity. It also lowers their confidence, communication skills, and make them less-interactive, thus becoming anti-social or introverts. Researchers say that, that the kids get so depressed that they even commit suicide or at least attempt them one. They also isolate themselves and creates FOMO (Fear OF Missing Out). In this situation, as the kids watches the luxury of other people on social media, they get prone to inferiority conplex and start thinking that others are living a very luxurious lives or as if they are lacking behind or they are missing something from their lives.

S. Harris Ali (2020) said that “Rumors are a second form of misinformation”. The rumors which spread through social media breeds fear in the hearts of the youth which can have devastating effects on Mental health of the youth, which prevents them from interacting socially and they prefer the use of technology instead.

In addition, those kids who tend to sacrifice their sleeps for social media, or other virtual entertainment make, them insomnia and lessens their hunger. Now as the food doesn’t enter the body, the body doesn’t develop well, which in turns makes them deficient in nutrients and thus, getting weak which also makes them less productive. Children have also become dependent to these gadgets and are unable to perform effectively without them.

Dejectedly, Pakistan has been declared as one of the most ranked country in watching porn (Desk, 2015), and it is very disappointing as majority of Pakistani are youth and kids, because of quarantine it provides more opportunities to kids to get an access to thing, which they shouldn’t be watching. And, after some time, this becomes an addiction, and as they start investing more time in them, this results in to lack of productivity. It can be understood through this situation that for example, a kid spends 8 hours watching this more 8 hours on sleep and 4 hours on the rest household chores, he only have 4 hours left to do something productive, whereas avoiding watching them and doing something productive would ultimately increase productivity (drug, 2019), further it also manipulates the minds of the kids and teenagers which in turn leads to the cases such as rapes, adultery and fornication.

Lastly, watching porn releases two of four happy chemicals (dopamine and serotonin). These chemicals are also released when we exercise. That’s why kids or teenagers involved with these sites do not exercise as the chemical is already released. Similarly, if the guy who works out daily would tend to avoid porn (drug, 2019). And as the rate of porn-watchers, is increasing, the kids or the teens set up expectations regarding sex in their young minds which in turn leads to violent, lustful acts, also makes them feel frustrated, and is the one of the major reasons which breeds anger in them and forces them to commit crimes.

SIGNS OF TECHNOLOGY ADDICTIONS:

In the beginning, parents are usually “too-engaged” with their other stuffs that they are unable to give proper time to the toddler. So, they turn toward gadgets to engage their child in something, while they are

not around. Kids start to get the hang of their gadget and their mind itself develops in the favor of using technology.

In this lockdown, when passing time is itself a challenge, the crave towards technology rapidly increased. Thus, many people are converting to “technology-addicts”

PSYCHOLOGICAL SIGNS:

Technology on kids have a serious impact on Childs brain. The most prominent among all is that, the kid would prefer “loneliness” and “His gadget” over people or friends. He would face lackness in public speaking skills, confidence, and anxiety disorder while facing people. Compare to other kids, they would show reluctance towards physical activities. He would face psychotic rage over small matters, and he would be prone to negativity. And lastly, he would be furious and rude with his kith and kin at all times, with no specific reason.

PHYSICAL SIGNS:

Where psychological effects are taking over kids’ brain, it is also creating hazardous health problems. The most prominent effect is that, the kid would be lazy and compare to other children would be weak and malnutrious. The main reason for this condition is that, they get so engaged in virtual world that they are ready to sacrifice their basic necessities, (i.e. sleep and food). This condition is known as insomnia. Kids lack the proper development of body and it is quite natural that they would be prone to some sort of eye’s, head’s, bone’s, joint’s or back’s disease or they would simply experience weakness.

OBJECTIVES OF THE STUDY:

The study is based on the following objectives:

- i. To study about how technology engages kids?
- ii. What role has lockdown played in making more kids into technology addicts.?
- iii. How it leads to violence and anti-social behavior?
- iv. After lockdown, how kids would behave going back to their normal life?
- v. How would parents deal them?
- vi. What measures should be taken to prevent technology’s addiction?

LITERATURE REVIEW:

In this research, previous researches have been taken into notice. There is no doubt that the dependency on electronical gadgets have been increasing from the past decade. And, this lockdown had added the spice to the dish. Not only toddlers, but even adults are vulnerable to technology in this lockdown as an alternate to boredom.

According to a study, there were 76.38 million internet users in Pakistan in January 2020. It has increased by 11 million (17%) from 2019-2020.

It is an alarming situation because if the child from its childhood is being exposed to technology because of either getting over boredom, or to look after kids from creating mishaps, or any reason, it may temporarily solve the problems for the tightly-scheduled parents in looking after their kids, but it also creates permanent damages to brain which effects mental health. And, your mental health is co-linked with your physical health, which in turn damages the child as a whole. As you step in the world of

fantasies and virtual life, there is no way back. And, kids who are easy to fall for, are the most vulnerable. With time, it becomes a habit, and this habit works as a

“slow poison” which the kid may think to be entertaining but would actually limit his thinking capacity up to the things which he watches at daily basis. And would also “develop” your brain in the “wrong manner”.

Most of the people has this confusion that every “brain development” is good for health or learning. But, it’s not the case. Watching “junk” or the wrong information on daily basis also develops your brain in the wrong manner which instead proves to be harmful than innocuous. “The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn”. (Warrell, 2014)

Similarly, porn-watchers and hyperactive gamers who are addicted to them are bound make lustful and violent acts as their brain has developed a “wrong lobe”, which makes them furious when they do not get what they desire.

METHODOLOGY:

This is an exploratory research design and the secondary data has been collected from research articles, discussion with family and friends. In the explanatory research, researcher prefers using his assumptions and judgement in obtaining information and with the basis of the critically analyzed secondary data, it than comes to a conclusion.

CONCLUSION:

Conclusively, there is no doubt that children have been using social media all along but imposing lockdown gave more opportunities to kids to get involve in social media which had increased the number of social media addicts, and assist these gadgets to tighten their hold on the kids and teenagers which led to extremely devastating effects. Moreover, the little physical activity they had, had also been relinquished because of the current scenario. And, it won’t be wrong to say that the current generation would catch rust till the lifting of the lockdown, and some may even forget or waste the skill they had learned or the talent they had!

RECOMMENDATIONS:

By taking the current scenario into notice, it is highly recommended that the parents keep a watchful and vigilant eye on their child and their activities. Furthermore, Parents may encourage their kids for spending quality time with their family. And, try indulging them with different other chores or let them learn new skills online, which would be a beneficial use of these gadgets, and to keep their skills into practice so that, they may not catch the rust. Ensure children’s devices have the newest software updates and antivirus programs; produce untie dialogues with kids on how and with whom they are communicating online; perform with children to found policy for how, when, and someplace the internet container be used; be alert to cryptogram of distress in kids that may emerge in link with their online activity, and be frequent with drill locality policies and limited coverage mechanisms and give edit to facts of pillar helplines and hotline handy.

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IMPACT OF CORONA VIRUS ON BUSINESS (WITH SPECIAL REFERENCE TO INDIA)**Aryan DHAWAN**

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ABSTRACT

It is an established fact, that the Covid-19 pandemic has produced a very unstable environment for people all around the world. Globally many economic activities have stopped due to this Covid-19 pandemic. There has been a rise in number of problems like recession, unemployment and poverty etc. In India the major impact of this pandemic has been noticed among business activities. All kinds of industries either small scale or large scale has been adversely affected by the Covid-19 pandemic. A joint survey conducted by the industrial body Ficci and tax consultancy department of India conveys a message that there will be a tremendous uncertainty among the business or trade sector in coming future .it has been expected that 61% of Indian companies are dropping their plans of expansion and wants to concentrate on tackling the upcoming risks and uncertainties. The impact on different type of industries like manufacturing, shipping, textiles, pharmaceuticals and auto industries has also been discussed in my research paper. At times of high uncertainty and risks, the investors or stakeholders of the company invest their money towards the safer side that is gold so like this I have discussed some remedies and steps that Indian companies should take at this time of pandemic to save themselves from huge losses. I have also discussed some of major problems that will come in the way of India's growth wen the trade or business is getting affected so brutally.

INTRODUCTION

The quick eruption of the Covid-19 gives an alarming crisis that is health crisis that the world is struggling with. There is also a commercial impact that is felt globally with the health crisis. As viruses know no borders, the impacts will continue to spread. In fact, 94 percent of the Fortune are already seeing COVID-19 disruptions the economic impact of the 2020 coronavirus pandemic in India has been largely disruptive. According to reports of ministry of statistics India's growth will go down to 3.1% in the end of the financial year 2020. The Covid-19 pandemic effect on the Indian economy is the main reason for this drop. Before this pandemic, Indian economy was witnessing a slowdown in its growth and now according to the world bank reports this pandemic will boost this drop in Indian economy. Although when the economic package was announced in May estimates of Indian GDP were demoted event to negative figures alarming us about another crisis that is recession. And according to various researchers this will be worst recession India has ever witnessed ever since independence. State Bank of India research estimates a contraction of over 40% in the GDP in Quarter 1 For Year 2021. This shrinkage will not be uniform, preferably it will be different according to various variables (such as state and sector. The Indian economy was expected to lose over ₹32,000 crore (US\$4.5 billion) every day during the first 21-days of complete lockdown, which was declared following the coronavirus outbreak. During the complete lockdown only a quarter of India's economic movement was operative. 53% of businesses were affected during this lockdown. Supply chains were stressed as there were lockdown restrictions and with that there was a lack of clarity what is essential and what not. Informal sectors, daily wage groups and the farmers who grow perishables were at most risk of uncertainty. Major companies like ultra tech cement, Aditya Birla group and BHEL have suspended their operations. Young start-ups have been impacted as funding has fallen. In addition to that Fast-moving consumer goods companies also reduced their functioning and started focusing on essentials. Stock markets of India faced their worst loses in the history on 23 March 2020. Although, on 25 March, one day after a complete 21-day lockdown was announced by the Prime Minister, SENSEX and NIFTY posted their biggest gains in 11 years. . Near about 45% households in India observed an income drop in comparison to the previous year.

The Indian govt. declared a lot of measures to tackle the situation, like food security schemes, extra funds were allotted for the healthcare sector and also extended the tax deadlines. On 26th march a number of economic reliefs were announced for the poor which was totalled almost over 170,000 crore rupees. The next day the Reserve Bank of India also announced a number of measures which would make available ₹374,000 crore (US\$52 billion) to the country's financial system. The support to India to tackle this Covid-19 pandemic was announced by world bank and Asian development bank.

GOVERNMENT PHILOSOPHY

Globally in a poll by the 'Edelman Trust Barometer', out of the 13,200+ people polled, 67% agreed that "The government's highest priority should be saving as many lives as possible and saving economy should be the second priority". Which means life should come before livelihood. In India the poll rate was 64% and 36%, in which the 64% people were in favour of saving people's life and 36% were in favour of saving their live hood. In India this debate of life against live hood was also well played out by the government.

PM Modi announced the first 21 days lockdown in India on 24 March. During this address to the nation he said, "*Jaan hai toh jahaan hai*" (transl. Only if there is life there will be livelihood). On 11 April, in a meeting with the Chief Ministers of India, the Prime Minister said "Our mantra earlier was *jaan hai toh jahaan hai* but now it is *jaan bhi jahaan bhi* (transl. life and live hood matters equally)". On 14th April lockdown was extended by our prime minister with some certain adjustments and after that on 11th may in his meeting with the chief ministers said that we should bring out various plans and schemes for preparing India for the post Covid-19 pandemic. During the meeting Modi said "*Jan se lekar jag tak*" (transl. From an independent to the whole of humankind) will be the new way of living a life. On 12 May, the PM addressed the nation saying that the Covid-19 pandemic was an opportunity for India to increase self-sustenance. He announced a new proposal named the *Atmanirbhar Bharat Abhiyan* (Self-reliant India).

ECONOMIC PACKAGE

India's overall economic package was announced as ₹20 lakh crore (US\$280 billion), 10% of India's GDP. The package which was announced on 12 May by the PM Modi, included previous government actions and the RBI announcements. The previous RBI announcements included around ₹8 lakh crore (US\$110 billion) liquidity. the economic package also included the Finance Minister announcement of a package totalling ₹170,000 crore (US\$24 billion) on 26 March. The idea of combining fiscal and monetary defended by the government. Sitharaman explained that other countries had also done the same. Estimates of the size of India's fiscal stimulus as a percentage of GDP varied between 0.75% to 1.3%. The finance minister explained various economic packages in a 5-day press conference which was held on 13th may up to 17th may. It was a mix of various reforms, infrastructure sector, business sector and a direct cash support. Also, it consisted of collateral-free loans for safeguarding the jobs and starting over business activities again. Land reforms which were not announced during the press conference were also the part of the economic package.

IMPACT OF CORONAVIRUS ON DIFFERENT SECTORS OF THE ECONOMY

Covid-19 has set foot in India and is heading the nation to major downturn. Coronavirus disease has become a world-changing event and is not only a humanitarian crisis but also economic and social crisis. Its impact on the business environment is worldwide and manifold. Due to the rapid spread of coronavirus, several entities are bound to limit their business operations leading to disruption in the economic activities of several industries that drives growth. The setback that is being encountered by the different sectors of the economy are highlighted below.¹

PRIMARY SECTOR: Primary sector encompasses industries associated with extraction and production of raw materials. This sector provides employment to about 43.21% of the population in India and contributes about 16.1% of the Indian GDP. It supplies raw materials to secondary sector and furnishes basic necessities of human life.

¹ https://en.wikipedia.org/wiki/Economic_impact_of_the_COVID-19_pandemic_in_India

AGRICULTURAL INDUSTRY²: In agricultural sector, due to travel restrictions for lockdown, there has been a dearth of agricultural workers which has resulted in drop in production. Also, the pandemic lockdown period coincides with the harvesting season of 'Rabi' crop, but owing to paucity of labourers the crops unabatedly stays in the field. As the operations of the businesses like hotels, restaurants, sweet shops and tea shops are suspended, the market of raw materials which are used for these purposes has gone down leading to grievances of farmers. There is a significant fall in revenue of the tea-based industries as they export a substantial part of their output which is now barred.

MINING INDUSTRY: The pandemic has curtailed the overall demand for metals and minerals which has trimmed down their prices. The mining entities has also experienced drastic drop in their share prices. Secondary sector: The secondary sector provides employment to around 24.89% of the population in India and contributes about 29.6% of the Indian GDP. It embraces industries that produces and distributes finished goods or in indulged in construction activities, thus providing support to both the primary and service sector.

MANUFACTURING INDUSTRIES: Manufacturing industries are bearing the brunt of coronavirus as they had terminated their production at a short notice. The value of the inventories that are held up in the production centres or warehouse of these industries has gone down and the machineries are too lying idle for a long time. Major hindrance encountered by the industries are cash flow constraints and supply chain disruption.

AUTOMOBILE INDUSTRY: With almost all plants shut and imports being sealed up, there is a steep decline in production and sales of the automobile companies impelling them to declare pay cuts. The situation will be awful even during post lockdown period due to fall in income levels.

TEXTILE AND APPAREL INDUSTRY: This industry is workplace for over 45 million people in the country but temporary closure of production units has increased their hurdles leading to lay-offs. The termination of exports and imports have adverse impact on the spinning mills in India as the exports of fabric, yarn and other materials have disrupted.

PHARMACEUTICAL AND CHEMICAL INDUSTRIES: These industries highly count on import of bulk drugs and several raw materials from China. Due to import restrictions these industries are also impacted.

ELECTRONIC INDUSTRY: The finish products plus the raw materials used in this industry is mainly supplied by China. The spread of coronavirus has pushed down the production and sale of electronic goods and the supply chain is also interrupted.

SOLAR POWER INDUSTRY: Solar power project builders depend on Chinese imports. Around 80% of solar modules and solar cell used in India are from Chinese manufacturers. Thus, the Indian solar project developers started confronting shortage of raw materials and have limited stocks.

CONSTRUCTION AND ENGINEERING INDUSTRIES: For construction and engineering industries, the physical presence of massive labour force is essential which is restrained during lockdown and the construction activities have also halted. Thus, the industries are tormenting at the hands of ruthless coronavirus. Service sector: About 31.9% of the Indian population is employed in service sector which contributes about 54.3% of the Indian GDP.

TOURISM AND HOSPITALITY INDUSTRIES: Tourism and hospitality are the foremost industries to be severely affected amid coronavirus crisis and will also be rearmost one to behold resumption of activities. Lockdown has averted the inflow of tourists dealing a crippling blow to the tourism and hospitality industries. The estimate loss of this sector is ₹15,000 crore (US\$2.1 billion) for just three months that is April-June.

TRANSPORTATION SEGMENT: The pandemic has put down this segment under massive financial strain. Airlines, cruise and road cargo operators has been struck hard because of border

² <https://www.icrisat.org/containing-covid19-impacts-on-indian-agriculture/>

closure and travel restrictions. Some of the aviation companies are not even in the position to refund their customers those who had booked flights that were cancelled due to lockdown.

HEALTHCARE SEGMENT: According to FICCI, healthcare segment is at the epicentre of these worldwide pandemic ordeal. Certain public hospitals have witnessed increase in demand in the crisis period. The private hospitals have arisen to the occasion by providing the government with all the succour it requires.

MEDIA AND ENTERTAINMENT INDUSTRY: Coronavirus have compelled to postpone release of several movies; shootings have come to rest and the theatres cannot screen movies bringing about heavy loss to this industry. Major sports events have been cancelled including the 2020 Olympics which were to be held in Tokyo.

RETAIL SEGMENT: shutting down of shops and malls that do not sell necessity goods have brought forth degrowth in revenue and considerable job loss. Retail stores selling essential commodities have witnessed demand of the products exceeding supply engendering bare retail shelves. Retail segment has suffered approx. 48.6 % drop in footfall.

BUSINESS SURVIVAL STRATEGIES

Getting the better of this pandemic crisis and its aftermath is imperative at this time. The business world needs to bite the bullet of coronavirus catastrophe and should come to grips with it by means of proper business strategies. Near-term persistence is the only scheme for survival of certain entities while the rest are peering through the fog of ambiguity, finding the way to position themselves after the crisis flames out and things get back to normal. What the scenario will be in near future is unknown, so we need to take into account the lessons of the past and ponder productively and adroitly about the future. To surmount the current situation is hard nut to crack mainly for the secondary and service sectors. They will either subsist, struggle, strive or shut down hinged on their financial capability, management technique and leadership style. To survive in this pandemic period, the organizations should adopt certain strategies to transform panic into constructive and proactive action.

Firstly, every organisation needs to understand the present external environment, for which they need to conduct PESTEL (Political, Economic, Social, Technological, ecological and Legal) analysis. Analysing political environment will provide information about the administrative decisions and measures taken by both the central and state governments. This will help the business to avail the benefits provided by the government which may soothe their business operations in this turmoil. For instance, government has extended the due dates for filling return, reduced the TDS rate, also provided 3 months moratorium on loan repayment and so on. Appraising economic environment will throw light on the present economic situation of the country, purchasing power of the consumer, change in their taste and preferences, volatility in demand and supply, etc. Social aspects will give information about the demand of the society. At present, social distancing, safety measures, disinfection has become very relevant. Technology related changes need to be properly assessed to ride on the technological wave by upgrading and innovating products otherwise the business can lose market. At present, this has become a very important issue which every business needs to consider first. Current ecological condition is also important to know as certain changes has taken place due to complete lockdown of most of the countries around the planet. Legal environment should also be properly analysed in order to know the legality of the business. For instance, government has announced that retail price of 200ml of sanitizer can be maximum Rs. 100 only.

Then the enterprises should conduct internal analysis to appraise their current position. They should properly know their core competent area, availability of resources and manpower and their capabilities. However, during this turbulent period, the senior officials of the company should assume utmost responsibility of managing and directing the organisation. More powers should be bestowed upon the CEO and CFO by the Board so that they do not confront impediment while taking urgent decisions in the period of crisis. During this unprecedented time, the executive directors of the company including the CEO and CFO should play the role of crisis managers and guide the organisation towards better performance. They should be efficient in organizing the available resources properly to accomplish their present objective. As well as, they need to identify the critical

uncertainties and must take a lead in designing contingency plans and developing plausible scenarios so as to overcome the crisis situation.

On basis on internal and external analysis, the entities should use SWOT analysis to correctly identify its strength, weaknesses, opportunities and threats. Strength recounts what an enterprise excels at and in what it is unique compared to its competitors. Whether it has skilled workforce, better knowhow or technology, loyal customer base, adequate capital, strong brand image, better equipment, ideal location and so on. Weaknesses will help an organisation to identify its internal weakness or what it lacks such as inadequate capital, high debt pressure, shortage of skilled workers, weak brand, resource limitations, inadequate supply chain, etc. These inhibit an entity from operating at its optimum level so the organisation must develop these areas to remain competitive. Opportunities indicates the auspicious external factors which might give rise to certain competitive advantages for an enterprise. Thus, opportunities need to be properly determined as it will help an organisation to expand its business. Based on the current scenario, the demand for new products can be identified. For example, demand can rise for safety enhancing products like sanitizer, masks, disinfectants, hand washes, gloves, etc. Threats refer to all those external factors that poses a risk to the entity or its likelihood of growth and prosperity. Therefore, the threats that has arisen due to the pandemic outbreak should be discerned. The change in customer behaviour, new competitors, supply chain disruption, change in regulatory environment, etc. should be assessed. Companies need to minimize its threats by using its strengths and should try to eliminate its weaknesses by utilizing the opportunities identified. The ability to absorb a shock and deal with it i.e. resiliency is the key to survive in the crisis and vital for long-term prosperity. Resilience capabilities of the entities must be reinforced to respond to the aftermath of unforeseen events. They need to have the capability to plan for and adjust to any change through forecasting, safeguarding, responsive capability and reviving and recovering strategy. Entities need to delineate its crucial functions and emphasize those which are critical to be carried out during crisis. Firms should recognize what their vulnerabilities are and how can they prepare themselves to remain in business. Firms need to rethink their business model, concentrate on their core business area, revive their strategies, rework their plans and policies, try to explore new markets, embrace new sales channel and find more opportunities to grow. Companies should focus on zero base budgeting by starting from zero and including only those expenditures which are essential to withstand the current situation. Business should ensure agility in their operations, strategies, etc. so that they can respond swiftly and efficiently to any threats or opportunities whether it be from external or internal environment. Technology is one of the vital aspects which the companies need to focus on. At present, every business should concentrate on digitalization since social distancing is a prime issue today. This plight seems to provide a glimpse of the future scenario where digital would become the heart of every interaction and communication. Crisis periods often act as catalyst for new technological developments and innovations. Digital technology can help the companies to alleviate the effect of coronavirus. From on-premises systems, the entities need to switch over to hybrid cloud services. Customer experience should be enhanced by using technology, financial and operational based software need to be upgraded, a more pliable and dynamic work environment need to be created. Artificial intelligence should be adopted by the business to attenuate the effect of this catastrophe. Digitalization gives rise to several cybercrimes so additional consideration should be given to cybersecurity. Earnest attention needs to be given on marketing which is one of the key functions of the business. Entities should try to embrace digital marketing technology since offline shopping is likely to be replaced by online shopping. Customer behaviour and habits have been affected by the pandemic thus online-shopping is expected to experience a notable surge in post-lockdown period. Therefore, ecommerce should be emphasized. Digital communication should also be encouraged. One of the serious impacts of Coronavirus is disruption of supply chain which need to be stabilized. The entities that are mainly depended on other countries for raw materials will face more hurdles. The organizations require to devise their future supply chain designs and should diversify their supply channels from geographical standpoint in order to attenuate supply-side risk. The entities can also make an effort to localize at least certain part of their supply channel. This will augment investment in local industries of India and will be a shot in the arm for Indian economy which is in distress now. For instance, in relation to pharmaceutical industry, the Indian government has taken the decision to promote bulk drug parks and manufacturing of active pharmaceuticals

ingredients and critical key starting materials in the country. This will help to restore the supply chain disruption in pharmaceutical segment. Business must re-assess their stocking strategies in light of the risk associated with the supply chain, volatility in demand and supply, liquidity and perishability. Increase in unemployment level due to job loss of several employees and measures like pay cuts have reduced the purchasing power of the people. They can curtail down their cost related to luxury items to buy necessary items. So, the demand for luxury items may fall and necessity goods may increase. Therefore, firms can prioritize necessary goods and safety-ensuring products. Even in this circumstances, certain enterprises have experienced a rise in their demand and created new job opportunities. These are internet or broadband service providers, online media and entertainment companies including social media, e learning, digital payment, pharmaceuticals, disinfectants, financial technology, medical equipment, etc. Entities should focus on their core customer segments and need to predict their behavioural changes due to coronavirus. Certainly, the consumption pattern will change for the crisis. So, the firms should rebuild their customer base and maintain contact with the key customers to strengthen loyalty and get their support. Entities should ensure that adequate amount of liquidity is there to weather the crisis. They need to evaluate their financial condition in each scenario and should take necessary measures like reducing cost, accounts receivables and payables optimization, divestments, merger and acquisitions and so on to stabilize the enterprise in every scenario. Cash flows must be properly managed to ensure that liquidity problems do not harm the employees and outsourced labourers. Highly leveraged entities will be more affected than the unleveraged one. High leveraged entities facing difficulties can obtain for certain temporary relief in their contractual obligations. Companies need to figure out the availability of workforce as there may be unavailability of outsourced and migrant labourers for certain period of time. Companies should also ensure labour health and safety in the workplace for carrying out the operational activities properly. Lastly, to keep the business buoyant in course of challenging period, a robust business continuity and disaster management plan is required. Every business should have such plan to cope with the difficulties and uncertainties that may arise anytime during the course of business. Such framework outlines the strategies and planning processes which are required for fabricating prior mechanisms and procedures that will enable an enterprise to respond in the critical period in such a way that crucial activities and operations can be continued within projected level of disruption. Business continuity plan should incorporate certain matters. Firstly, assessment of risk to identify the potential loss to the business during the crisis. Secondly, mitigating risk through eliminating loopholes and lacunas and safeguarding business operations and assets. Thirdly, the plan should properly and precisely specify the business continuity strategies that should be adopted during the crisis period. A planning team need to be built up clearly specifying their roles and responsibilities. Lastly, for proper implementation of the plan, training session need to be carried out of the involved professionals. This will help the enterprises to carry out their normal business operations during crisis period with marginal disruption.

REVIVAL OF INDIA'S ECONOMY FROM THE COVID-19 CRISIS

Over the past decades, India – the world's seventh largest economy – has been relatively immune to global recessions. Even in the global slowdowns of 2001 and 2008, while the country's GDP growth rate did drop, it never turned negative. Although India is not safe from coronavirus pandemic crisis and its economy will be stressed in upcoming years like 2021.

In a new report by Arthur D. Little, titled 'Surmounting the economic challenges of COVID-19', experts at the global strategy and management consultancy have modelled how they believe India's economy will progress in the coming quarters. The four views given by the experts have been discussed below: -

V-SHAPED RECOVERY³

³ <https://www.investopedia.com/terms/v/v-shaped-recovery.asp#:~:text=Specifically%2C%20a%20V%2Dshaped%20recovery,sharp%20decline%20in%20these%20metrics.>

In this scenario, there will be a quick downturn in the first quarter of FY 2020-21 and a recovery from the second quarter onwards. A government stimulus will have the strongest impact, helping kickstart sectors such as construction and manufacturing. The recovery in 2001 from the recession caused by the tech bubble of 1999/2000 is an example of a V-shaped recovery, with a sharp fall in GDP followed by strong growth. The analysis by Arthur D. Little shows that, in this type of recovery, GDP in India will contract by 1.0% in FY 2020-21 and then expand by 4.1% in FY 2021-22.

U-SHAPED RECOVERY⁴

Estimates of figures at this point of time indicates that the downturn will extend to the end of year 2020. Subsequently, growth will gradually recover over the next five quarters. These estimates also assume positive government support and a comprehensive containment of the spread of Covid-19 by the end of summer. In this scenario, it is assumed the containment/lockdown impact on daily economic activity will not extend beyond May. A u-shaped recovery example is the 2008 recession. Based on the firm's calculation, in this type of recovery, GDP in India is expected to contract by 5.3% in FY 2020-21 and grow by 2.8% in FY 2021-22. The authors believe that this scenario has a likelihood of playing out only if the lockdowns are discontinued after May 2020.

THEORIES OF ECONOMY RECOVERY	YEAR 2021 (NEGATIVE)	YEAR 2022 (POSITIVE)
V-SHAPED RECOVERY	-1.0%	4.1%
U-SHAPED RECOVERY	-5.3%	2.8%
W-SHAPED RECOVERY	-10.8%	0.8%
L-SHAPED RECOVERY	-15.9%	-2.5%

W-SHAPED RECOVERY⁵

A combination of three factors – rise in Covid-19 cases in the summer, a relapse in winter that peaks around December 2020, and limited further stimulus – will lead to a W-shaped recovery. In this case, growth will resume in the third quarter of FY 2020-21 but then contract over the next five quarters with a few intermittent rebounds and a final recovery in year 2021 as soon as the vaccine becomes available in India. If we look for an example of w-shaped recovery then it would be debt crisis of European union that occurred in year 2010. Arthur D. Little's analysis indicates a 10.8% contraction of GDP in India for FY 2020-21 and a growth of 0.8 % in FY 2021-22.

L-SHAPED RECOVERY⁶

This is the gloomiest recovery curve. In this scenario, growth falls and does not recover for many years. The closest example of an L-shaped recovery is in Japan, which took more than ten years to emerge out of the market crash and credit crunch of the 1990s, mainly due to a series of ineffective

⁴ <https://www.investopedia.com/terms/u/u-shaped-recovery.asp#:~:text=A%20U%2Dshaped%20recovery%20is%20so%2Dcalled%20because%20major%20measures,bottom%20for%20a%20few%20quarters.>

⁵ <https://www.investopedia.com/terms/w/w-shaped-recovery.asp#:~:text=Understanding%20a%20W%2DShaped%20Recovery&text=A%20W%2Dshaped%20recession%20begins,the%20full%20recovery%20is%20achieved.>

⁶ <https://www.investopedia.com/terms/l/l-shaped-recession.asp>

policy actions. Based on the report's forecast, in this type of recovery, GDP in India will contract by 15.9% in FY 2020-21 and by 2.5% in FY 2021-22.

CONCLUSION

The entire world is in the grip of vicious coronavirus. The pandemic outbreak has sparked a global health emergency along with social and economic crisis unleashing unprecedented collapse of the economic activities and business operations. It has severe repercussions on the global business world. Therefore, this study has put forward the potential effects of coronavirus on the different sectors of Indian economy and the reasons for which India one of the emerging economies in the world can be benefitted in this crisis period. Moreover, the study highlights the survival strategies that are essential for a business to cope with the present situation. However, during this current pandemic scenario, every enterprise should brace for the uncertainties and challenges that are cropping up due to coronavirus. They need to be proactive and should build up strategies to combat the effect of coronavirus in order to sustain during this tough time. They need to apprehend probable impending changes in business environment and should identify the opportunities in order to strive and thrive.

“ENVIRONMENT: THE BASIC NEED, IMPORTANCE AND STRIVE TO SAVE FROM HUMAN BEINGS”**Prabhjot SINGH****Devyani GUPTA**

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ABSTRACT

The environment plays a vital role to support life on earth. However, there are some problems that are inflicting damages to life and also the system of the world. It is associated with the not solely environment with everybody that lives on the world. Besides, its main supply is pollution, warming, greenhouse emission, and lots of others. The everyday activities of human are perpetually degrading the standard of the environments that are supply of environments Issue .There are many issue that inflicting injury to the environments. During this, we tend to are reaching to discuss the most causes of environmental problems as a result of they are terribly dangerous to life and also the system. As we know that environment is the basic needs of the people of the society still there are various barriers that has been put and to fight is the controversial issue such as, firstly pollution one of the most causes of an environmental issue as a result of it poisons the air, water, soil, and noise. Secondly greenhouse gases are the gases that are to blame for the rise within the temperature of the world surface which gases directly relates to pollution owing to the pollution made by the vehicle and factories that contains a virulent chemical that harms the life and environments of earth. Because of environmental issue the climate is dynamical apace and things like air pollution, acid rains have gotten common. Also, the amount of natural calamities is additionally increasing and nearly once a year there's flood, famine, drought, landslides, earthquakes, and lots of a lot of calamities are increasing ultimately ends up in the loss of survival condition from the world and are the basic reason for climate change and there are lot of reasons which will be covered by me in detail in my whole paper.

Keywords: Environment, pollution, greenhouse gases, reason, protection.

INTRODUCTION

The environment plays a big role to support life on earth. Environment is an integral component of human and animal health. However there are some problems that are inflicting damages to life and also the system of the world. It's associated with the not solely environment however with everybody that lives on the world. Besides, its main supply is pollution, warming, greenhouse emission, and lots of others. The everyday activities of human are perpetually degrading the standard of the environments that are supply of environments Issue .There are many issue that inflicting injury to the environments. However during this, we tend to are reaching to discuss the most causes of environmental problems as a result of their terribly dangerous to life and also the system. The environment plays a vital role in healthy living and therefore the existence of life on planet earth. Earth may be a home for various living species and that we all are smitten by the surroundings for food, air, water, and different desires. Therefore, it's vital for each individual to save lots of and shield atmosphere. There are differing types of human activities that are directly attributed to the environmental disasters, that includes- acid rain, acidification of oceans, changes within the climate, deforestation, depletion of an ozonosphere, disposal of venturous wastes, global warming, population, pollutions, etc. Various environment protection programs are being practiced at the individual, organizational and government levels with the aim of establishing a balance between man and environment.

Pollution – it's one in every of the most causes of an environmental issue as a result of it poisons the air, water, soil, and noise. As we all know that within the past few decades the numbers of industries have apace augmented. Moreover, these industries discharge their untreated waste into the water bodies, on soil, and in air. Most of those wastes contain harmful and toxic materials that unfold terribly simply owing to the movement of water bodies and wind. Pollution and global climate change are closely coupled, because the same greenhouse emission emissions that are warming the world also are making cloudy conditions in major cities that endanger public health. If you've seen atrocious pictures of pollution-choked Chinese cities and suppose the air pollution is isolated to Peking or Shanghai, re-evaluate. U.S. scientists are finding that Chinese pollution is aggravating storms over the Pacific and conducive to a lot of erratic weather ¹. Water and soil pollution may not get the media attention that pollution will, however they're still necessary public health issues. In keeping with the Natural Resources Defense Council, dirty water is that the world's biggest health risk. Whereas the Clean Water Act did a lot of to form yank water safe from harmful pollutants, these days there's a replacement threat to scrub water returning from the sedimentary rock gas fracking boom happening across the country and from the independent agency itself. Soil contamination could be a major issue across the globe. In China, nearly 20% of tillable land has been contaminated by virulent serious metals. Soil pollution threatens food security and poses health risks to the native population. the utilization of pesticides and fertilizers also are major factors in soil pollution

Greenhouse Gases – These are the gases that are to blame for the rise within the temperature of the world surface. This gases directly relates to pollution owing to the pollution made by the vehicle and factories that contains a virulent chemical that harms the life and environments of earth.

Climate Changes – because of environmental issue the climate is dynamical apace and things like air pollution, acid rains have gotten common. Also, the amount of natural calamities is additionally increasing and nearly once a year there's flood, famine, drought, landslides, earthquakes, and lots of a lot of calamities are increasing ultimately ends up in the loss of survival condition from the world. whereas ninety seven % of climate scientists agree that global climate change is happening and greenhouse emission emissions are the most cause, political can has not been robust enough up to now to initiate a colossal policy shift faraway from fossil fuels and toward property sorts of energy. Maybe a lot of extreme weather events like droughts, wildfires, heat waves and flooding can persuade the general public to place a lot of pressure on policymakers to act desperately to curb carbon emissions and address this issue before it's too late.

Deforestation-Forests are necessary to mitigating global climate change as a result of they function "carbon sinks," that means that they absorb carbonic acid gas that might otherwise escape into the atmosphere and worsen warming. It's calculable that fifteen % of total greenhouse emission emissions come back from deforestation. lowering trees conjointly threatens animals and humans UN agency have confidence healthy forests to sustain themselves, and also the loss of tropical rainforests is especially regarding as a result of around 80% of the world's species reside in these Ares. Concerning 17% of the Amazon timber has been prevent within the past fifty years to form means for oxen husbandry. That's a double whammy for the climate as a result of oxen flatulence could be a major supply of alkane gas that contributes a lot of to short term global climate change than carbon emissions.

WATER Scarcity-As the population will increase and global climate change causes a lot of droughts, water insufficiency is changing into a lot of a problem. Solely 3 % of the world's water is water and one.1 billion individuals lack access to scrub, safe beverage. Because the current drought in CA dramatically shows, access to water isn't simply a problem for developing countries however furthermore. In fact, by the center of this century over a 3rd of all counties within the lower forty eight states are going to be at

¹ <https://ohiostate.pressbooks.pub/sciencebites/chapter/causes-and-consequences-of-air-pollution-in-beijing-china/>

higher risk of water shortages with over four hundred of the one, 100 counties facing an especially high risk.

Loss of biodiversity-Increasing human encroachment on life habitats is inflicting a speedy loss of diversity that threatens food security, population health and world stability. Global climate change is additionally a serious contributor to diversity loss, as some species aren't able to adapt to dynamical temperatures

SOIL EROSION AND DEGRADATION-Unsustainable industrial agriculture practices have resulted in eating away and degradation that results in less tillable land, clogged and contaminated waterways, augmented flooding and geologic process. In keeping with the globe life Fund, half the earth's surface soil has been lost within the last a hundred and fifty years.

A new UN Environment Programme (UNEP) report warns that unless global greenhouse gas emissions fall by 7.6% each year between 2020 and 2030, the world will miss the opportunity to get on track towards the 1.5°C temperature goal of the Paris Agreement. "There is alarming evidence that important tipping points, leading to irreversible changes in major ecosystems and the planetary climate system, may already have been reached or passed. Ecosystems as diverse as the Amazon rainforest and the Arctic tundra, may be approaching thresholds of dramatic change through warming and drying. Mountain glaciers are in alarming retreat and the downstream effects of reduced water supply in the driest months will have repercussions that transcend generations. In October 2018 the IPCC issued a special report on the impacts of global warming of 1.5°C, finding that limiting global warming to 1.5°C would require rapid, far-reaching and unprecedented changes in all aspects of society. With clear benefits to people and natural ecosystems, the report found that limiting global warming to 1.5°C compared to 2°C could go hand in hand with ensuring a more sustainable and equitable society. While previous estimates focused on estimating the damage if average temperatures were to rise by 2°C, this report shows that many of the adverse impacts of climate change will come at the 1.5°C mark. The report also highlights a number of climate change impacts that could be avoided by limiting global warming to 1.5°C compared to 2°C, or more. For instance, by 2100, global sea level rise would be 10 cm lower with global warming of 1.5°C compared with 2°C. The likelihood of an Arctic Ocean free of sea ice in summer would be once per century with global warming of 1.5°C, compared with at least once per decade with 2°C. Coral reefs would decline by 70-90 percent with global warming of 1.5°C, whereas virtually all (> 99 percent) would be lost with 2°C. The report finds that limiting global warming to 1.5°C would require "rapid and far-reaching" transitions in land, energy, industry, buildings, transport, and cities. Global net human-caused emissions of carbon dioxide (CO₂) would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050. This means that any remaining emissions would need to be balanced by removing CO₂ from the air." (UNEP).²

How to minimize atmosphere Issue?

Now we all know the most important problems that are unit inflicting harm to the atmosphere. So, currently we will discuss the ways by which we will save our surroundings. For doing therefore we've to require some measures that may facilitate us in fighting environmental problems. Moreover, these problems won't solely save the atmosphere however additionally save the life and system of the world. Number of the ways in which of minimizing environmental threat are unit mentioned below:

Reforestation – it'll not solely facilitate in maintaining the balance of the system however additionally facilitate in restoring the natural cycles that employment with it. Also, it'll facilitate in recharge of groundwater, maintaining the monsoon cycle, decreasing the quantity of carbons from the air. The 3 R's principle – For tributary to the atmosphere one ought to have to be compelled to use the three R's

² <https://public.wmo.int/en/media/news/emissions-gap-report-warns-about-missing-paris-agreement-targets>

principle that's cut back, Reuse, and Recycle. Moreover, it helps the atmosphere during a ton of the way. Some things will we have a tendency to do stop deforestation, climate change, pollution, water scarcity, loss of biodiversity, soil erosion and degradation. Our home and transportation can be major sources of gas emissions. A licensed home energy audit will facilitate build your home a lot of energy economical. If you commute via biking, walking or public transportation you're doing all of your half to fight heating, however if you want to own an automobile, take into account mercantilism in your machine for a fuel economical hybrid or higher yet go electrical. after you fly, make certain to cut back your carbon footprint from air miles traveled with carbon offsets from a revered company like Carbonfund.org .There are unit several of the solutions to pollution are unit like those for temperature change, although it's vital to either build a united effort to drive less, or switch to a lower-emissions vehicle. Change over to inexperienced energy is additionally vital, as that may trim on fuel emissions. If you aren't ready to install star or alternative energy on your property or if your utility gets its electricity from dirty energy sources, take into account linguistic communication up for a renewable energy producer like moral electrical that connects customers to one hundred pc renewable energy sources to power their homes. Whereas for the deforestation there are unit several of the solutions to pollution are unit like those for temperature change, although it's vital to either build a united effort to drive less, or switch to a lower-emissions vehicle. Change over to inexperienced energy is additionally vital, as that may trim on fuel emissions. If you aren't ready to install star or alternative energy on your property or if your utility gets its electricity from dirty energy sources, take into account linguistic communication up for a renewable energy producer like moral electrical that connects customers to one hundred pc renewable energy sources to power their homes. Even as energy potency is taken into account a vital resolution to the problems of temperature change and pollution, water potency will facilitate us trot out water scarceness. Some ideas to be a lot of water economical embrace putting in associate degree ENERGY STAR-certified washer³, victimization low-flow taps, plugging up leaks, irrigating the field within the morning or evening once the cooler air causes less evaporation, taking shorter showers and not running sink water once brushing your teeth. Also, think about using non-toxic cleanup merchandise and eco-friendly pesticides and herbicides that won't contaminate groundwater. Seventh Generation uses plant-derived ingredients for his or her home cleanup merchandise. As customers we will all facilitate shield multifariousness by getting merchandise that don't damage the atmosphere. Next time you're at the market, check to examine if food packaging contains any of the subsequent eco-labels: USDA Organic, honest Trade Certified, Marine billet Council or inexperienced Seal. Alternative product certifications embrace Forest billet Council Certification, woodland Alliance Certification and authorized life Friendly. Also, reusing, utilization and composting are unit simple ways in which to shield multifariousness. On alternative hand Support property agriculture that puts individuals and therefore the planet on top of profit. Support property agriculture by visiting the property Table for recommendations on fighting for a property food system. On a smaller scale, you'll be able to build a distinction in your yard by change to non-toxic inexperienced pesticides, herbicides and fertilizers. The web site Eartheasy.com sells natural field care merchandise like gluten organic fertilizer to conclude, we can say that humans are a serious supply of environmental problems. Likewise, our activities are unit the most important reason that the extent of harmful gases and pollutants have inflated within the atmosphere. However currently the humans have taken this drawback seriously and currently operating to eradicate it. Above all, if all humans contribute equally to the atmosphere then this issues are often fight backed. The natural balance will all over again be renovated.

³ <https://www.energystar.gov/products/appliances/dishwashers>

SAĞLIK TURİZMİNİN HUKUKEN İNCELENMESİ

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ÖZET

Kapitalist düzenle birlikte sağlık hizmetleri devlet tarafından sistematik olarak sağlanmaya başlamıştır. Sağlık bir kişilik hakkı olarak görülmeye başlamıştır. Küreselleşme ile birlikte sağlık, eğitim gibi alanlar açık pazar haline gelmeye başlamıştır. Açık Pazar haline gelen bu sektörler hukukun ilgisini çekmiştir. Turizm ülkeler açısından gelir kapısıdır. Sağlık turizmi yeni bir olgu olmasına rağmen ülkeler açısından gelir kapısı olmuştur. Sağlık turizmi gelir açısından normal turizmden daha önde gelmektedir. Sağlık turizmini Covid 19 pandemisi sebebiyle günümüzde sıkça duymaya başlamış bulunmaktayız.

Covid 19 pandemisi ile birlikte sağlık turizmi, bütün ülkeler açısından önem kazanmaya başlamıştır. Ülkeler sağlık turizminin önünü açacak yasal düzenlemeler yapmaya başlamışlardır. Ülkeler Covid 19 pandemisini kâra çevirmeye çalışmaktadırlar. Sağlık turizmi yeni bir sektör olarak karşımıza çıkmaktadır. Sağlık turizmini, turizmin bir alt kolu olarak nitelendirebiliriz. Bu tebliğ kapsamında sağlık turizminin nasıl yapılacağı, avantaj ve dezavantajlarından bahsedilecektir. Sağlık turizminin hukuki olarak nasıl mümkün olabileceği açıklanacaktır. Sağlık turizminde uyulması gereken uluslararası standart ve ilkelerden bahsedilecektir. Sağlık turizmi hizmetinden faydalanmak için ülkemize gelen hastaların sahip olduğu hak ve yükümlülüklerden bahsedilecektir.

Sağlık turizmi hizmetinden faydalanan hastaların haksız tıbbi uygulamalar sebebiyle sahip olabilecekleri haklardan bahsedilecektir. Türkiye’de hâlihazırda sağlık turizmini düzenleyen bir kanun bulunmamaktadır. Sağlık Turizmi kanunu çıkarmak önem arz etmektedir. Tebliğ kapsamında sağlık turizmi ile ilgili çıkarılacak kanunun niteliğinin ne olması gerektiği hakkında önerilerde bulunulacaktır. Bu konuda yönlendirme ve düzenlemeler çıkarılması gerektiği vurgulanacaktır. Sağlık turizmi ile ilgili çıkacak ihtilaflar yabancı unsurlu ihtilaflar olarak karşımıza çıkacaktır. Yabancı unsurlu ihtilaflar olması sebebiyle sağlık turizmi ile ilgili ihtilaflar Milletlerarası Özel Hukukun inceleme alanına girmektedir ve bu ihtilaflara Milletlerarası Özel Hukuk ve Usul Hukuku Hakkında Kanun uygulanacaktır.

Anahtar Kelimeler: Sağlık Turizmi, Pandemi, Yabancı Unsur, Haksız Tıbbi Uygulamalar

LEGAL REVIEW OF HEALTH TOURISM

ABSTRACT

Health services began to be provided systematically by the state with the capitalist order. Health has started to be seen as a personality right. With globalization, areas such as health and education have become open markets. These sectors, which have become open markets, have attracted the attention of the law. Tourism is a source of income for countries. Although health tourism is a new phenomenon, it has been a source of income for countries. Health tourism is ahead of normal tourism in terms of income. We have started to hear about health tourism frequently today due to the Covid 19 pandemic.

With the Covid 19 pandemic, health tourism has started to gain importance for all countries. Countries have started to make legal regulations that will pave the way for health tourism. Countries are trying to turn the Covid 19 pandemic into profit. Health tourism emerges as a new sector. We can define health tourism as a sub-branch of tourism. In the scope of this communique, how to do health tourism, its advantages and disadvantages will be mentioned. How can health tourism be legally possible will be explained. International standards and principles to be followed in health tourism will be mentioned. The rights and obligations of patients who come to our country to benefit from health tourism services will be mentioned.

The rights that patients who benefit from health tourism services may have due to unfair medical practices will be mentioned. currently there are no laws governing the health tourism in Turkey. It is important to enact a Health Tourism law. Within the scope of the Communiqué, recommendations will be made on what should be the nature of the law to be enacted on health tourism. It will be emphasized that regulations and regulations should be issued in this regard. The disputes that will arise regarding health tourism will appear as disputes with foreign elements. Due to the fact that there are disputes with foreign elements, disputes related to health tourism are within the scope of the examination of Private International Law and the Law on International Private Law and Procedural Law will be applied to these disputes.

Keywords: Health Tourism, Pandemic, Foreign Factor, Unfair Medical Practices

GİRİŞ

Tüm insanlığın evrensel kaygılarından birisi sağlıktır. Bu kaygı Covid 19 pandemisi ile daha belirgin hale gelmiştir. Bireyler, hem fiziksel hem de psikolojik olarak en iyi halde olmak için çaba harcamaktadırlar. Sağlıkla ilgili en önemli referans aldığımız kurumlardan birisi olan Dünya Sağlık Örgütü sağlığı. “ zihnen, beden ve sosyal açıdan tam bir iyilik hali “ olarak tanımlamıştır. Sağlık hakkı artık günümüzde vatandaşlık hakkı olarak görülmektedir.

Sağlık hakkı kavramı, İnsan Hakları Evrensel Bildirgesi’nde, Birleşmiş Milletler Ekonomik, Sosyal ve Kültürel Haklar sözleşmesinde yer alan bir kavramdır. Sağlık hakkı, bu uluslararası bildirelerin yanında Türk Anayasası madde 56’da da düzenlenmiş ve güvence altına alınmış bulunmaktadır. Devlet, son zamanlarda gelişen politikalar neticesinde, sağlık sektöründe hizmet sağlayıcı rolünden vazgeçmiş ve düzenleyici bir rol üstlenmeye başlamıştır(Aslanova, 2013: 130). Devlet, sağlık sektöründe düzenleyici bir rol üstlenmeye başlayınca, özel sektör sağlık alanında faaliyet göstermeye başlamıştır.

Döviz elde etmek isteyen devletler, sağlık turizminin gelişmesi için faaliyetlerde bulunmuşlardır. İlk zamanlarda sadece tatil ve seyahat amaçlı görülen turizm zamanla sağlık için de uygun olmaya başlamıştır. Sağlık turizmi her ne kadar ülkeler için döviz kaynağı olsa da belli esaslara uygun ve hukuka uygun olarak yapılmalıdır.

Sağlık hizmetinin devletler tarafından sistematik bir biçimde sağlanması kapitalizm ile olmuştur. Küreselleşme ile birlikte kültür, eğitim ve sağlık gibi alanlar ülkeler için açık pazar haline gelmiş durumdadır. Sağlık hakkı, bir insan hakkıdır ve ikinci kuşak bir insan hakkı olarak görülmektedir.

SAĞLIK TURİZMİNİN HUKUKEN İNCELENMESİ

Dünya çapında uygulanan politikalar neticesinde sağlık alanı küresel bir pazar haline gelmiştir. Turizm ülkeler için gelir kaynağıdır. Dünyada 1970’li yıllardan sonra turizm, en önemli sektörlerden biri haline gelmiştir. Türkiye’de ise 1980’lerden sonra turizm sektöründeki gelişmeler hız kazanmıştır (Özer ve Songur, 2012: 70).

Sağlık turizmi ise, yeni bir olgudur. Yeni bir olgu olmasına rağmen kendisine önemli bir yer edinmiştir.

Sağlık turizmi, turizmin bir alt koludur. Sağlık turizmi başarılı olabilmesi için bünyesinde bazı unsurları barındırmalıdır. Sağlık turizminin başarılı olabilmesi için bazı donanımlara sahip olmak gerekecektir. Sağlık turizmi aynı zamanda iş gücü gerektiren de bir turizm türüdür. Sağlık turizminde,

hizmeti sunan kuruluşun evrensel standartlara uygun davranması gerekmektedir. Sağlık turizminde, hizmeti sunan personelin yabancı dil bilmesi gerekmektedir(Özalp 2005: 98).

Sağlık turizmi ile ilgili özellikle Avrupa Birliği ülkelerinin aktif faaliyetlerde bulunduğunu görmekteyiz. Özellikle Covid 19 pandemisi sebebiyle bu aktifliğin en üst düzeyde olduğu tespit edilmektedir.

Avrupa Birliği Ülkelerinde, sağlık turizmi ile hastaneler daha yüksek kalitede sağlık ve bakım hizmeti sağlamak için deneyimlerini paylaşmasının faydalı olduğu belirtilmiştir. Bu paylaşım, sağlık hizmetlerini de geliştirecektir.

Sağlık turizmi, maliyetlerin, kaynakların ve hizmetlerin paylaşılması yolu ile ekonomiye katkı sağlamaktadır. Sağlık turizmi, normal olarak ikamet edilen yerden farklı bir ülkeye, tıbbi ve tıbbi olmayan hizmetleri almak üzere yapılan seyahatlerdir(Aydın ve Karaahmet Aydın, 2015: 2).

Sağlık turizmi, sağlık bakım hizmeti almak için başka bir ülkeye seyahat etmek olarak tanımlanmaktadır. Hastalar, kendi ülkelerinde istedikleri tedavinin yapılamaması, sunulan tedavilerin maliyetinin yüksek olması, hizmet almak için uzun süre beklemeleri gerekmesi gibi nedenlerle farklı ülkelerden sağlık hizmeti almaktadır. Bu durum ise sağlık turizminin evrenselliğini ön plana çıkarmaktadır(Gülmez, 2012:1).

Sağlık turizminin somut ve soyut faydaları söz konusu olabilir(Özsarı ve karantana, 2013:137). En önemli somut faydası ülkeye döviz girişinin sağlanmasıdır.

SONUÇ VE TARTIŞMA

Türkiye’de ve pek çok ülkede sağlıkla ilgili resmi kurum Sağlık Bakanlığı’dır. Sağlık turizmi ile ilgili Sağlık Bakanlığı’na birçok görev düşmektedir. Sağlık turizmi yeni gelişen bir turizm türüdür. Bu turizm ile ilgili ülkemizde ve pek çok ülkede yasal bir düzenlemeye rastlamamaktayız. Yapılması gereken sağlık turizmi ile ilgili özel bir kanun çıkarmak olmalıdır. Bu söz konusu özel kanun sağlık turizminin yapılma şartları ve sağlık turizminden faydalanan hastaların haklarını düzenlemelidir.

Turizm Bakanlığı’na da, sağlık turizmini tanıtmada önemli görevler düşmektedir. Turizm Bakanlığı, sağlık turizmini teşvik edici tanıtım faaliyetlerini yabancı ülkelerde yerine getirmelidir. Sağlık turizmi her ne kadar gelir kapısı olsa da insan sağlığı tehlikeye atılmamalıdır.

Sağlık turizmi alanında yaşanacak sorunların çözümleri yasal mevzuatlar çerçevesinde yapılmalıdır. Sağlık turizmini, medikal turizm olarak da adlandırabiliriz(Şahbaz ve arkadaşları, 2012:167).

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KORONAVİRÜS SALGINI VE DOĞA-KÜLTÜR KARŞITLIĞI

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ÖZET

Bugünlerde dünya tarihsel bir olayla karşı karşıya: Küresel salgın COVID-19'la. Öyle ki, kimine göre bu epidemi, ulaştığı boyut itibariyle “öncesi” ve “sonrası” olmak üzere tarihi ikiye bölecek eşi benzeri görülmemiş bir vakıdır. Bu virüsün nasıl ortaya çıktığı, nasıl yayıldığı, etkilerinin ne olduğu sorusuna cevap aramak bilim adamlarının görevidir. Konuyu insanın yeryüzündeki varoluşu, tarihsel süreçler, doğa ve kültür kavramları çerçevesinde analiz etmek ve buradan bazı sonuçlara ulaşmak ise felsefecilerin ilgi alanına girer. Bu yazıda söz konusu epidemi, doğa ve kültür karşıtlığı bağlamında ele alınacak, “karşıtlık” ise modern bilincin temel mottolarından biri olan “doğaya egemen olmak” anlayışı ile açıklanacaktır. Modern bilincin “egemenlik” anlayışı, doğa ve kültür arasındaki karşıtlığı kışkırttığı gibi “sömürü” ve “yağma”ya dönüştüğünde ise günümüzde olduğu gibi giderek insan varlığını da tehdit eden derin çevre sorunlarına neden olabilmektedir. Epidemi süreci içinde, doğrudan ya da dolaylı şekilde kültür ve doğa karşıtlığı üzerinde düşünme ve “bu sorun nasıl çözülebilir?” sorusunu sorma fırsatı bulduk. Aşağıdaki makale, epidemi sürecini kültür ve doğa karşıtlığı bağlamında ele almakta, “karşıtlığın uyum arz edebileceği bir bakış açısı olabilir mi” sorusuna ulaşmaya çalışmaktadır.

Anahtar Kelimeler: Salgın, İnsan, doğa, kültür.

ABSTRACT

Nowadays, the world is facing a historical event: with Global epidemic COVID-19. In fact, this epidemic is an unprecedented fact in history with the level of prevalence it gained. It is the duty of scientists to find an answer to the question of how this virus came about, how it spread and what its effects are. Analysing the subject within the framework of human existence in the world, historical processes, concepts of nature and culture and reaching some conclusions from this field are among the philosophers' interests. In this article, the aforementioned epidemic will be discussed on contrasting between nature and culture, and "contrasting" will be explained with the understanding of "sovereignty over the nature", which is one of the basic mottos of the modern conscious. This understanding of "sovereignty" can provoke the contrasting between nature and culture, and when it turns into "exploitation" and "looting", it can cause deep environmental problems that increasingly threaten human existence as it is today. Within the epidemic process, we had an opportunity to think on contrasting of between nature and culture, and to ask a question "how can we solve this problem"? In the following article the epidemic process is discussed in the context of contrasting between nature and culture, and tries to reach a question: "Can there be a perspective in which the contrasting can be into a harmony?"

Keywords: Epidemia, Human, nature, culture.

Yaşadığımız şu günlerde içimizde şöyle bir duygu beliriyor: Yeryüzü insanın yurdudur; fakat insan artık orada güvende değil, kendini kendi evindeymiş gibi hissetmiyor. Bunu çoktan beri ünlü bilim adamları, filozoflar da seslendiriyor: Stephan Hawking, insanın bir an önce kendisine başka bir gezegen bulması gerektiğini söylediğinde onun konuyu abarttığını düşünenler olmuştu, belki bugün de hâlâ öyledir. Modern dünyada, teknolojinin konforu, doğa ile mücadelede sağladığı üstünlük içinde tam da rahat bir nefes alınacağı sırada ne oluyor böyle; bu risk nedir? Tehlike doğada mı, insanın kendisinde mi? Dünya yurdumuz olmaktan çıkarsa, başka nereye gidebiliriz, nereye sığınabiliriz? İnsan demek dünya demektir, dünya demek insan demektir. Dünya insanın yaşayacağı, insan da dünyanın kendisinde ve kendisiyle yaşayacağı şekilde yaratılmıştır. İnsan “orada-Varlık” (*da-Sean*)’tır; yani “dünya-içinde-Varlık” (*das-in-der-welt-Sean*)’tır. İnsan dünyayı, dünya insanı tanımlar.

Yaklaşık 10 aydır dünya hiç yaşamadığı ve hiç karşılaşmadığı bir olayla karşı karşıya: Koronavirüs ya da COVID-19’la. İlk önce haberlerden duyduk onu, sonra uzak ve yakın çevremizden. Neyle karşı karşıya olduğumuzu ilk zamanlar anlayamadık; hiç kimse anlayamadı. Belirsizlik hâlâ sürmekte.

Tarihin çeşitli dönemlerinde veba, kolera, tifo, çiçek gibi salgınlar yaşanmış, ancak bunlar olsa olsa bir şehir veya bir bölge ile sınırlı kalmıştır. Son epidemi, COVID-19 salgını, dünyayı bir uçtan diğerine etkisi altına aldı, küresel bir karantina durumu söz konusu oldu. İnsanlar evlere kapandı, farklı bir yaşama biçimi ortaya çıktı: yeni tür alışkanlıklar, alışverişler, eğitim biçimleri, yeni tür yaşama stilleri. Birbirimizle görüşmemek pahasına yalıtılmış ortamlar oluşturduk. “Acaba yeni bir dönemin eşliğinde miyiz”, sorusu tartışılmaya başlandı. İlk defa dünya halkları bir tehlikeyle karşı karşıya olmanın tedirginliği ve aciziyetini birlikte yaşadı ve ortak bir kaygıda birleşti: Yeryüzünde güvende değiliz! Suçu bir kişiye veya bir topluma yükleme adına bir mahreç arandı: Çin mi? Yarasa mı? Doğa mı? İnsan zihni ani sıçramalar yapmaya, açıklanamayan karşısında mitler, spekülasyonlar, söylentiler oluşturmaya müsait olduğundan bazıları son derece yanlış ve tehlikeli bir Tanrı tasavvurundan hareketle “ilâhî” bir cezadan, bazıları yiyeceklerin genetiğinin bozulmasından, bazıları doğa ve çevre sorunlarından söz eder oldular. Kültüre bağlı beslenme alışkanlıkları kadar bir “komplo” ile karşı karşıya olduğumuz tezini işleyenler de oldu. Tam olarak neyin karşısında olduğumuzu bilmemek, kaygı düzeyini derinleştirdi. Şöyle düşünüldü: “Kurttan, yılandan, akrepten korkarım; onları görürüm. Ama şimdi görmediğim, göremediğim, göremeyeceğim bir tehlike ile karşı karşıyayım. Nerede bulunuyor, nerede yaşıyor, nasıl etki ediyor; yeterince bilemiyorum!”.

Şu bir gerçek ki, COVID-19 hakkında konuşurken henüz tamamlanmamış, ne olacağı, nereye varacağı belli olmayan epidemik bir süreç hakkında konuşuyoruz. Bazı kişiler pandeminin dünyayı sonsuza kadar değiştirdiği ve yeni bir dönemi başlattığı inancındalar. Berlin duvarının yıkılması ya da Fransız ihtilali gibi bir şeyden söz ediyorlar. Bu doğru olabilir mi? Pandemi ile insan bir şey gördü, bir tecrübe kazandı; kolay kolay göremeyeceği bir şey: Kendi aciziyetini. Acz, insanı tanımlayan nihai bir şeydir dünyada; bu sadece dinlerde veya edebiyatta böyle değildir; Gılgamış örneğinde olduğu gibi mitolojide bile böyledir. İnsan acizdir, ama bütün hikâye de onun hikâyesidir, onun için hikâyedir. Kim bir hikâye anlatırsa onu anlatır, onun için anlatır.

Francis Bacon’ın Modern Çağın sloganı haline gelen bir sözü vardır: “Doğaya egemen olmak!”. Doğayı bilerek, tanıyarak yasalarına, işleyişine egemen olmak! İnsanın kendini doğadan ayırıp, kendini onun hâkimi olarak görmeye başlaması, 1600’lü yıllarla birlikte başlayan yeni dönemin en önemli özelliklerinden biridir. “Modern bilinç” bugün de etkisini artırarak sürdürmekte, insanın kendini doğanın bir parçası olarak görmesini ilginç bir şekilde küçümsemekte, bunu “ilkel” zihnin bir özelliği olarak değerlendirmektedir. Bilim ve ardından teknolojinin kendisine sunduğu imkânlarla doğa üzerinde kurduğu hâkimiyet, beraberinde doğa ve kültür çatışmasını da getirmiştir. Doğa ve kültür arasındaki ters orantıya bakarak açık bir sonuca ulaşılabilir. Buna göre doğa çoğalırsa kültür, kültür çoğalırsa doğa azalacaktır. İnsan doğanın bağrında yaşar, doğadan aldığı malzemelerle doğada olmayan bir şeyi, kültürü üretir; ama bunu yaparken doğayı da azaltır, hatta yok eder.

Doğaya egemen olmanın bilimsel teorik ve pratik boyutları vardır. Evrenin yasalarını ve çalışma düzenini tanımak ve bilmek, onun teorik boyutunu oluşturur. Bir de pratik boyutu vardır: Doğaya ilişkin bilgiyi pratik yarara dönüştürmek! Yarar, “hırs”ın bir ürünü olarak çıkarıcılığa ve sömürüye dönüşürse insanın doğaya verdiği zarar sonuçta kendisine verdiği zarara dönüşecektir. Egemenliğin

anlaşılma ve yaşanma biçimi önemlidir. İnsanda özellikle teknolojik güçle birlikte isterik bir sahip olma ve ele geçirme isteği ortaya çıkmakta, kendisini olduğundan daha güçlü hissetmektedir. Aslına bakılırsa bir noktaya kadar haklıdır da; ama yine de insan kendi acziyeti ile birlikte yeryüzünde olan bir varlıktır. Hemen her zaman karşılaştığımız doğal felaketler bize bir şey öğretir: Kültür denilen yer kabuğu üzerindeki çentik, küçük bir sallantı halinde dökülüp toprağa karışır. Binlerce yıllık antik kentler bunun en güzel örneğidir. Doğa, insanın kendisine verdiği zararı karşılayıp kendini onaramaz hale geldiğinde insan için yurt olmaktan çıkar ve adeta bir yangın yeri haline gelerek yapılan tahribata bir nevi “mukabele”de bulunur.

Burada kültür ve doğa dengesini sağlayabilecek felsefi ve manevî içerimi olan farklı bir “egemenlik” biçiminden söz edebiliriz. Daha önceki birkaç yazımda İbn Arabî’nin *Fusus*’ta işlediği bir kavrama, “halife” kavramına göndermede bulunmuştum. O, insanı yeryüzünde “halife” olarak görür ve insanın yeryüzündeki durumunu “temsil” ve “sorumluluk” kavramları ile açıklar. Hayvanları, bitkileri, canlı ve cansızları kendi varlığında temsil eden insan, varlık hiyerarşisi içinde yüksek noktalarda yer alan manevî varlık alanını da kendi ruhî özellikleri içinde kendinde temsil eder. Eğer böyle bir temsiliyet özelliği olmasaydı “hâkim olmanın” farklı bir yorumuyla “halife” olamazdı. Hiyerarşi içindeki orta konum, ona manevi anlamda yukarı ve aşağı yönde hareket kabiliyeti kazandırır. Bu hareketliliğin yansıma biçimi “ihtimam”, “koruyuculuk” ve “kişisel olgunlaşma”dır.

Bu yaklaşımın bugün anlaşılabilir olup olmadığı sorgulanabilir. Yine de “hâkim olmayı”, doğanın zenginliklerini sömürme değil de ondan “faydalanma” ve ondan “sorumlu” olma olarak anladığımızda doğru bir “egemenlik” yorumuna ulaşmış oluruz ve doğa ile ilişkimize insanî bir değer katmış oluruz. Aksi halde doğa insan, insan da doğa için her zaman bir risk oluşturacaktır. Bugün Yunus Emre’nin tabiata, insana, varlığa bakış açısındaki saflığa ulaşabilir miyiz? Bunu yapabilirsek, yeryüzü kurtulacaktır. Ama bu modern bilincin tanımadığı bir ruh halidir: Yeniden işlenmesi, yeniden anlaşılması ve kavramsallaştırılması gerekir. Üstelik bunun ontolojik temelinde sadece tanrısal irade/istenç değil, aynı zamanda insanın kendi ontolojik bütünlüğü de bulunur. İnsan maddenin ve ruhun sentezidir. Bu, Descartes’e göre iki farklı tözdür. Kierkegaard’a göre benliğin diyalektik yapısıdır. Sentez “hırs” başta olmak üzere birçok duygunun oluşmasını sağlar. Yine Descartes’ın bir benzetmesinden yararlanarak söylersek, insanoğlu hırs ve bencillik adlı iki güçlü atın çektiği bir arabada gidiyor gibidir. Arabayı akıl, vicdan ve yüksek insanlık değerleri denetlemedikçe insan varoluşu bir felakete doğru sürüklenip gidecektir.

COVID-19 pandemi süreci pek çok şeyi yeniden gözden geçirmemizi, sorgulamamızı sağladı; kendimiz ve kendi dünyamız üzerine, bireysel ve toplumsal ilişkilerimizi, hayatımızın anlam ve değerini düşünme fırsatı bulduk. İnsanlar modern hayatın hız sarmalından kurtularak kendilerini eğitecek kadar “boş zaman”a sahip oldular. Süreç bize daha sade, daha basit ve her koşulda sürdürülebilir bir hayatı hatırlattı. Daha basit şeylerle mutlu olabilmeyi, hayatı mikro düzeyde planlayabilmeyi, insanın insana, insanın doğaya karşı tutumunun anlamını hatırlattı. En önemli değerlerin eşyanın kendisi değil, eşyaya verdiğimiz anlam olduğunu öğretti.

Anladığımız bir başka şey: Dünyanın dinlenmeye ihtiyacı olduğu hususu. Bunu karantina döneminde atmosferde görülen iyileşme ve kendi kendini onarma durumu ile açıklayabiliriz. Hava temizlendi, insanın doğaya verdiği zarar azaldı, doğa kısa sürede kendini toparlamaya başladı. Bunu dünyanın çeşitli bölgelerinde, özellikle Çin ve Hindistan’da çekilen hava fotoğraflarında rahatlıkla gözlemleyebildik. Benzeri görüntüler Türkiye’de de çekildi. Karantina öncesi havada olan kapalılık ve kirlilik, karantina dönemi ile birlikte berraklığa yerini bıraktı. Bu sadece belirli bölgelerde değil bütün dünyada böyle oldu.

Epidemi, küreselleşme olgusuna yeniden bakmamızı sağladı. Küreselleşme gelinen dijital teknoloji evresinde, bu devasa sermaye birikimi çağında zaten kendiliğinden gerçekleşen ve gerçekleşecek bir durumdur; sorun bu değildir. Sorun bireylerin, devlet ve toplumların kendine yeterliği meselesidir. Yeterlik sadece teknoloji anlamında değil, öncelikle tarımsal üretim anlamındadır. Nihai noktada küreselleşmenin aslında kırılğan bir yapı olduğu da anlaşıldı. Sınırlar ve gümrükler kapatıldığında küreselleşme de bitmekte, internet kesildiğinde küreselleşme de kesilmektedir. Bu bağlamda ortak

değerleri bulunan ülke ve toplumların stratejik birlikler oluşturmalarının, istikrar ve özgüven tesisi açısından önemi anlaşıldı.

Öncelikli olan insan doğasının ihtiyaçlarıdır. Bu ihtiyaçlar basit gibi görülebilir, ancak temel ihtiyaçlar olduğu için ertelenmeleri veya yok sayılmaları mümkün değildir. Onlar karşılanmadan daha ileri düzeydeki kültürel, bilimsel, felsefi ve estetik ihtiyaçlar karşılanamamaktadır. Ülkelerin kendi koşullarından ve kendine yeterlik ilkesinden hareket eden bir tarım ve gıda politikası oluşturmaları önemlidir. Bu da “dışa bağımlılığı” yeniden değerlendirmeyi gerekli kılar. Küresel kriz durumlarından en az etkilenecek ülkeler dışa bağımlılığı olmayan ülkelerdir. Toplumların bugün yüksek teknolojiler karşısında “primitif” olarak görülen temel ihtiyaçlara yönelik üretim ve yaşam pratiklerini unuttukları görülmektedir. Bazı toplumlar söz gelimi uzay teknolojileri gibi ileri üretim aşamasına geçtikleri için söz gelimi “maske” gibi, “tarım ürünleri”, “temizlik maddeleri” gibi basit üretimleri ihmal etmiş ve bu konudaki pratikleri zayıflamış durumdadır. Hep olageldiği gibi bir telefon için tonlarca buğday üretimi yapmak, bir otomobil alabilmek için gemi dolusu hububat ihraç etmek gerektiğinden söz edilir; böylece teknolojinin değeri öne çıkarılırken tarımsal üretimin değeri düşürülmüş olur. Oysa tarım insanoğlunun en önemli ve en temel üretim biçimidir; daha ilk zamanlardan beri bu böyle olmuştur. Basit üretim diye bir şey yoktur, basit gibi görünen üretimler vardır ve onlar da aslında hayati üretimlerdir.

COVID-19 salgını küresel çapta spekülasyon ve tartışmaları da beraberinde getirdi. Bilgi de hiç yeterli olmadı; bu nedenle devlet başkanları, sağlıkçılar da dâhil, ne olup bittiğini tam olarak anlayamadıkları bir süreç içinde buluverdiler kendilerini. Bu belirsizlik doğal olarak çeşitli spekülasyonları beraberinde getirdi: Virüs üretildi mi, doğal olarak mı ortaya çıktı? Bu soruların dolaysız bir anlamı var: Bazı kişiler bazı kişileri, bazı ülkeler bazı ülkeleri istedikleri yönde biçimlendirebilmek için yapay tehdit ve riskler üretebilirler. Yanlış bilgilerle kitleleri yönlendirebilirler. Bu olasılık, en önemli değerler bilgi ve bilgiyi analiz edebilecek entelektüel güç olduğu gerçeğini bir kez daha teyit etti. Özellikle bilgi kaynaklarına ulaşımın son derece kolay olduğu günümüzde, bilginin doğruluk ve güvenilirliğini sorgulayıp analiz edebilecek eleştirel ve sorgulayıcı bakış açısı, eğitimin öncelikli amacı olmalıdır. Aksi halde kendilerine anlatılan hikâyelerle iktifa eden mitolojik zihniyet tutumları yaşama ve çoğalma imkânı bulur. Bu da her zaman şiddete, teröre, istismara ve sömürüye açık bir kitle demektir. Akılcı ve gerçekçi analizler yapıp sağlıklı düşünebilmeye olan ihtiyaç epidemiyi süreci ile birlikte bir kez daha açık hale geldi.

Bütün bunların sonucunda şöyle bir soru ortaya çıkıyor: “İlerilik” ve “gerilik” kavramlarının yeniden tanımlanması gerekir. İleri olmak, ileri teknolojik aygıtlar üretilen toplum olmaktan çıkabilmekte midir gerçekten? Bu tür bir tanımın insan mutluluğuna sunabileceği katkı ne olabilir? İlerilik ve gerilik, zenginlik ve mutluluk tanımları değiştiğinde, kişinin kendisi ve evrenle uyumu ölçüt haline geldiğinde, insan-insan, insan-doğa ilişkisinde basit yaşam formlarının öne çıkması beklenebilir. Bu yaklaşım insanın yeryüzündeki huzur ve güvenine büyük katkı sağlayacaktır.

Sonuç olarak söylemek gerekirse: Korona salgını insanın doğa, insanın insan ve insanın kendi dünyasıyla ilişkisini yeniden sorgulama fırsatı doğurmuş ve konuya dikkat çekmiştir. Filozoflar, “nasıl” sorusunu cevaplayabilecek kişiler değildir. Koronavirüs nasıl oluştu, nasıl ortaya çıktı, nasıl dünyaya yayıldı gibi sorular bilim adamlarının cevaplayabileceği türden sorulardır. Ancak bu epideminin insan varoluşu üzerinde oluşturduğu etki, insan doğa, insan kültür, kültür doğa ilişkileri filozofların analiz edebileceği konulardır. Bu, iyi bir dikkattir. İnsanın yeryüzündeki, kâinattaki varlığını düşünme yönünde bir imkân, fırsat ve uyarıdır. Ve bütün bu olup bitenler insana gerçek gücün ne olduğu konusunda bir soru yöneltiyor. Yeryüzünde ne kadar güçlüyüz, tehlike ve riskler karşısında ne kadar donanımlıyız, ne yapabiliriz, ne kadar ve nasıl güvende olabiliriz? Bugün ulaştığı teknolojik zaferle bir özgüven zehirlenmesi yaşayan insan için bir virüsün dünyayı ne hale getirdiğini görmek, kültür ve doğa ilişkisini sorgulama fırsatı doğurabilir. İnsanın yeryüzündeki varlığı bu ilişkinin sorgulanmasına ve bir dengeye oturtulmasına bağlıdır.

İnsanoğlu kendini ve kendi doğasını unuttuğu bu dönemde, kutsal olanlar başta olmak üzere eski metinlere kadar geri giderek yeryüzündeki varoluşun genetiğini yeniden çıkarmalı; üretim-tüketim sarmalı dışında mutluluğu ve iyi hayatı başka kavramlarda aramalıdır. Nesne ve eşyayı değil, değerleri

öncelemelidir. Modern çağ bize çok şey verdi, ama aynı zamanda bizden çok şey aldı. Modern insan yeniden otantisiteyi tanımalı, eşyayı değil manayı, gösteriyi değil samimiyeti, çok şeye sahip olmayı değil mutlu olmayı, lüksü değil dostluğu incelemelidir. Modern yaşam tarzına bağımlılık azaltılmalı ve otantik varoluş biçimi ile ruhsal bağışıklık güçlendirilmelidir. İnsanın kendisi, diğer insanlar ve doğa ile olan ilişkisi en önemli varoluş değerleri olarak kabul edilmelidir. İnsan ürettiklerinin değeri ile değil, varoluşsal tutumları ile anlaşılmalıdır.

Dikkat çekilebilecek bir başka husus: Kültür ve doğa arasındaki karşıt ilişkide insanoğlu, birbirini yok eden bu iki unsurun, kültür ve doğanın uyumunu gerçekleştirecek, onların birbirini tüketen değil üreten yapıda olmalarını sağlayacak bir çözüm üretmek zorundadır. Bu zorunluluk gittikçe daha da açık hale gelmiştir. Çözümün insanda, insanın eğitiminde olduğu düşünülebilir. Bunun için öncelikle “hırs”ın bir yana bırakılması ve insanın otantik bir varoluş durumu içine girmesi önemlidir. İyiliği üretecek en önemli varoluşsal tutum hırsın, samimiyetsizliğin içinde yer almadığı yalın ve sahil (*authentic*) bir varoluş durumudur. Zira sorun, insanın kendi doğasına yabancılaşmasıyla başlamıştır.

Doğa canlı bir yapıdır. Onun da kendine göre refleksleri ve tepki verme biçimleri vardır. Havanın, suyun ve toprağın kirlenmesi, doğanın dengesini bozmuştur. Bu bozulma karşısında küresel ısınma gibi, çeşitli pandemiler gibi, türlerin azalması gibi refleksler ortaya çıkmış ve çıkmaktadır. İnsanoğlunun en önemli ödevi tabiatı korumak ve onu kendi evi olarak görebilmektir. Doğa ve kültür arasındaki karşıt varoluş ilişkisine bir an önce akıl ve sağduyunun egemen olması beklenir; bu yeryüzündeki insan varlığının güvende olabilmesi için gereklidir. Kültür ve doğa ilişkisi bir denge içine oturup bir diğeri için risk ve tehdit olmaktan çıktığında, ancak o zaman dünya insanın yurdu ve medeniyetin beşiği olabilecektir.

**THE SPECTACLE OF QUARANTINE DAYS IN TURKEY: A CONTENT ANALYSIS ON
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ABSTRACT

Changing the balances of the world, the novel Corona virus outbreak is investigated from various aspects. The outbreak started in China and quickly spread throughout the world. Within this scope, preventative measures focus on voluntary or enforced implementations of quarantines. Consequently, the discussion of changes in consumption habits of postmodern societies become quite common as well. This is because individuals, who were confined to the walls of their homes had to change their daily habits substantially. Working from home, instead of going to workplaces, cooking at home, instead of dining out or shopping online, instead of going to shopping malls, which are deemed to be the heart and soul of consumption, become widely mentioned topics. In this context, the need to socialize also drove individuals to share more posts on social media platforms, which were already highly used. The question of how such disruption change consumer societies, where consumption determines conditions and becomes a culture itself, represents the foundation of this study. To that end, Instagram is the selected social media platform for the research purposes. A total of four hashtags concerning Corona virus is selected and a total of 1,540 Instagram posts are subjected to a content analysis. In order to determine how the changing consumption habits are reflected, concepts of consumer society and the society of the spectacle are covered in the literature review. As a result, the descriptive characteristics of consumer society and society of the spectacle appear to preserve their validities, even during a challenging time such as the corona virus outbreak and relevant quarantine.

Keywords: Corona virus, consumer society, consumer culture, society of the spectacle.

**TÜRKİYE'DE KARANTİNA GÜNLERİ GÖSTERİSİ: TÜRK TÜKETİCİLER ÜZERİNE BİR
İÇERİK ANALİZİ****ÖZET**

Dünyanın dengelerini değiştiren yeni tip Corona virüs salgını pek çok açıdan incelenmeye başlamıştır. Çin'de başlayan salgın kısa bir süre içerisinde dünyanın hemen hemen her yerini etkisi altına almıştır. Bu kapsamda alınan önlemler gönüllü veya zorunlu karantina uygulamalarına odaklanmıştır. Bu odaklanmanın sonucunda, post modern toplumların tüketim odağında bazı değişimler olduğu fikri sıklıkla konuşulur hale gelmiştir. Öyle ki eve kapanan bireyler günlük alışkanlıklarını büyük ölçüde değiştirmek zorunda kalmıştır. İşe gitmek yerine evden çalışmak, dışarıda yemek yerine evde yemek yapmak veya tüketicinin kalbi olarak görülen alışveriş merkezlerine gitmek yerine çevrimiçi alışverişe mecbur kalmak sıklıkla konuşulan konular haline gelmiştir. Bu bağlamda, sosyalleşme ihtiyacı da bireyleri zaten çok kullanılan sosyal medya platformları üzerinden daha çok paylaşımına itmiştir. Tüketicinin şartlarını belirlediği ve kültür haline geldiği toplumlarda böylesi bir kesintinin tüketim toplumlarını nasıl

değiştirdiği sorusu da bu çalışmanın temelini oluşturmaktadır. Çalışmanın araştırma kısmı için seçilen platform Instagram olup karantina dönemi ve Corona virüse ilişkin dört tane hashtag seçilerek toplam 1.540 Instagram gönderisi içerik analizine tabi tutulmuştur. İncelemenin değişen tüketim alışkanlıklarının nasıl yansıtıldığını belirlemesi için çalışmanın literatür taraması kısmında tüketim toplumu ve gösteri toplumu kavramları üzerinde durulmuştur. İncelemenin sonucunda gösteri toplumu ve tüketim toplumu kavramları için tanımlayıcı nitelikte olan özelliklerin karantina döneminde de geçerliliğini koruduğu görülmüştür.

Anahtar sözcükler: Corona virüs, tüketim toplumu, tüketim kültürü, gösteri toplumu.

Introduction

As means for consumption vary, consumption in daily life becomes more and more visible. Still, when we talk about consumption today, we do not only refer to the monetary exchange of purchasing good and services and the exhaustion of them. Consumption is an experience in the heads of consumers than a process of simple satisfaction of biological needs (Bocock, 1993, p. 51). There is symbolic value, search for prestige, social status and many more to be considered in this context. As consumption penetrates the lives of consumers in postmodern societies, the wish to consume becomes the aim of consumption itself. Moreover, consumption becomes more appealing and convenient with the help of various media. Media does not only advertise consumption to members of a society, it also shapes their selection by way of fashion. Especially with the rise of social media, individuals easily share and display their consumption habits and check if they are actually following the fashion in each category.

There is a plethora of studies regarding the consumption habits of various societies. However, the current circumstances concerning novel Corona virus outbreak and the changes it brought along also have to be considered in this sense. Studies with reference to changing social and economic circumstances help shed light on the social lives of individuals in a given society.

Declared to be a global outbreak in early March by the World Health Organization, novel Corona virus brought along various measures such as social distancing, mandatory wearing of surgical masks, hygienic rearrangements and regulations and lockdowns – be it enforced or voluntary. Naturally, these items changed individuals' perceptions of fashion, socialization and consumption. Lekakis (2015) mentions three types of reactions in times of crises; using consumption to put a stop to market applications that are triggered by recession; consumption patterns, followed by national purchases to support local economies and creatively reorganized markets for resilience (Koos et al., 2017). So, consumption plays even more varied roles under different circumstances. This is hardly surprising. In capitalist societies, when the economy blooms, consumers are encouraged to consume more and when there is a recession in question, consumers are promised better times and more consumption in future (Bocock, 1993). Within the scope of this study, novel Corona virus pandemic is also considered to be a time of crisis. In this context, this study aims to investigate whether characteristics of consumer society can be observed in the time of the Corona virus outbreak in Turkey with the help of Instagram as the selected social media platform for the investigation.

Theoretical framework

This study aims to investigate the consumption habits of Turkish consumers on Instagram, a social media platform, from the perspective of consumer society. To that end, Guy Debord's seminal work, *The Society of the Spectacle* is also used to shed light on how consumption habits of individuals are displayed on said social media platform. Thus, consumption and the role it plays in postmodern societies, as well as the key concepts of the society of the spectacle are covered in the literature review.

Consumption and consumer culture

The word consumption refer to a sort of exhaustion of various resources, while the word culture connotes a way of life. In the postmodern world, consumption did become a way of life, which caused the concept of consumer culture to arise. This is because production and consumption processes are not simple ones, which begin on an assembly line and end as soon as they are put on a shelf to be displayed (Sadakaoğlu, 2018, p. 54). As of the 18th century, societies started to be deeply influenced by myriad economic, political and cultural changes with the dominating capitalist production manners, which brought along a new era, where individuals participate in the consumption processes more actively (Acar, 2018, p. 92). At this point, mere definitions of what consumption is would not suffice, for consumption does not only spread and become more generic, it also creates its own culture (Topay & Erdem, 2019, p. 164). According to Bauman (2010, pp. 64-85), the question of whether we consume to survive or survive to consume and the discussion of whether or not there is life that can be separated from consumption are similar to the puzzling reflections of philosophers, poets and professors of ethics.

Within the scope of consumer culture, the amount of what individuals possess or the satisfaction of their needs do not suffice to describe the concept per se; Baudrillard claims that the symbolic dimension of consumption cannot be overlooked (Baudrillard, 2010, p. 241). As a form of systematically manipulating symbols, consumption molds cultures and the points of view of individuals in a society. Surrounded by the consumer culture, individuals are happier as they consume more and more (Ilgaz, 2000, p. 329). In the most traditional sense, consumption does possess an economic aspect. However, the psychological and sociological aspects cannot be overlooked within the scope of consumer culture. In this sense, Featherstone suggests three perspectives to analyze consumption culture; the enhancement of the capitalist production form, which causes accumulation of consumption goods, shopping areas and consumption areas; consumption goods and services, creating links and distinctions in the social field from a sociological perspective and the field of emotional pleasure, dreams and desires, which have important places in the lives of consumers, creating direct physical arousal and aesthetic pleasure (Acar, 2018, pp. 95-96). Combining the psychological, sociological and physical aspects, it can be said that consumption helps individuals satisfy their tangible and intangible needs, such as validation, status and being accepted, in addition to fundamental ones. Consumer culture places importance on the fulfillment of symbolic desires, rather than biological ones (Şan & Hira, 2004, p. 16). Baudrillard (2010, p. 242) exemplifies the concept of marriage in this sense; the aim of marriage used to include a relationship, whereas it is now aimed at consumption of objects, including symbolic ones that only refer to said relationship.

Consumer culture manipulates consumers through false needs, inviting them to consume more with each and every day as such. Marcuse (1991, p. 7) defines false needs as those that are superimposed by social interests that perpetuate misery and must be met to sustain the cycle, such as the need to relax after hard work, only to have to work again. Such needs have a societal content, being produced by societies that dominantly wish to sustain the repression of individuals. True needs, on the other hand, include more fundamental ones, such as nourishment, clothing and lodging (Marcuse, 1991, p. 8). Thus, even the needs are not simply linear or have to do with fundamental and biological needs. Considering the role society plays on such needs, Bocoock (1993, pp. 17-18) underlines that individual choices in consumption are also related to living in overwhelmingly cosmopolitan settings, where members of a society feel the need to simultaneously blend in with the society and stand differently. These changes and needs are often relayed to societies through mass media, which play key roles in shaping individuals' consumption activities. Thus, it can be said that media culture, arising from mass media, drives consumption patterns in such cultures (Dikici, 2017).

The consumer society

Happiness is the indispensable part of consumer society (Baudrillard, 2013) and individuals constantly pursue happiness by consuming with the belief that the more they consume, the happier they will be. They may purchase an object or an experience, but in such societies, they would actually be purchasing the symbolic values with them – happiness, belonging, fulfillment of their desires and so on.

Bauman (2010, p. 84) states that ours is the consumer society, just as much as what our ancestors formed was a production society, in terms of depth and foundations. He also underlines the differentiation in the term consumption itself over time, for consuming has always been there, but not in the sense it is approached in capitalist systems or in the postmodern era. On the other hand, Baudrillard (2013, p.15) notes that consumers in a consumer society do not don this identity, because they merely desire for an object; they are so because they desire the desiring itself. Thus, consumer societies exceed actions of eating more, reading more, buying more and possessing more. Thus, individuals spend money according to the current circumstances consumer culture offers and not according to what they actually need in consumer societies (Kaya & Büyükbaykal, 2019, p. 689), because needs carry different values. In this context, consumption does not only refer to the monetary exchange or shopping, but also to things that are considered to be in fashion to keep up with the necessities of consumer society, where symbols are displayed to the consumers. Consumption itself becomes a negation of reality all over (Baudrillard, 2013, p. 27).

Attention is drawn to diverse goods, services and images, which must be desired by consumers; but once they are desired, others to fulfill the same duties must be deployed to keep the attention, desire and attraction alive (Bauman, 2010, p. 83). This description brings to mind the concept of fashion and how it affects the consumption habits of individuals.

The concept of consumer society refers to a structure, organized around consumption and leisure activities than production (Acar, 2018, p. 96). Consumption can be observed in various forms and can be easily identified, due to the exchange it intrinsically brings along. However, leisure activities also make up an important part of consumer societies. They are also related to the aforementioned statement related to what is in fashion. The physical possession or ownership may not be observed, but leisure activities still possess the traces of the need to keep up. For example; individuals work out under the sun by force and become obsessed with suntans in naked form, which are indicators of their dedication to misery and duty, showing that individuals in a consumer society carry out their leisure activities by force (Baudrillard, 2013, pp. 190-191).

Baudrillard (2013, p. 113) also notes that keeping up with what is in fashion is a duty for consumers in a consumer society; otherwise, they fail to be a part of it. While fashion does not necessarily contribute to the qualities of a person, it imposes oppression due to dictating whether or not the individual, who does not follow fashion, will be accepted in the society. Thus, many continue their desire to keep being purchasers and consumers of something, even when they cannot afford to do so (Bocock, 1993, p. 76) as a result of what they are exposed to in media and social media to speak in more contemporary terms.

Much like the aspects of consumer culture, today's consumer societies place importance on prestige, difference, status, belonging to a group, identity and image – symbolic values as they are. Various media show these symbolic values to consumers with the claims that if consumers do, in fact, utilize the advertised commodities, they will climb up the social ladder, have positive changes in their lives, belong to a particular group of their choice or simply be different than everybody else (Dikici, 2017, p. 61). While this used to be observed more commonly in traditional media, in the form of television commercials or radio and newspaper advertising, social media today fulfills multiple roles in this sense. Especially with the developing e-commerce platforms and social media applications today, consumption surpasses spatial and temporal boundaries (Ahmadov, 2019, p. 33). Individuals post and share what they eat, what they drink, what they wear, where they go to and many more details to keep up with what is in fashion, follow the social trends, be more socially acceptable and more popular (Kellner, 1991, p. 83). To understand this constant show of what is consumed and what is in fashion, one must turn the looks to the concept of the society of the spectacle.

The society of the spectacle

Guy Debord introduced the concept of spectacle in his 1967 book, *The Society of the Spectacle* about consumption and commodity fetishism, where he claims that the spectacle is an image-mediated social

relation between people, rather than a collection of images (Debord, 1992, p. 10). Accordingly, everything is a representation and the only thing that matters is the image. What Debord means by image, at this point, is a visual reflection of the dominant economic order. In terms of both content and form, the spectacle surpasses what has been done already in the field of consumption, for it serves to the justification of the existing system. It does so by speaking the language of the dominant production system. Thus, reality is produced within the spectacle and the spectacle itself is real (Debord, 1992, p. 11). There is no questioning whether this reality is, in fact, real, for what is good is seen and what is good is visible (Debord, 1992, p. 12). The paradise that was once promised via different images to individuals becomes the life itself. The mundane world is the paradise, filled with images and illusions. In such a society, specialization becomes a significant concept. What is said by the specialized power holder must be abided by; hence what is in fashion or trendy must be followed too, which is the specialization of power for Debord, underlying the society of the spectacle (Senemoğlu, 2017, p. 81).

In societies of spectacle, being turns into having and human fulfilment becomes dependent on what one possesses and accumulates in line with his or her economic power. Having derives its prestige and ultimate goal from appearance (Debord, 1992, p. 13). On the other hand, possession of commodities are still praised in advertisements and mass communication messages, making up the display of constant spectacles (Baudrillard, 2013, pp. 15-16).

Debord (1992) notes that consumers acquire one particular commodity and are happy until they are not and it is time for the next commodity to be acquired for one's happiness. Thus, commodity fetishism becomes apparent, thanks to the images that represent themselves as reality with such illusions. Keeping these images alive, the economic system is a vicious cycle of isolation in and of itself (Debord, 1992, p. 16), supporting the loneliness of the crowds with technologies that help keep these isolating systems alive. In such systems, individuals are isolated, so that they can be excluded from the existing system altogether, if such a need arises. The isolation brings along the concept of banalization in the society of the spectacle, even when commodity consumption differs in form and its advance forms diversify roles as well (Debord, 1992, p. 24). The spectacle separates the self and the world by demolishing the self in this world, filled with images. It also demolishes the boundaries between true and false. In a way, this is similar to the description of true and false needs in consumer societies. On another note, individuals in a society of spectacle must be attentive of their appearances, which brings us back to the concept of false needs; only this time, it has to do with surveillance; individuals in the society of spectacle monitor others and are aware of being monitored by others themselves, which is why they always opt for the better looking or aesthetically pleasing (Featherstone, 2005, p. 181; cited by Senemoğlu, 2017, p. 73). The surveillance aspect of the society of the spectacle can be related to the concept of what is in fashion too. Individuals feel like they have to keep up with what is trendy, for they know they are observed in such societies. Thinking about this in more contemporary terms, the constant imitation of what individuals see on social media platforms, arising from the need to reproduce what is seen, can be linked to individuals' needs for acceptance, belonging and submission to surveillance. The technological content of the society of the spectacle is determined by the society itself as well. Serving the purposes of the society of the spectacle, a technological apparatus cannot be objective, for it would support the internal dynamics of the system. If the management of the society and all contact among its members depend on such instantaneous methods of communication and the social needs of the time can be met only with such mediations, it is because this type of communication is unilateral (Debord, 1992, p. 14).

Research study

Various definitions of consumption from different perspectives underline its consistency, as well as the weakening relationship between consumption and monetary power. In this sense, Lodziak (2003, p. 60; cited by Senemoğlu, 2017, p. 78) defines two types of fundamental needs; survival and a satisfactory life. This definition can be observed in the period that swept the nations in early 2020, when the whole globe, because of the global outbreak of the novel corona virus, went into various forms of lockdowns. Individuals had to fulfill their basic needs as they used to, but there were drastic and sudden changes to the

lifestyles of people around the world and inevitably so. As individuals started to spend more time by themselves, confined in their homes, the lack of consumers in the physical sense paved the way for new discussions about the future of consumer societies. Thus, this study aims to approach this unique time of a global outbreak from a consumption-oriented perspective.

The purpose and scope of the research study

The purpose of this study is to investigate whether characteristics of consumer society can be observed in the time of the Corona virus outbreak in Turkey. During this time, individuals had to be confined in their homes to prevent the spread of the disease. The lack of visitors in shopping malls and stores started discussions about the end of a consumer society. It is hypothesized, within the scope of this study that consumption during this time persisted as it was. To that end, Guy Debord's postulates from his seminal work, *The Society of the Spectacle*, are used to determine how consumption habits of individuals are reflected. This is because social media platforms became the only tools for those, who wish to continue the cycle of surveillance by displaying pieces of their lives. In this context, Instagram posts with 4 different hashtags are subjected to a content analysis. The method is selected to be content analysis from amongst quantitative analysis methods, for it is an objective, systematic and descriptive method (Bal, 2016, p. 259). Within the scope of the content analysis, the hashtags in question are karantinagünleri (quarantine days), evindekaltürkiye (stay home Turkey), karantinagünlükleri (quarantine diaries) and koronagünleri (corona days). Hashtags were selected for they are thought to be related to individuals' time spent at home during the time of quarantine in Turkey as of March 11th, 2020, until June 1st, 2020, with recommended measurements still in place. Furthermore, hashtags are selected in Turkish, for the study aims to examine Turkish Instagram users. Instagram is the choice of platform for social media due to offering both text and images.

Sample size and method of the research study

As of late 2019, there are 38 million Instagram users in Turkey, according to social media user research studies (Türkiye'nin sosyal medya karnesi belli oldu, 2020). This is assumed to be the population for the study. Accordingly, Raosoft's sample size calculator was used (Raosoft, 2020) and sample size was determined to be 385 with 5% margin of error and 95% confidence level. Thus, 385 posts with each of the selected hashtags were analyzed. The hashtags were analyzed between the dates of May 25th, 2020 and May 29th, 2020. For the analysis, both post captions and visual content of the posts were examined. The selected hashtags were karantinagünleri (quarantine days), evindekatürkiye (stay home Turkey), karantinagünlükleri (quarantine diaries) and koronagünleri (corona days). Hashtags are selected in Turkish, for the study is attempted to observe Turkish Instagram users. Furthermore, posts that include direct sales, advertisements and corporation accounts are excluded. Content from the same account are not included to ensure diversity. For the same purpose, corporate campaigns had to be eliminated, which is why only personal accounts that reveal personal posts without any sales intentions are included. Instagram's offer to view the most popular posts also made sure that the investigated content offered the ones with highest engagement rates. This also means that the investigated posts are seen by a larger number of people than others posted on the same dates.

Limitations of the study

The research study only included Turkish Instagram users, thus in addition to the limitation of the dates of May 25th – 29th, 2020, there was a limitation of location. Another limitation of the study relates to the privacy settings of the accounts; only public accounts were examined within the scope of the study, since private accounts are not listed in hashtag search. Moreover, investigated posts are limited to times of the corona virus outbreak and the accompanying quarantine. Since Instagram does not offer the option to observe hashtags, posted in a particular time period, further quantitative data cannot be collected for the time being.

Findings

The content analysis of four hashtags, #karantinagünleri, #evindekaltürkiye, #karantinagünlükleri and #koronagünleri revealed the following categories: beauty, books, coffee, education, family, fashion, food, hand crafts, horoscopes, jewelry, love and partnership, medical information, movies, music, national pride, nature, traveling, parenting, personal development, pets, religion, sports, sports cars and weight loss. Jewelry is the only category that was found in one hashtag out of four; in the remaining three categories, there were no such themes in the examined posts. The total distribution of all categories by hashtags can be seen in Table 1.

The hashtag #karantinagünleri (quarantine days) showed posts with content related to food (68), nature (42), traveling (42), parenting (37), hand crafts (33), family (33), fashion (31), weight loss (30), beauty (23), books (19), coffee (16), personal development (13), religious content (9), sports (7), love and partnership (7), national pride (4), horoscopes (4), pets (3), education (2), movies (2), sports car (1), music (1) and medical information (1). The hashtag #evindekaltürkiye (stay home Turkey) showed posts with content related to hand crafts (68), traveling (64), nature (54), food (38), family (21), religious content (21), personal development (21), national pride (18), parenting (18), medical information (17), sports (15), education (14), beauty (12), coffee (12), weight loss (11), sports cars (11), jewelry (9), fashion (6), books (2) and love and partnership (1). The hashtag #karantinagünlükleri (quarantine diaries) showed posts with content related to family (55), nature (46), food (41), parenting (37), fashion (38), books (29), personal development (27), beauty (25), traveling (24), coffee (15), hand crafts (14), weight loss (13), love and partnership (8), pets (8), movies (7), sports (7), religious content (6), education (6), music (4), medical information (4), horoscopes (2), sports cars (2), jewelry (1) and national pride (1). Finally, the hashtag #koronagünleri (corona days) showed posts with content related to nature (75), parenting (56), traveling (45), hand crafts (37), food (33), family (32), fashion (24), beauty (19), personal development (17), medical information (16), books (14), education (13), sports (10), weight loss (8), pets (8), religious content (7), love and partnership (7), national pride (6), music (5), coffee (4) and sports cars (1).

Table 1. Total distribution of all categories by hashtags

Content categories/hashtags	#karantinagünleri (quarantine days)	#evindekaltürkiye (stay home Turkey)	#karantinagünlükleri (quarantine diaries)	#koronagünleri (corona days)
Beauty	23	12	25	19
Books	19	2	29	14
Coffee	16	12	15	4
Education	2	14	6	13
Family	33	21	55	32
Fashion	31	6	38	24
Food	68	38	41	33
Hand crafts	33	68	14	37
Horoscopes	4	0	2	0
Jewelry		9	1	0
Love & partnership	7	1	8	7
Medical info.	1	17	4	16

Movies	2	0	7	0
Music	1	0	4	5
National pride	4	18	1	6
Nature	42	54	46	75
Travelling	42	64	24	45
Parenting	37	18	37	56
Personal development	13	21	27	17
Pets	3	0	8	8
Religion	9	21	6	7
Sports	7	15	7	10
Sports cars	1	11	2	1
Weight loss	30	11	13	8

Discussion of the findings

In order to understand how each category, found as a result of the content analysis, relates to the concept of consumption, their underlying themes and how they are selected must be explained.

Posts collected under the category, beauty, include tips for better skin, hair, nails or other cosmetic purposes. It also includes home remedies and home-made tips for the same group and posts, where the viewer is advised to take good cosmetic care of his or her self, for when the quarantine days are over and the outbreak is not a threat anymore, they can display the beauty of their skin. This category also include make-up tips. It is observed that some users resort to wearing make-up for psychological support during the time they spent at home. Posts collected under the category of books, include user suggestions, such as the books they read during the time they spent at home, recommendations of other books, shares of poems and various quotes from literary authors. Posts collected under the category of coffee, on the other hand, include recipes for coffee that are similar to what users drank before the lockdown, tips for presentation of coffee to look more professional and missing the days, where individuals were free to drink coffee outside at coffee shops. Posts collected under the category, education, include tips and trainings for skill development at home, professional trainings and webinars and recommendations concerning educational activities at home for children. Since formal education during the lockdown was also converted into remote education, many of the posts in this category underline additional educational activities to sustain the success of children or the self. Posts in the category of family are the ones that display and highlight users' time spent at home during the quarantine with other family members or missing family members due to the same reason. Posts in the category of fashion include images from past outings with showy clothes, as well as fashion tips, shopping recommendations for readymade clothing, dressing up at home and tips to mix and match clothes at home. In this sense, being restricted with the walls of one's home does not appear to have changed the fashion understanding. Tips for online shopping are most commonly observed in this category. Posts that fall under the category of food include home-made food and baking recipes, recipes that are recommended for healthy living, especially considering the circumstances of the outbreak and home-made meal presentations. At this point, it is important to note that much like the category of coffee, the category of food also places importance on preparing dishes that would normally be served to the user in a restaurant. Quite high in numbers, the category of hand crafts include the display

of manual skills of the user, regarding products that are made at home via knitting, sewing and crocheting. The products in question are bracelets, totes, slippers, socks, masks, earrings, dolls, tablecloths, macramé key chains, bikinis and even tops. The sole purpose of displaying these works is to show others that the individual possesses the skill and since the shopping experiences are not common for the time being due to the quarantine, they are displayed as significant earnings of the time spent at home. For the sake of the research study, those who wish to sell their handiwork are excluded from the content analysis. Posts that fall under the category of horoscopes include information and daily posts about zodiac signs, astrology and fortune telling bits. Posts that fall under the category of jewelry, on the other hand, include pieces of jewelry that were purchased before the quarantine and others that are worn at home to feel like the old days, before the quarantine started. Posts that fall under the category of love and partnership include posts about the user's significant other, prior photographs from weddings and quotes and aphorisms about love, without any designated authors. Posts that fall under the category of medical information include tips about home remedies for the well-being of others, the importance of wearing masks when one is outside, praise for medical personnel, doctors and nurses, who work non-stop for infected patients and medical personnel themselves, who share tips as the professionals they are, as well as pride for the work they do. Posts that fall under the category of movies include both scenes and photographs from the account holder's favorite movies, as well as movie tips for others to see. Posts that fall under the category of music include the account holder singing, recommendations for music and songs and music platforms. While direct advertisements were excluded from the content analysis, it can be said that users still advertise the platforms or karaoke applications they use to share how they sing. Posts that fall under the category of national pride include posts that praise how the government, public hospitals and national agencies are managing the crisis that is corona virus, as well as posts that display the nationalist views of the user. Posts that fall under the category of nature, which have highest numbers, include images of green sceneries, woods, beaches, which are said to be missed by the account holders, gardens, yards or pot plants of the users and home grown vegetables and fruits, underlining the importance of nature and being in nature. Posts that fall under the category of travelling include posts of the user from past vacations, visited destinations, missing traveling and travel plans for after the quarantine. Despite the fact that the quarantine limited individuals to homes, when many different areas of work had to be carried out online and remotely, individuals still display their need to travel and go on holidays. Posts that fall under the category of parenting include user images from quality time they spend with their children during the quarantine and how happy and content they are about it, tips about activities other parents can carry out with their children and what parents do for their younger children with the extra time they spend at home; in other words, these posts also include the pride parents take in because they spend more time with their children. Posts that fall under the category of personal development include encouraging quotes and tips for the mental well-being of the viewers, mostly about being mindful, patient and loving as an individual. Posts that fall under the category of pets include user images of their pets and photographs they have taken of their pets. Posts that fall under the category of religion include religious quotes and daily Islamic celebrations. Posts that fall under the category of sports include user images before and after they work out at home or on the street near their homes, as well as workout tips for others to see, so they would keep being fit during the time of the quarantine. Posts that fall under the category of sports cars display users' sports car or dream cars they would like to have in future. Finally, posts that fall under the category of weight loss include tips to stay healthy and fit at home, since the quarantine does not allow individuals to go to gyms or have access to takeout services, so they have to cook at home. This category is separated from the food category, based on the explanations in the captions about how they recommend the viewers to help lose weight and not only cook for the sake of sustenance.

While the hashtags are naturally limited to a particular date, time and space, the lack of self-care in these posts is clearly seen. The investigated posts reveal that users are more concerned about physical properties and showing it for everyone to see. For example, putting on make-up at home and posting photographs for others to see, preparing for the time when the quarantine is over by eating health and working out for the sake of keeping up appearances and not for the sake of being healthy. Symbolic values in this context are

highlighted with, for instance, having better skin, drinking coffee that looks more beautiful, dressing up fashionably and revealing the type of parenthood one assumes with positive connotations. Posts about books are underlined by the need to look more sophisticated, posts about beauty by the need to be liked in aesthetic terms and appreciated, posts about coffee, hand crafts and clothes and accessories by the need to be envied by others to see. In this context, the spectacle that mediates social relations is intact. By displaying their following of what is in fashion, individuals seek belonging. Furthermore, the majority of the analyzed posts consist of leisure activities, which is an important component of the consumer society. More importantly, the display of individuals' observed love for nature and yearning for traveling is evident of Baudrillard's example of fashion in consumer societies; even though the quarantine days ensured that the majority of the individuals remained home to work remotely, posts still underline the need for time off from work, traveling and vacation. Desire for the sake of desiring in consumer societies can be observed at this point. Although Instagram, by its nature, is of supporting quality for the characteristics Guy Debord lists, the contemporary circumstances apparently do not change in such times of crisis. Individuals still seek prestige and social status by following what is trendy, even though its form has changed, while their realities become spectacles per se. These spectacles both ensure that the capitalist system controls the consumption patterns of individuals and simultaneously manipulates their tastes and habits.

Conclusion

Aimed at investigating the consumption habits of Turkish consumers during a critical time such as novel Corona virus outbreak, this study uses characteristics of consumer society and the society of spectacle to scrutinize the content, displayed by Turkish consumers on Instagram. To that end, four hashtags are selected and a total of 385 for each hashtag are analyzed. The themes, found in consequence of the coding process of the content analysis, are tabulated and interpreted, revealing that even drastic measures of voluntary and enforced measures of quarantine do not really change the foundations of the consumer society, despite the fact that it may change form. All in all, it is hoped that this study will represent a basis for further studies concerning the consumption habits of Turkish study during such crisis times. While this study adopts a quantitative method, for it investigates the data with content analysis method, qualitative methods can be added to shed more light on identification of the characteristics of Turkish society and other social media platforms can be analyzed with similar endeavors.

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SPORDA ŞİDDET VE SALDIRGANLIK

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ÖZET

Spor barış kardeşlik ve sevginin bir arada yaşandığı ve toplumun her kesimini bir araya getiren sosyal bir bağ olarak ifade edilebilir. Ancak kazanma ve kaybetme algısının somutlaşması ve rekabetin ekonomik ölçüler ile değerlendirilmesi ile birlikte sporun yapısı ve algılanış biçimi değişime uğramıştır. Spor saha ve alanlarında meydana gelen şiddet, saldırganlık ve sapkın davranışlarını temel sebebi olarak da bu değişimi gösterebiliriz. Kendiliğinden oluşmayan bu sürecin sebepleri arasında kitle iletişim araçları, kulüp yöneticileri, sporcular, hakemler, antrenörler, seyirciler vb sporun içinde yer alan diğer unsurları sayabiliriz. Bu bağlamda mevcut literatürün taranması ile gerçekleştirilen bu çalışmanın amacı sporda şiddet ve saldırganlığı inceleyerek bu davranışların sebeplerini ortaya koymaktır.

Anahtar Kelimeler: Spor, Şiddet, Saldırganlık.

ABSTRACT

Sports can be expressed as a social tie that brings the whole community together in which peace, brotherhood and love are shared all together. However, the structure of sports and its perception have changed due to the embodiment of the winning and losing concepts and to the evaluation of competition with economic measures. We can indicate this change as the main reason of violence, aggression and aberrant behaviours occurring in sports fields and areas. Among the reasons of this process that doesn't come into being by itself, we can count mass media tools, club managers, athletes, referees, trainers, audiences etc. and other elements of sports. In this sense, the purpose of this study that is conducted with the review of current literature is to analyse violence and aggression in sports and to present the reasons of these behaviours.

Keywords: Sports, Violence, Aggression.

Giriş

Spor, özellikle seyirci, şampiyon ve madalya üçlüsünden oluşan, ya da görsel yönü ön plana çıkan, kitleleri peşinden sürükleyen, politika ve ideolojilerin reklam aracı olabilen, anlam değişikliğine uğratarak ticaretleştirilen insani etkinlik olarak karşımıza çıkmaktadır. Bir toplumun özünü oluşturan önemli unsur uğraştığı spor dalı ve bu spor dalı üzerindeki övgüleridir. Toplumda egemen olan sporun yapısındaki incelemeler, o toplum ve kültürü hakkında önemli ipuçları sağlar (1). Gün geçtikçe büyük önem kazanan, hızla yayılan ve gelişen futbol, gerek futbolcuların çalışma şartlarını iyileştirmek, gerekse de seyircilere daha iyi izleme, zevk ve haz duyma imkânı verebilecek gelişmeler sağlamakta olup, futbolun gelişmesine ve daha geniş kitlelere yayılmasına hız kazandırmaktadır (2). Bugün seyirci ve seyircilerin davranışları, bunların kişilik özellikleri birer tartışma konusu haline almıştır. Özel izlenimlerden, bilimsel çalışmalara kadar dile getirilmekte olan bu konu etrafındaki fikirler, değişik olmakla beraber, genel eğilim şudur ki; son yıllarda tribünler birer problem arenası haline almış, seyircilerin ve taraftarların davranışlarında istenmedik yönde değişiklikler olmuştur (3).

Şiddet

Şiddet kelime anlamı olarak insanın fiziksel ve ruhsal bütünlüğüne yönelik her türlü maddi ve manevi olumsuzluğu dile getiren bir kavramdır. Kendisini çok farklı biçimlerde gösterebilen şiddet olgusu, günümüzde toplumsal ve bireysel boyutta sık sık karşımıza çıkmaktadır (4).

Şiddet Türleri

Ailede şiddet komisyonu raporu (2013)'e göre şiddet türleri şu şekilde belirtilmektedir.

Sözel Şiddet:

Aşağılayıcı sözler söylemek, suçlamak, küfür etmek, küçük düşürmek, hakaret etmek, tehdit etmek, yüksek sesle bağırarak, sürekli eleştirmek, kararlara katılımı engellemek vs.

Fiziksel Şiddet:

Tokat atmak, vurmak, itmek, kemiklerini kırmak, tükürmek, yumruklamak, duvara vurmak, saç çekmek, tekmelemek, bıçak çekmek, yaralamak, silahla yaralamak, öldürmek, vs.

Ekonomik Şiddet:

Evin masraflarını karşılamamak, aile bireylerinin çalışmasına izin vermemek, çalışan bireyin parasını elinden almak, mal/ mülkünü kontrol etmek, vs.

Psikolojik Şiddet:

Keyfi surette eşle doğrudan iletişimi kesmek, onunla konuşmamak, surat asmak, aile bireylerinin kendisini ifade etmesini, görüş ve düşüncelerini açıklamasını engellemek, ailesiyle ve arkadaşlarıyla görüşmesini engellemek, aile bireylerinin birbirlerini değersiz görmesi.

Sosyal Şiddet:

Aile bireylerini başkaları önünde sürekli küçük düşürmek, başkaları önünde zaafıyla alay etmek, başkalarının önünde kıskançlık gösterilerinde bulunmak suretiyle bireylerin davranışlarını kontrol etmek, ailesi, arkadaşları, komşuları ile görüşmesini ve evden dışarı çıkmasını engellemek.

Cinsel Şiddet:

Başkalarıyla cinsel ilişkiye zorlama, eşlerin rızası olmadan çocuk doğurmaya veya doğurmamaya, kürtaja, yakın akrabalarla cinsel ilişkiye (taciz veya tecavüz), zorlama, evlenmeye zorlama, telefon, mektup veya sözle cinsel içerikli rahatsızlık verici davranışlar vs.

Saldırganlık:

Saldırganlık; başka kişilere ya da nesnelere yönelmiş olan zararlı, yok edici (5), ya da karşısındakine üstün gelmek, onu yönetmek; bir işi bozmak, boşa çıkarmak için düşmanca, incitici, hırpalayıcı, acı/ağrı verici amaçlar taşıyan bir davranış biçimidir. Saldırgan davranışlar amaca yönelik davranışlardır ve bir kişiye, gruba ya da topluma yönelik olabilir. Bu tür davranışlarla karşılaşan kişilerde ya kaçınma davranışı, ya da benzer davranışlarla karşı koyma davranışı görülür (6)

Araçsal Saldırganlık:

Bu saldırganlık çeşidinde kişi öfke duyduğu kişiyi tamamen bir araç amacıyla kullanır. Çünkü asıl öfkesi o kişiye değildir. Ancak bu şekilde davranarak bir şeylere ulaşmaya çalışır.

Düşmanca Saldırganlık:

Bu saldırganlık çeşidinde ise kişi aşırı derecede kin ve öfke besler. Amacı tamamen karşısında ki kişiye zarar vermek ve o kişinin canının yanmasını sağlamak olarak görülür.

Özgeci Saldırganlık:

Bu saldırganlık çeşidinde kişinin kendisini ya da çevresinde bulunan kişileri koruma amacı vardır. Bu nedenle her ne kadar saldırganlık hoş bir davranış olarak kabul edilmese de bu durumda hoş karşılanabilir. Ancak kişiler duygu ve düşüncelerini saldırganlık yerine farklı şekillerde ifade etmesi toplum açısından önemlidir (7).

Sonuç:

Fişekcioğluna göre özellikle futbol olmak üzere kitleleri çeken bir spor müsabakasında kendilerini şu veya bu kulübün taraftarı olarak niteleyen kişi ya da grupların maç öncesinde, sırasında ya da sonrasında bilinçsiz ya da bilinçli olarak tetikledikleri kavgaya, yaralamaya, hatta ölüme yol açabilecek türden şiddet olaylarının, kişilerin fiziksel bütünlüğü üzerinde bir tehdit oluşturduğu kadar spor alanı içinde ya da dışında da maddi zararlara yol açması bir olgu olarak izlenmektedir. Sosyolojik araştırmalar, kulüp yöneticileri, futbolcular, spor basını mensupları, futbol eleştirmenleri, spor malzemesi üreticileri, reklamcılar ve siyasetçiler gibi aktörlerden oluşan futbol iktidarının varlığını ve taraftarın, bu iktidarın egemenliği altında yönlendiğini ortaya koymaktadır (8). Bu egemen güç kendi çıkarları doğrultusunda grupları yönlendirmekte ve çıkarlarına hizmet ettirmektedir. Saldırgan davranışlarda bulunarak kendini ifade etmeye çalışan taraftar kitlesinin profilini ortaya koyacak bilimsel çalışmalar yapılarak, bunların çözüme kavuşturulması için bilimsel analizler yapılması gerekmektedir. Sporda şiddet eylemlerine başvuran, kışkırtıcı, kamplaşma, rekabeti kötüye kullanma vb davranışları farklı bilim dalları ile çalışmalar yaparak minimize etmenin yolları aranmalıdır. Şiddetten uzak kendini güzel cümlelerle ifade etmeye çalışan toplumlar oluşturmak için herkes üzerine düşeni yaparak, çalışmalara katkı sunmalı ve sağlıklı bireyler yetiştirmemiz sağlanmalıdır.

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EFFECT OF COVID-19 PANDEMIC ON THE MIGRANT LABORERS AND FUTURE LABOUR MARKET OF BANGLADESH: CASES FROM IRAN AND SOME OTHER COUNTRIES

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ABSTRACT

Nearly, 8 million people of its 160 million citizens are living abroad from Bangladesh. Of them, approximately 4.2 million Bangladeshi migrants are working in the GCC states and the rest is working in other parts of the world. The present study explores how Bangladeshi migrant workers are struggling against the COVID-19 pandemic, especially, its economic impact on them and finding the future labor market of Bangladesh. These workers, across the world, are now suffering from large-scale job loss, salary reductions, deportations from some countries, inadequate access to sanitation and hygienic practices, and so on. The data on the migrants have been primarily collected from Iran on an empirical basis and compared with situations in other countries using secondary materials. The respondents were reached through Viber, WhatsApp, and Telegram. Fifty migrant workers have been interviewed who are living in Tehran, Alborz, and Qom. The study time is from March to July 2020. This is a comparative study to explore the situation of Bangladeshi migrants in Iran and the other countries during this pandemic and how the situations will affect the future of the economy and the labor market of Bangladesh.

Key Words: COVID-19 and Migrant Workers, Bangladeshi Migrant Workers in Iran, GCC Migrant Workers of Bangladesh and Future Labour Market of Bangladesh

Introduction

Nearly, 8 million people of its 160 million citizens are living abroad from Bangladesh. Of them, approximately 4.2 million Bangladeshi migrants are working in the GCC states and the rest is working in other parts of the world. The present study explores how Bangladeshi migrant workers are struggling against the COVID-19 pandemic, especially, its economic impact on them and the future labor market of Bangladesh. These workers, across the world, are now suffering from large-scale job loss, salary reductions, deportations from some countries, inadequate access to sanitation and hygienic practices, and so on. Nearly, two thousand Bangladeshis are living in Iran. Most of them are illegal workers. Migrant workers are most likely to suffer from the pandemics. Many Bangladeshi workers across the world are suffering from job loss that directly impacts the future economy of Bangladesh. The fraud in carrying Corona Virus certificate who were corona-virus positive make the situation more vulnerable when Italy sent back a plane full of migrants who were carrying fake coronavirus certificate. Their everyday trajectories of the criticality of migrant workers i.e. their status of jobs, their health facilities, deportation, psychological impacts, income and job insecurity as well as the help from the host country to these migrants during the COVID-19 pandemic will be studied. The data on the migrants have been primarily collected from Iran on an empirical basis and compared with situations in other countries using secondary materials. The fifty respondents were reached through social media. The study time is from March to July 2020. This is a comparative study to explore the situation of Bangladeshi migrants in Iran and the other countries during this pandemic and how the situations will affect the future of the economy and the labor market of Bangladesh.

Objectives:

The objectives of the study are to find out:

1. How Bangladeshi migrant workers in Iran are facing the corona virus pandemic.
2. The situation of Bangladeshi Migrant workers in Iran and the rest of the world
3. The Future Labour Market of Bangladesh after the Pandemic

Methodology, Study Area and Time Framework

After the outbreak of the Covid-19 pandemic, respondents in Iran are reached through Viber, WhatsApp, and telephone. Random and snowball sampling methods were used. Moreover, a well-organized questionnaire was articulated to take interviews.

The data on the migrants have been primarily collected from Iran on an empirical basis and compared with situations in other countries using secondary materials. Respondents have been selected from three provinces of Iran. These are Tehran, Alborz, and Qum. The study was done from March to May 2020 during the pandemic. For secondary sources, various books, newspapers, journals, reports have been used.

Literature Review

Job loss means significant declines in the standard of living and in the remittances. World Bank predicts that “Global remittances are projected to decline sharply by about 20 percent in 2020 due to the economic crisis induced by the COVID-19 pandemic and shutdown (World Bank, 2020).” World Bank Report was used to understand the situation of Bangladesh. In a report of the International Organization for Migration (IOM), “Migrants and the COVID-19 Pandemic: An Initial analysis”, Lorenzo Guadagno interprets that the migrants of some countries are affected by the pandemic. It was helpful to analyze the health and other socio-economic situations of the migrant workers with measuring units of the report (Guadagno, 2020). Liem and others write that migrants are vulnerable to the impacts of the COVID-19. “Their ability to avoid the infection, receive adequate health care and cope with the economic, social and psychological impacts of the pandemic can be affected by a variety of factors, including: their living and working conditions, lack of consideration of their cultural and linguistic diversity in service provision, xenophobia, their limited local knowledge and networks, and their access to rights and level of inclusion in host communities, often related to their migration status (Liem et al., 2020).”

Bangladeshi Migrant Labours across the World

More than 77 percent of Bangladeshi migrants headed to the GCC states—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE). According to the Embassy of Bangladesh in Tehran, nearly two thousand Bangladeshis are living in Iran most of whom are illegal migrants. Temporary workers who are living abroad are contributing every month a handsome amount of remittance. This remittance makes the Bangladesh economy stronger than ever. But the COVID-19 pandemic is adding some challenges. It will be discussed in the following part of the article.

Age, Education, and Jobs of the Respondents Living in Iran

Fifty respondents living in various parts of Iran were selected randomly. Altogether one respondent was female and the rest of the respondents were males. Their age ranged from twenty to fifty. Most of them completed primary education. Migrant workers have engaged themselves in domestic works, cooking, workshops, factories, steel mills as machine operators and so on.

Comparative Analysis of the situation of the Migrants in Iran and Other Countries during the Pandemic:

1. Death and Health Situation of the Migrant Workers During COVID-19:

According to Worldometer, 895 Bangladeshis have died from novel coronavirus in six Middle East countries, of which, 621 Bangladeshis died in Saudi Arabia, 130 in the United Arab Emirates (UAE), 75 in Kuwait, 30 in Oman, 24 in Qatar, and 15 Bahrain (Diplomatic Correspondent, 2020). According

to Brac's Migration Program, 200 Bangladeshi migrants died of Corona Virus up to 11 April (Siddiqui, 2020a). On the contrary, no death has been reported for Bangladeshi migrant workers in Iran. Some of the migrants reported that they had fever, cough, and cold during the pandemic. However, they did not go for the COVID-19 test. So it is difficult to know whether they were attacked by Corona-Virus or not. In Iran, illegal migrant workers don't possess any kind of insurance. They have to pay the doctors fee and other medical expenses of their own. 'Social distancing', 'quarantine', and 'lockdown' are now a little bit relaxed in Iran. Illegal migrants are going to their regular works with much protection. They are using masks and hand sanitizer regularly. Sometimes their owner provided those kits to them.

2. Food and Shelter of the Migrant Workers during the Pandemic:

In Iran, migrant workers were suffering from ensuring their nutrition during the first phase of the pandemic as they lost their jobs. In the second phase, they are joining their work and getting the salary properly. Sometimes, the workers are getting food from the house they work in. Migrant workers are sharing their toilet, kitchen, and bedroom during these days which is very risky. Sometimes, four to six persons are sharing one bed room and trying to maintain a distance of two meters and more. Some of them are living with their families in their separate flats. Some of them live in the offices and go out when necessary.

On the other hand, .13 million Bangladeshi migrants, working in Singapore, are living in crowded dormitories. Out of the total corona virus-affected 18,788 persons in Singapore, roughly 40% are Bangladeshi workers (Kamal, 2020). One of the migrant workers in Singapore said that he had 12 roommates in his room. The distance between the two beds was one meter (Siddiqui, 2020a). Furthermore, it is found that in Saudi Arabia, 70 to 80 percent of migrant workers are infected with the Corona Virus. It is due to living in shared accommodation. Migrants in the Gulf often live in dirty, congested, and unhygienic dormitories with inadequate access to sanitation. Illegal female domestic workers in many countries like Kuwait, Lebanon, and Jordan have been in a difficult situation. Roula Hamati, the coordinator of Cross Regional Center for Refugees and Migrants in Beirut, said that women are not getting employment and food amid the Pandemic (The Daily Star, 2020).

3. Conditions in Working Places:

Jean D'Cunha, the senior global advisor on international migration at UN Women Regional Office for the Arab States in Cairo, said "panic on Covid-19 in Arab countries has resulted in "increased xenophobia" against migrant workers. Domestic workers have been seen as "vectors of the virus" (The Daily Star, 2020)." Many firms closed indefinitely and the employees asked to return home with only airfare and one or two month's salary (Uttom and Rozario, 2020).

In Iran, the respondents have reported that the owners are providing hand sanitizer and essentials to the domestic workers. Domestic workers are using different shoes and a set of clothing while working in the owners' house. Sometimes, workers who are working in various offices are not permitted to go outside without the owner's consent.

4. Large-Scale Job Loss, and Increase in Deportations due to Lost Job Contract:

Due to COVID-19, Bangladeshi migrants around the world have lost their jobs in various sectors like in the domestic-work sectors, aviation, tourism, transportation, retail, hospitality, amusement, and street vending. Many migrants have been fired by their companies. Illegal migrants have faced a more vulnerable situation. One of the illegal migrants in Iran told me that during pandemic many of them were fired from the work. Some of them did not get any salary. But they could not go to the police in fear of getting arrested as they did not have visa. During fieldwork in Iran, it is seen that a hundred percent of the migrant workers have lost at least half of their works. Now, the situation has a little bit improved. During the pandemic their owner helped them a lot by providing money, sometimes food, and necessary support. In the first phase, the house owners do not allow domestic workers to enter their houses in fear of COVID-19 virus contact and many did not throw any party where many Bangladeshi workers worked as party attendants. Now the Iranians are throwing parties and the workers are attending as workers. Some of them work as caregivers in some Iranian houses where older people live alone. These older people were fully depended on their Bangladeshi care-givers

during the pandemic. Some of them are above 80, or 90 years. They do not have anyone to take care, do household works or do shopping for them. A very few of the workers have got salary though they were forced to take leave for a long time. Some of them, living with their family members earn a lot and maintain a good livelihood. Globally, many workers have been forced to return to the countries of origin before completion of their job contracts. Employers terminated many documented migrant workers from their jobs and without any compensation (The Daily Star, 2020). Many are facing repatriation. M.N.I. Sorkar wrote,

“According to public reports, around 200,000 Bangladeshi migrants returned from around the world between the beginning of January and March 21, when Bangladesh’s government suspended flights. International flights between Bangladesh and the Gulf states restarted on June 16, and government officials expected that thousands more laborers would be repatriated as regular flights resume. The Gulf States are mounting the pressure for deportation day by day (Sorkar, 2020).”

In Iran, the case is more vulnerable. Due to economic sanction and the COVID-19 pandemic migrants are doubly suffered. Many of them have lost their jobs and are not getting a proper salary. So, many of them have applied for Transfer Permit in the Bangladesh Embassy. According to one of the sources of Bangladesh Embassy, 109 migrant workers are ready to go back to Bangladesh. The migrant workers say that “you will not find any Bangladeshi Migrants in Iran after this pandemic or at least opening the airline.” According to Embassy 140 Bangladeshi were issued Travel Permit (TP) for going back to Bangladesh but they could not as air communication was stopped. Many of the migrant workers wanted to go to Europe. Accidentally, they had to stop in Iran, either driven back from the Turkey border or losing all of their money to the human traffickers. They were working here to earn some money necessary for travelling to Europe. Now, many of them lost their jobs due to COVID-19. So they want to go back to home. This is an example of reverse migration.

There are 350,000 Bangladeshi migrant workers in Kuwait. Out of them, about 5,000 were expected to leave Kuwait due to the COVID-19 crisis (Sumon, 2020). Bangladesh faced a tight labor market conditions before the pandemic. Saudi Arabia is also likely to deport Bangladeshi migrants due to the oil price decline and their Saudization policy (Uttom and Rozario, 2019). It is estimated that “the coronavirus fallout and slumping oil prices may lead to the deportation of up to 1 million Bangladeshi migrant workers from Saudi Arabia in the next three or five years (The Daily Star, 2020).” But there is no proper documentation on how many migrants have returned to Bangladesh (Khan, 2020).

In a report by the Business Standard, it is seen that among the 1 crore Bangladeshis in the global job market 2 million Bangladeshi migrants face possible deportation after the Covid-19 pandemic. Most of them would come from Middle-Eastern countries. It is due to job cuts and economic recession in the host countries during the post-novel coronavirus collapse. If the pandemic does not abate by September 2020, Bangladesh will lose many of the global job markets. In the meantime, 6,66,000 migrant workers returned to Bangladesh between January and mid-March (Noman, 2020). Many migrant workers could not afford buying a ticket to travel back home as the price of the tickets soared high. In some cases, the fare was even quadrupled. Dhaka-Tehran route also experience more or less the same price hike.

5. Impact on Remittances:

The remittance inflow in Bangladesh dropped by around 12 percent in March as the novel coronavirus pandemic hit the host countries of Bangladeshi migrants. According to the Bangladesh Bank’s data, the remittances dropped to \$1.29 billion from \$1.46 billion in March. The country received \$1.69 billion last December, which declined further to \$1.64 and \$1.45 billion in January and February, respectively (Noman, 2020).

According to the Bangladesh Manpower Employment and Training Authority, “the country sent more than 180,000 migrant workers to several countries between January and March this year (Sumon, 2020).” However, 100000 Bangladeshi migrant workers are stuck in Bangladesh because of travel bans imposed by many countries. Many of them had either sold their property or borrowed money in

the hope that they will repay the loan after starting work in overseas. Now they are facing an uncertain future (ibid, 2020). As the country's job market has collapsed and returnee migrants have become unemployed, many of them are borrowing money from neighbors and relatives, trying to earn money by doing temporary works like day labor, starting a small business, and others (Uttom and Rozario, 2020). Many host countries have officially requested Bangladesh to repatriate their undocumented migrant workers due to the constriction of the economy.

Despite the bite of COVID-19, it has been declared by the Finance Ministry that the migrant workers of Bangladesh across the world sent 2.6 Billion US Dollar as remittance only in July. The total foreign exchange reserve has now reached a record 37.287 Billion US dollars. It is assumed that remittance flow increased due to the 2 percent incentive on the remittance declared by the government of Bangladesh (UNB 2020). However, some other factors might have also contributed to the increased inflow of remittances. According to Tasnim Siddique, the migrant workers are preparing to come back to Bangladesh. So they are sending all of the savings. Gold smuggling and money laundering decreased. Furthermore, the incentive discouraged informal channels. So the workers are sending money through the proper channel. The remittance will not continue the expanding trends (Sakib, 2020). But at the same time, some experts also opine that as the GCC countries need labor, there would not be a big breakdown in recruiting migrant workers in the Middle East (Khan, 2020).

6. Migrants are Unwelcome Socially in Their Own Country:

Back home in Bangladesh, it is reported that migrants are treated as unwanted. After their return to Bangladesh they are isolated socially. They are being treated as COVID-19 carriers (Sorkar, 2020).

7. The Role of the Bangladesh Government:

A Deputy Secretary at the Expatriate Welfare and Overseas Employment Ministry said that in order to support returnee migrant workers, the government has allocated 2 billion taka (\$23.6 million) as a stimulus package and another 5 billion taka for low-interest loan support. Workers rendered jobless due to Covid-19 and their family members can apply for loans of .1 million to .5 million taka from the Expatriate Welfare Bank with only 4 percent interest in order to start alternative livelihoods (Uttom and Rozario, 2020)."

Bangladesh has offered incentives to encourage expat workers to send their money through legal channels. This is one kind of policy for ensuring money flows. The government of Bangladesh has allocated \$361million as incentives for this. Some of the banks in Bangladesh are providing an extra 1% incentive for remittance beneficiaries.

8. Sending Back Migrant Workers from Italy and the Problem of Images:

More than 100,000 legally and 45,000 Bangladeshis reside illegally in Italy. They work in the tourism, catering and agriculture sectors, and so on. On a flight bound for Italy from Dhaka on July 6, it is found that 21 of 225 passengers were corona virus-positive who possessed certificates for a negative COVID-19 test from Dhaka. So, Italian authorities denied entry to flight from Bangladesh. Italy also imposed an entry ban on non-Schengen countries including Bangladesh until July 31. That directly impacted upon Bangladeshi migrant workers (Welle, 2020). Health official Alessio D'Amato addressed the flight from Dhaka a "veritable viral 'bomb' that we have defused (ibid, 2020)".

9. Getting Help in the Host Country:

It is known from the Embassy of Bangladesh that still no Bengali people in Iran are affected by Corona-virus. The Embassy of Bangladesh in Tehran has helped five hundred Bangladeshis living in Iran by providing money and essential things like rice, oils, and hand sanitizer and so on, during this pandemic. The Government of Iran has opened COVID-19 corner in every hospital so migrants are getting good health facilities in Iran. The Iranian people provided rice, peas, oil and some other items to Bangladeshi students. Iranian Government is continuing scholarships for the students also. In India, Muslim migrants have been blamed for spreading COVID-19 (Slater and Masih, 2020). Bangladeshi migrants did not face any such stigma in Iran. Some migrant workers use private car provided by their owners during this pandemic in Iran. In Italy, we see that the Italian health authority asked all Bangladeshi expatriates to test for the Corona Virus which was arranged free of costs (Welle, 2020).

400000 Bangladeshis live and work in Qatar. Bangladeshis who are working with low-wage in construction work, allied industries as well as street vending and selling contraband goods are facing trouble during this pandemic. They are on “Azad (free) visas” which allows them to work anywhere they want. So Qatar Government has announced two relief actions for workers with Azad Visa. Firstly, employers have been ordered to continue food and housing to migrant workers through the pandemic. Secondly, all migrants can access health services. But illegal migrants are afraid of having the opportunities for revealing their irregular status. They are in fear of deporting to Bangladesh (Momen and Deshingkar, 2020).

10. New Labour Market:

Bangladesh needs to explore the new labour market to ensure remittance inflows. Recently, The Foreign Minister of Bangladesh urged at the Organization of Islamic Cooperation's (OIC) ministerial meeting that the members should prioritize the issue of job retention of domestic and resident migrant workers. He also requested the Dutch Minister for Foreign Trade and Development Cooperation Sigrid Kaag to support Bangladesh in ensuring the welfare of expatriate Bangladeshis in the Middle East (Noman, 2020). The pandemic tore down the Middle Eastern Job market, so, a new job market is needed to find out. Japan can be the best destination for that (Devnath, 2020).

Conclusion

The article analyzed the socio-economic condition of the Bangladeshi migrant workers in various parts of the world. During the first phase of the COVID-19 pandemic, migrant workers suffered a lot. However, during the second phase they are trying to coping with the situation. However, some of the workers died, many more lost their jobs, many have returned to Bangladesh. It has a long-term effect on the remittance. The remittance is dropped during this pandemic. The Government of Bangladesh is taking initiatives to energize the labor by declaring some incentives to them. Furthermore, new job markets are being searched. The host countries of the migrants are also taking initiatives for securing the rights of the migrant labor. However, Bangladeshi migrant laborers are suffering a lot due to The COVID-19 pandemic.

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COVID 19 KÜRESEL BİR BİYOLOJİK SİLAH MI?

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Ateşli silahlar, çelik, pusulanın icadı, buharlı motorlar ve mikroplar insanlık tarihini şekillendiren, yüzlerce yıldır bu beş kelimenin temsil ettiği alanlarda yaşanan gelişmelerdir.

Dünya tarihi boyunca yıkıcı bir mikropla ilk kez karşılaşılmıyor. Doğal seyrinde gelişen ya da bir savaşı kazanmak için biyolojik bir savaş yöntemi olarak başlatılan salgınlar çok can aldı.

Sanayi Devrimi ile birlikte ortaya çıkan iktisadi büyüme, teknolojik ilerleme, sömürgecilik yarışı ve tüketim, gezegenimizin kaynaklarını sorumsuzca kullanmamıza; son 200 yılda hızla artan nüfus ve şehirleşme, üretim ve tüketim ihtiyaçlarını karşılamak için geliştirilen yöntemler, ekolojik dengenin bozulmasına ve başka zorlu sorunlarla yüzleşmemize neden oldu.

İkinci Dünya Savaşı'nda Hiroşima ve Nagazaki'ye atılan bombalar sonrasında dünya iki kutuplu batı, doğu ve bağılantısızlardan oluşan bir dengeye kısmen kavuştuğu söylenebilir.

Berlin Duvarı'nın yıkılışından ve Doğu Bloku'nun 1991 yılında çöküşünden beri bir türlü dengesini bulamayan Dünya, insanların doyumsuz ihtiyaçlarının neden olduğu çalkantılı bir süreç yaşıyor. Bölgesel çatışmalar, terör olayları, "büyük hayaller" peşinde koşan liderler, silahlanma yarışı, sonsuz iktisadi büyüme fantezisi ve bunu canlı tutmak için ısrarla körüklenen tüketim, gezegenimizin kaynaklarının artan bir şiddetle sömürülmesi, bunun neticesinde ortaya çıkan gelir dağılımı adaletsizliği, çevresel felaketler, egemenlerin çıkarlarına hizmet etmekten başka bir işe yaramayan ve büyük krizlerde etkisiz kalan küresel yönetim mekanizmaları, kitlesel göç hareketleri, hastalıklar, açlık, temiz suya erişimde yaşanan büyük sorunlar vesaire.

Yukarıda sıraladıklarım, insanın neden halen ilkel bir tür olduğunu idrak etmemiz için yeterli olur sanırım. Kudretimizin her şeye yeteceğine inancımız o kadar şişik ki, gezegenimizin kaynaklarını bencilce tüketmekten çekinmiyor, utanmıyoruz. Neticede doğa, bizden intikamını almak için çeşitli enstrümanlarını devreye sokuyor. İşte bugün içinde bulunduğumuz pandemi bunlardan biri: ancak elektron mikroskobu ile görülebilen küçücük bir virüs, kendini gezegenin hakimi sanan kibirli insanlığı esas duruşa geçirdi.

Covid-19 küresel salgını ile dünyada ortaya çıkan manzara gösterdi ki, küresel bir savaşın içindeyiz. Gelişmiş ülkeler başta olmak üzere birçok ülkenin sağlık sistemi çöktü, siyasi birliklerin üye destek mekanizmaları felç oldu, halklar panik içinde evlere kapandı, İtalya Başbakanı durumun İkinci Dünya Savaşı'ndan sonraki en büyük kriz olduğunu ifade etti, ordular sokaklara indi, semavi dinlerin kutsal mekanları ve ülkelerin sınırları içindeki ibadethaneler kapatıldı.

Artık bildiğimiz dünyanın sonuna geldik, bir süredir sancılarını gözlemlediğimiz paradigma değişimi pandeminin etkisiyle hızlanacak gibi görünüyor: Küresel yönetim mekanizmalarını işlevsel hale getirmek kısa vadede mümkün görünmüyor, bu yüzden devletlerin salgına ilk tepkileri içe kapanmak oldu. Pandemi süresince bir yandan ulusal sınırlar içinde mücadele etme motivasyonu sürecek, diğer taraftan sağlık, gıda tedariği gibi az sayıdaki temel alanda yeni küresel işbirliği olanakları aranacaktır. Ancak bu belirsizlik ortamı uluslararası ilişkilerde tansiyonu yükseltme ve sıcak çatışmaları tetikleme potansiyeline sahip.

Virüs çok hızlı yayılıyor; bunu doğal bir pandemi olarak görmenin, yani sadece tıbbi yöntemleri kullanarak çözüm üretmeye çalışmanın, süreci yönetmek için yetersiz kalacağına dair emareler var. Dolayısıyla orduların ve istihbarat teşkilatlarının sahada daha aktif olacağını beklemeliyiz.

Uğraşmak zorunda olduğumuz diğer önemli konu pandeminin ekonomik etkileridir. Dünya, 1929 Büyük Buhranı'ndan daha şiddetli bir ekonomik krize girdi. Üretim durma noktasına geldi, işsizlik çok hızlı artıyor ve önümüzdeki 3 ila 5 yıllık periyotta bu eğilim devam edecek. Sosyal patlamalar, yağmalama, sokak olayları gibi asayişsizlik ortamına hazırlanmalıyız. Bununla birlikte Covid-19'un yayılımı kontrol altına alınsa dahi benzer salgınların kısa vadede hayatımızın yeni normali olması kimseyi şaşırtmamalı. Salgınlara yaratacağı psikolojik etkiler ve bu korku ikliminin güç merkezleri tarafından yönlendirilmesi, artacak kitlesel göç hareketleri ve doğuracağı yıkıcı insani felaketler, kuraklık ve temiz suya erişimde yaşanacak sıkıntılar gibi hadiseler devletleri içe kapanmaya, otoriter ve güvenlikçi bir anlayışa itecek, bu politikalar vatandaşları tarafından da destek görecektir.

Salgından ötürü dijital araçların kullanımındaki motivasyon ve adaptasyon dikkate değer. İlk bakışta olumlu bir gelişme gibi gözükse de bu iklim, zaten tartışmalı pek çok noktası olan dijital dönüşümü, Dünya için dijital distopyaya dönüştürme (Dolanbay, 2020) potansiyeli taşıyor.

Dünya'nın pandemiyle birlikte ortaya çıkan gelişmeleri ciddiye alarak stratejik orta akıl mekanizması oluşturması, yeni bir topyekün mücadele doktrini geliştirmesi ve vatandaşlarıyla şeffaf bir iletişim ağı kurması gerekiyor. Çünkü her şey daha yeni başlıyor.

Biz makalemizde sadece online ve smart teknolojinin gelişmesine yarayan, yalnızca dijital şirketlerin borsada daha da hızlı yükselmesine yol açan ve canlıların yaşadığı değil robotların, bilişim sistemlerinin ve yapay zekaların "big data"nın hakim olduğu bir dünyaya işaret fişegi gönderen bu Covid-19 pandemisinin; dünya sosyolojisinde ikinci "big bang" etkisi yaparak büyük kırılmalara yol açacağı ve giderek dünyayı yeniden formatlayacak güce sahip olacağı tezini işlemeye çalıştık.

Bu tezi işlerken de başlıkta da belirttiğimiz gibi biyolojik savaş nedir? (Christopher, G.W., , Chieslak, T.J.,, & Pavlin, J.A, 2005) Tanım ve tarihçesinden başlayarak bugünkü Covid-19 salgının ilk günden itibaren biyolojik bir saldırı mı olduğu yolundaki sorulara cevap bulmaya çalıştık.

Kilit Kelimeler: Pandemi, Biyolojik Savaş ve Biyo-Terör, Biyolojik Ajan/Silah, Covid-19, Sanayi Devrimi, Doğu-Batı Bloku, Küreselleşme, Dijital Teknoloji, Big Data, Big Bang Teorisi

SUMMARY

Firearms, steel, the invention of the compass, steam engines and microbes are the developments that have shaped the history of humanity and have been represented by these five words for hundreds of years.

This is not the first time a devastating microbe has been encountered in the history of the world. Outbreaks that developed in their natural course or started as a biological war method to win a war took many lives.

The economic growth, technological progress, colonial race and consumption that emerged with the Industrial Revolution cause us to use our planet's resources irresponsibly; The rapidly increasing population and urbanization in the last 200 years, the methods developed to meet the production and consumption needs, have caused the deterioration of the ecological balance and other difficult problems.

It can be said that after the bombs dropped on Hiroshima and Nagasaki during the Second World War, the world has partially attained a balance of bipolar west, east and unconnected.

The world, which has not been able to find its balance since the fall of the Berlin Wall and the collapse of the Eastern Bloc in 1991, is going through a turbulent process caused by the insatiable needs of people. Regional conflicts, terrorist incidents, leaders in pursuit of "big dreams", the arms race, the fantasy of endless economic growth and the consumption fueled insistently to keep it alive, the exploitation of our planet's resources with increasing violence, the resulting injustice of income

distribution, environmental disasters, in the interests of the rulers. Global governance mechanisms, mass migration movements, diseases, hunger, major problems in access to clean water and so on, which only serve only to serve and remain ineffective in major crises.

I guess what I have listed above would be enough for us to realize why man is still a primitive species. Our belief that our might is omnipotent is so inflated that we do not hesitate to consume our planet's resources selfishly, we are not ashamed. After all, nature uses its various instruments to take revenge on us. The pandemic we are in today is one of them: a tiny virus that can only be seen with an electron microscope has put the arrogant humanity that thinks itself the ruler of the planet to the main stand .

The landscape that emerged in the world with the Covid-19 global epidemic showed that we are in a global war. The health systems of many countries, especially the developed countries, collapsed, the members support mechanisms of the political unions were paralyzed, the peoples were closed to homes in panic, the Italian Prime Minister stated that the situation was the biggest crisis after the Second World War, the armies took to the streets, the holy places of heavenly religions and Places of worship within the borders of the countries were closed.

Now that we have come to the end of the world as we know it, the paradigm shift that we have been experiencing for some time seems to be accelerated by the effect of the pandemic : It does not seem possible in the short term to make global governance mechanisms functional, so the first reaction of the states to the epidemic was to be introverted. Throughout the pandemic , on the one hand, the motivation to struggle within national borders will continue, on the other hand, new opportunities for global cooperation will be sought in a few basic areas such as health and food supply . However, this environment of uncertainty has the potential to raise tension in international relations and trigger hot conflicts.

The virus spreads very quickly; There are indications that seeing this as a natural pandemic , that is, trying to produce solutions using only medical methods, will be insufficient to manage the process. Therefore, we should expect armies and intelligence agencies to be more active in the field.

Another important issue we have to deal with is the economic impact of the pandemic . The world went into an economic crisis even more severe than the Great Depression of 1929 . Production has come to a standstill, unemployment is growing very rapidly and this trend will continue in the next 3 to 5 years. We must prepare for an environment of disorder such as social explosions, looting and street events. However, even if the spread of Covid-19 is under control, it should not surprise anyone that similar epidemics are the new normal of our lives in the short term . The psychological effects of epidemics and the manipulation of this climate of fear by power centers, increasing mass migration movements and devastating humanitarian disasters, drought and problems in access to clean water will push states to introversion, authoritarian and securityist understanding, and these policies will be supported by their citizens. .

The motivation and adaptation in the use of digital tools due to the epidemic is remarkable. Although it may seem like a positive development at first glance, this climate has the potential to transform digital transformation, which has many controversial points, into a digital dystopia for the world.

The world needs to take the developments that emerged with the pandemic seriously and form a strategic middle-mind mechanism, develop a new total struggle doctrine and establish a transparent communication network with its citizens. Because everything is just beginning .

In our article, this Covid-19 pandemic, which only serves the development of online and smart technology, causes digital companies to rise even faster in the stock market and sends a flare to a world where living beings are not inhabited, but where robots, information systems and artificial intelligence dominate " big data " ; We tried to process the thesis that it will cause great ruptures by making the second " big bang " effect in world sociology and gradually have the power to reform the world .

As we mentioned in the title while processing this thesis, what is biological warfare? Starting with its definition and history, we tried to find answers to the questions about whether the current Covid-19 epidemic is a biological attack from the first day.

Key Words: Pandemic , Biological Warfare and Bio-Terror, Covid-19, Industrial Revolution, East-West Block, Globalization, Digital Technology, Big Data, Big Bang Theory

GİRİŞ:

Aralık 2019'da Çin'in Hubei eyaleti Vuhan kentinde çıkan yeni COVID-19 salgını epidemi şeklinde başlayarak, kısa zaman içinde pandemiye dönüşmüştür. Bu hastalık etkeni, bulaştırıcı özelliğinin yüksek olması, olumsuz klinik prognozu ile 65 yaş ve üzeri başta olmak üzere, hemen her yaş grubunda öldürücü etkisi sebebiyle 21. Yüzyılın en önemli sağlık sorunu haline gelmiştir. Bu makalede, henüz çok yeni ve farklı bir pandeminin çıkış sebeplerini, sosyal yaşam ve etik düzlem üzerinde oluşturduğu olumsuzlukları, internet ortamı üzerinden verilen ve doğruluğu yüksek olan kaynakların incelenmesiyle bir değerlendirmeye çalışılmıştır. Hiç şüphesiz bu konular hakkında bilgi akışı arttıkça ve içerik çoğaldıkça farklı çalışmaların yapılması da olasıdır.

COVID-19 pandemisi, ülkeleri ve toplumları etkilerken, ülkelerin kendi izolasyonlarını sağlamak için sınırlarını kapatması, serbest dolaşım hakkının kesintiye uğramasına, sosyokültürel etkileşimin kısıtlanmasına yol açmış, hastalığın yayılmasıyla enfekte olan veya ölen kişi sayılarının yüksekliği, modern olarak adlandırılan, bilim ve teknolojinin gelişmişliği ile ölçülen bir dönemin yeniden sorgulanmasına sebep olmuştur. Bu makale yazıldığı sırada, COVID-19 virüsü izole edilmesine karşın, halen kesin ve sonuç veren onaylanmış spesifik bir tedavi protokolünün ve aşının bulunamamış olması, hastalığı gizemli kılmaya devam etmektedir.

COVID-19 pandemisi sosyal yaşam, etik düzlem, sosyolojik bakış açısı, kitle psikolojisi, mesleki alanların işlevselliği, turizm, eğitim, ekonomi, popülasyon hareketliliği, politika gibi pek çok farklı noktada etkisini hissettirmeye devam etmektedir. Öyle ki, internet üzerinden paylaşılan haber, köşe yazısı ya da sosyal paylaşımlarda "COVID-19 pandemisinden sonra artık hiçbir şeyin eskisi gibi olmayacağı" ibaresi, bu etkinin ne kadar derin hissedildiğini göstermektedir.

Covid 19 virüsünün halen dünyada kabul edilmiş aşısının bulunmadığı şu anlarda Tıp ve viroloji bilimi Covid 19 virüsünün etkilerini laboratuvarlar ve hastalar üzerinde yapılan tahribat sonuçlarını ve hastalığın sekellerini izleyerek tanımaya çalışırken, bilim ve teknolojinin çok ilerlediği günümüzde dünya devleri bu virüsü biyolojik bir ajan/silah olarak hayvanlar üzerinden aldıktan sonra laboratuvarlarda geliştirmiş, kimyasal yollarla mutasyona uğratmış olabilirler mi? Yayılmasına bilerek veya ihmalleri sonucunda hizmet etmişler olabilirler mi?

Biz makalemizde bu sorulara tarihi, askeri olaylar, makaleler, haber ve röportajlar, Biyoterör girişimleri ve Nükleer, Biyolojik ve Kimyasal savunma bilimindeki verilerden hareket ederek ışık tutmaya çalıştık.

ARAÇ VE YÖNTEMLER

Bu konuları araştırırken kaynak tarama metodunu kullandık. Tıp alanında Covid-19 ile mücadele eden onlarca bilim insanıyla görüştük. Sosyal medya, medya ve interneti etkin kullandık. Nükleer Biyolojik ve Kimyasal savaş hakkındaki askeri talimnameleri inceledik. (FM Chemical, Biological, Radiological, and Nuclear Operation, 2020)

Gördük ki bilim insanlarının çoğunun meselelere farklı disiplinler açısından bakışlarındaki gelişmemişlikler, askeri tarihi ve alanlarda yeterli uzman olmayışı, olanların da bu konuların hassasiyet içermesi açısından temkinli açıklamalarda bulunması ve bilim insanlarının bir çoğunun biyoloji ve gen alanında ki ve siber teknoloji alanında ki gelişmeler ve bu konuların günümüz sosyolojisini nasıl değiştirdiğinin hakkındaki farkındalığının yeterli düzeyde olmaması bir çok kuvvetli hipotez ve iddiayı daha baştan komplo teorisi diyerek reddetme olgusunu ve önyargısını çoğaltmaktadır.

Tabii bu biyo terör, biyo saldırı, asimetrik (Berdal, 2020) ve hibrit savaş gibi konuların uluslararası hukuk açısından taşıdığı hassasiyet de bu dar bakış açılarını ve önyargıları güçlendirmektedir. Bir çok bilim insanı güvenli olmadığını hissettiği bu alanlarda çalışma yapma ve bulgular ve olgular üzerinden analiz ve tüme varım yapmak istememektedirler.

Herşeyi doğal olarak kabul etmek, en az ürkütücü psikoloji, sığınılacak en güvenli sığınak gibi geliyor bir çok insana ancak hakikat böylemidir? Yoksa bu meselelerin özüne inmemek ve meseleleri çetrefilli yönleriyle ele almaktan kaçınmak mıdır tartışmalı bir durumdur. Neticede bu kaçınmalar, meselelerin çetrefilli taraflarını günyüzüne çıkaramayışımız böylesine pandemik felaketleri tekrar tekrar yaşamamıza sebep olacak mıdır ya da olmayacak mıdır? Esas soru, tartışılması gereken konu budur?

Çalışmamız, bilimsel makalelerin, nitelikli yayın organlarının güvenilir haber ve röportajların, askeri talimname etüdlerinin, uzaman görüşlerinin, derlenmesi ve sentezlenmesi sonucu oluşmuştur. Askerlik mesleğindeki çeyrek yüz yıldan fazla süren savaş sanatı dallarındaki uzmanlığımız ve tarih alanındaki doktora derecesindeki uzmanlığımız ve aile içinde bulunan üç tıp insanı da çalışmamızda yolumuzu aydınlatan çok güçlü datalar sağlamışlardır.

Yaşanan covid-19 pandemi sürecinin dünya üzerinde başta insan sağlığı olmak üzere sosyal ve ekonomik açılardan köklü farklılıklara yol açan bir fenomen olduğu için daha çok betimleyici bir yöntem kullanmanın konuya genel itibarı ile açıklık getireceği düşünülmüştür.

1.1945 VE SONRASI DÜNYA:

İkinci Dünya Savaşı'nda Hiroşima ve Nagazaki'ye atılan bombalar sonrasında dünya iki kutuplu batı, doğu ve bağlantısızlardan oluşan bir dengeye kısmen kavuştuğu söylenebilir. Berlin duvarının yıkılması ve S.S.C.B'nin dağılmasından sonra tek kutuplu bir istikamete sürüklenen dünya 2001 yılında Newyork'ta bulunan ikiz kulelere hava korsanlarınca kaçırılan uçaklarla çarpılması ve ikiz kulelerin dev bir çelik yığını olarak yanıp yerle bir olması sonucunda tek kutuplu tek merkezli global bir dünya ekolojisi oluşmuştu. (YEŞİLBAĞ, 2002)

Bu gün gelinen noktada nükleer silahlar askeri manada birçok büyük devlette ve hatta gelişmekte olan devletlerde bile mevcuttur. Mevcut dehşet dengesi içinde ekonomi, ticaret, terörizm gibi asimetrik güçler kullanarak veya bölgesel savaşlar, askeri güç kullanma yoluyla küresel kapital ve yönetim merkezinin değişmesi ve çeşitlendirilmesi de mümkün olmamıştır.

Bir grup elit ve yüksek sermaye grubuna göre; 2.Dünya Savaşı'ndan sonra savaşı geçiren uzunca bir dönemden sonra artan dünya nüfusu büyük bir tehdit oluşturmaktadır. (Dixon, 2010)4'ncü sanayi devriminin hızla geliştiği 2000'li yıllar sürecinde genom (biyoteknoloji) ile birlikte yapay zeka (smart teknoloji) de devasa boyutlarda gelişmeye başlamıştır.

Çin- Rusya-ABD ekseninde 3.Dünya Savaşı'na doğru gidişin emareleri ve gergin ticaret savaşları ve vekaleten yürütülen savaşlar ve Kuzey Kore üzerinden füze denemeleri aralıklarla sürerken birden bire 2019 Kasım ayından itibaren Çin'in Vuhan kenti orijinli bir Corona virüs salgını yayılmaya başlamış ve kısa sürede bu salgının etkileri tüm dünyayı sarmıştır.

Corona virüs salgını doğal bir pandemi mi yoksa laboratuvarlarda üretilen biyolojik bir silah mı? Peki bu virüsü dünyaya yayan kişi ya da kişiler kimlerdir? Amaçları sadece para kazanmak mı yoksa güç savaşları mı oynuyor? Başlangıçta virüsten özellikle yaşlıların ve kronik hastalığı olanların etkileniyor olması, kültürümüzün değiştirilmek istenmesi anlamına mı geliyor? Sanal bir çağa mı geçiyoruz? Türkiye yeni bir dijital değişime nasıl ayak uyduracak? Ülke olarak nasıl önlemler almamız gerekiyor? (Çiftçi Abdullah, 2020) Ayrıca; koronavirüs'ün "*Dijital Dünyaya Entegre*" için "*sosyal öncü bir deney*" olduğunu iddia eden Stratejist Abdullah Çiftçi, "Korona virüs nedeniyle dünyada ciddi bir panik ve korku var. Dünya, Blockchain tabanlı dijital topluma geçme evresinde. İnsanların davranışları ve alışkanlıkları değişiyor. İnsanlar evlerine kapanıyor, el sıkışırken çekiniyor, ayaklarını tokuşturarak selamlaşanlar var. Para kullanımı ortadan kalkıyor. Yani, "*dünya yeniden dizayn ediliyor diyebiliriz*" ifadelerini kullandı. (Çiftçi Abdullah, 2020)

Çiftçi'ye göre "Olayın formatı, insanların bunu anlaması için müsait değil. Bunu çözmek için, ileri düzey bilim ve teknoloji bilgisi, aynı zamanda tarih, mitoloji, finans ve paranın tarihi bilgisi lazım.

İnsanların mevcut bilgisi bu durumu anlamaya yetmiyor. Daha filozofik bir bakış açısı lazım. İnsanlar bilimsel olarak çok alt dalda uzmanlaştığı için bütünü yakalayamıyor, parça içinde kaybolup gidiyor. Dünyada şu anda çok ciddi bir panik ve korku var. İnsanların davranışları ve alışkanlıkları değişiyor. İnsanlar evlerine kapanıyor.

Bugünkü 21. Yüzyıl toplumu, yani 4. Sanayi Devrimi toplumu, tarihten bugüne kadar gelen alışkanlıkları, kültürü, dini, dili, alfabeyi, yaşam şeklini ve insan fitratını değiştirebilecek nitelikte. diye konuştu. (Çiftçi Abdullah, 2020)

Yine başka bir bilim insanı; "Fransa'da, önce Paris'teki Pastör Enstitüsü daha sonra Almanya'daki Robert Koch enstitülerinde ön çalışmalar yapılmış ve daha hazırlanan yeni virüs ABD'ye götürülerek bu ülkenin laboratuvarlarında güçlendirilmeye çalışılmıştır. Daha sonra da bir askeri ekip bu virüsü uçakla Çin'e götürerek bu ülkenin Vuhan eyaletinde güçlendirmeye devam edildikten sonra yeni virüs burada bırakılarak, dünyaya dağıtım operasyonu Çin devletinin sırtına yüklenmiştir" demiştir.

Bundan başka, Rusya Ulusal Acil Çocuk Cerrahisi ve Travmatoloji Enstitüsü Direktörü Leonid Roşal, Forbes dergisine verdiği demeçte yeni tip koronavirüs pandemisi nedeniyle oluşan durumu analiz etti ve şöyle dedi: "Her ülkenin bu tür bir hastalığa hazır olmadığına görüldüğünü" ifade etti ve "Virüs sınır tanımıyor ve kapsamını öngörmek mümkün değil. Özellikle insanların davranışı sorun teşkil ediyor. Yurtdışına seyahat eden iki doktor Rusya'ya enfeksiyonu getirdi" ifadesinde bulunmuştur.

Kovid-19 pandemisinin oluşturduğu durumu analiz ettiğinde bunun bir biyolojik savaş provası olduğunu gördüğünü anlatan Roşal, "Bu virüsün insanlar tarafından üretildiğini söylemiyorum. Bunun için yeterli dayanak yok ve ayrıca ben bir virolog değilim. Ancak bu, ülkenin biyolojik güvenliği de dahil olmak üzere sağlık sisteminin dayanıklılığına yönelik bir test" ifadelerini kullandı. SSCB döneminde biyolojik güvenlik yapısının en üst seviyede inşa edildiğini ve Çin'deki sistemin de buna göre oluşturulduğunu kaydeden Roşal, "Ancak bu sistemi kısmen yitirdik. Şu anda bu sistem bir testten geçiyor" diye de ifadesini sürdürdü.(www.ntv.com.tr)

Bilim insanlarının açıklamaları birbiriyle tam örtüşmese de hepsinde anormal yayılma hızı ve dünya genelinde bu pandemiden 200 000 bine yaklaşan ölümler kuvvetli bir şüphe yaratmıştı.

Bu minvalde, kafaları karıştıran bir açıklama, doğrusu bir tartışma konusu da ABD Başkanı Trump'ın bir dönem danışmanlığı yapan Roger Stone'dan geldi. Stone katıldığı bir programda ilginç iddialar ortaya atarak attı. Şöyle ki; New York Post'ta yer alan habere göre Stone küresel bir soruna dönüşen corona virüs salgınının yaratılmasında Bill Gates'in parmağı olabileceğini iddia etti. (https://www.ntv.com.tr, 2018).Bill Gates'in bu meselelerle ilgili çok önceden verdiği konferanslar, salgının ne zaman biteceğine dair yaptığı sürekli açıklamalar, salgının bilişim teknolojilerinin ve insanlara çip yerleştirme hususlarının önünü açması ve iddiada bulunan şahsın süper bir gücün başkanlığını yapan şahsın danışmanlığını yapmış olması açıklamanın kuru sıkı bir komplo teorisi teşhisiyle insanlığın vicdanını rahatlatılabilir mi?

Bu arada, İsrail vatandaşı olan Dany Shoham'ın ortaya attığı iddiaya gelince, bu iddia da herkesi şoke etti. Eski istihbarat subayı Dany Shoham'un iddiasına göre virüs, gizli silah programına bağlı bir laboratuvarla ortaya çıkmıştı. Shoham, Vuhan'da bulunan Viroloji Enstitüsü'nün, (Çin'in en gelişmiş virüs araştırma laboratuvarı) ölümcül virüslerle çalışılabilecek tek yer olduğunu ve bu enstitünün, Pekin'de bulunan gizli biyolojik silah programı ile bağlantılı olduğunu iddia etti. Shoham, "Enstitüdeki bazı laboratuvarlar muhtemelen biyolojik silahların araştırma ve geliştirme kısmı için en azından teminat için kullanılıyordu. Ancak Çin'in ana tesisi olarak kullanılmıyor" dedi. Biyolojik silahlar üzerindeki çalışmaların ikili sivil- askeri araştırmanın bir parçası olarak yürütüldüğünü ve kesinlikle gizli olduğunu belirten Shoham bunların birbiri ile bağlantılı olabileceğini ve virüsün bu gizli silah programlarında ortaya çıkabileceğini iddia etti.

Tıp bilimi, vüroloji ve kimya bilimiyle uğraşan bilim adamları % 90 olarak doğal bir pandemi olarak gördükleri bu salgınla kendilerini mücadeleye ve bu virüsü tanımaya ona karşı aşı geliştirmeye adanmışken.Bir kısım stratejist, tarihçi, istihbaratçı, tecrübeli bilim insanı ise bu kadar süratle yayılan ve dünyayı etkisi altına alan pandeminin biyo savaş olmasa da ihmaller sonucunda ortaya çıkan bir biyo terör olduğu iddiası arkasında da güçlü bir şekilde durmaktadır. (SEYHAN & SARI)

Bu zaman zaman ortaya atılan biyolojik silah iddialarına önceleri sessiz kalan Çin Büyükelçiliği sözcüsü,İsraili istihbarat subayının bu iddialarına ise cevap verdi: İddiaları yalanlayan Çin, “biyolojik silahlara sahip olmadığını” açıkladı (<https://www.haberler.com/israilli-istihbarat-subayindan-koronavirusle-12861877-haberi>, 2020).

Şimdi biz bugünden 11 yıl öncesine gidelim. 2009 yılında New York'ta yayınlanarak dünyanın geleceği ile ilgili olarak gündeme gelen “ Yedi ölümcül senaryo “ isimli kitabın içinde yer alan senaryolardan birisi olarak kitabın üçüncü bölümünde incelenen konu “PANDEMİC”tir. Bu bölümde dünyanın geleceği için tehlike arz eden ve tehdit yaratan 7 konu ayrı ölümler biçiminde ele alınmakta ve yakın bir gelecekte ortaya çıkacak bir virüs aracılığı ile dünya nüfusunun azaltılmasının planlandığı açıkça dile getirilmektedir. Gelecekte dünyayı yok edebilecek senaryoları ele alan bu kitapta, Pakistan'ın çöküşü, Çin'in dünyaya saldırısı, ekonominin iflası, küresel bir savaşın çıkması Amerika'ya büyük bir iç savaşın gelmesi, kıyamet senaryosunun gerçekleşmesi ile birlikte, bir de PANDEMİC başlığı altında, bir virüs örgütlenmesi ile dünyanın başına yeni bir biyolojik savaş belasının örülmesi anlatılmaktadır. On iki yıl önce yazılmış olan bu kitabın üçüncü bölümünde virüs saldırısı üzerinden insanlığın büyük bir biyolojik savaşa doğru sürüklendiği anlatılırken, böyle bir durumun çok yakın bir zaman dilimi içinde gerçekleşeceği belirtilmektedir. Böylesine bir bilimsel çalışma aracılığı ile biyolojik tehdidin dünya kamuoyuna açıklanmasına rağmen, hiçbir devletin ya da uluslararası kurumun harekete geçerek önlem almaması yüzünden, dünya bugün çok büyük bir biyolojik savaş tehlikesi ile karşı karşıya kalmıştır. Andrew Krepinevich isimli araştırmacı tarafından kaleme alınan ilgili kitabın adı “7 Ölümcül Senaryo”dur. New York'ta basılan kitap bütün dünyaya dağıtılmış ama büyük virüs tehdidi bu kitapta açıklanmasına rağmen gerekli önlemler alınmamıştır. Son olaylarda uluslararası görev sahibi olan Dünya Sağlık Örgütü'nün de geride kalarak gereken önlemleri alamadığı hayretle izlenmiştir . (Çeçen , 2020.)

Kitabın ilgili üçüncü bölümü incelediğinde çok yakın bir zaman dilimi içinde dünyayı büyük bir pandemi tehlikesinin beklediği kamuoyunun bilgisine sunulmaktadır.

Şu an Corona saldırısında en çok insan kaybını ABD'nin vermesi üzerinde bütün dünya ülkelerinin artık bir düşünmesi gerektiği açıktır. Normal olarak Amerikan yaşam biçimini tümüyle ortadan kaldıracabilecek böylesine bir virüs salgını karşısında süper güç olarak ABD'nin daha hazırlıklı olması ve fazla insan kaybını kesinlikle önlemesi gerekirdi. (Çeçen , 2020.)

Dünya literatüründe karşılıklı yıkımı kaçınılmaz kılacak çok da maliyetli olan özellikle nükleer kitle imha silahları ve konvansiyonel güçlü teknolojik silahlar yerine siber ve biyolojik kimyasal saldırılar yasalarla yasaklanmış olmasına rağmen maliyeti düşük etkisi büyük ve hızlı olmasından dolayı büyük devletlerce ilgi gösterilen bir sahadır. (FM Chemical, Biological, Radiological, and Nuclear Operation, 2020)

Ayrıca “Big Data” sahipleri güç merkezinde olan silah ve sanayi şirketlerinin ve ulusal güç merkezlerinin yerine “Bilgi ve robot teknolojilerinin” hakim olmasını istemektedirler. (Çeçen , 2020.)

2.BİYOLOJİK SAVAŞ, BİO TERÖR, BİYOLOJİK SİLAH/AJAN NEDİR?TARİHİ SEYRİ NASILDIR?

A)Biyolojik Silahların Tanımı ve Özellikleri

“Biyolojik silah olarak mikroorganizmaların kullanılmasının avantajları:

1. Etki alanının geniş olması: Biyolojik silah ajanları uygun meteorolojik koşullar ile çok geniş alana yayılabilmektedir. (YEŞİLBAĞ, 2002)
2. Kolay ve büyük miktarlarda üretilebilmeleri ve depolanabilmesi,
3. Düşük maliyetle üretim: Bir km²'de ki kişilerin %50'sini etkileyen doz (LD50) baz alınarak maliyet hesaplandığında, konvansiyonel silahlar 2000 \$, nükleer silahlar 800 \$, kimyasal silahlar 600 \$, biyolojik silahlar 1 \$' a mal olmaktadır Bu nedenle biyolojik silahların “Fakirin Atom Bombası” olarak tanımlanması yanlış değildir. (FM Chemical, Biological, Radiological, and Nuclear Operation, 2020)

4. Kullanımların kolay olması ve kullanılıp kullanılmadıklarına karar vermenin zorluğu: Zirai ilaçlama uçağı, helikopter, tekne veya kamyonet gibi kolaylıkla bulunabilen araçlara yerleştirilebilen sprey cihazları ile biyoterörizm (Berdal, 2020) amacıyla ortama kolayca verilebilirler. Biyolojik silah ajanları aerosol şeklinde ortama verildiğinde, renksiz, kokusuz, tatsız olması ve mikroskopik boyutu (ideal olarak, 1-5 µm çapında) nedeniyle farkedilemezler. Bu özellikleriyle solunum yoluyla akciğerlerin en uç bölgelerine hızla ulaşabilirler. Etkilerinin ancak kuluçka süresinin sonunda görülmesi nedeniyle etkene maruz kalanlar, semptomlar ortaya çıkana kadar hedef olduklarının farkına bile varamazlar ve bu arada salgın yayılmış olur.

5. Yüksek hastalık ve/veya ölüme neden olma potansiyeli: Az miktarının dahi büyük kitleleri etkilemesi ve oldukça fazla sayıda insanda hastalık ve/veya ölüme neden olabilmesi, biyolojik ajanların en önemli özellikleridir.

6. Dış ortam koşullarına dirençlilik: Örneğin şarbon sporunun toprakta 40 yıldan daha uzun süre kalabilmesi, dış ortam koşullarına oldukça dirençlidir.

7. Bazı etkenlerin insandan insana bulaşması: Örneğin veba, çiçek, kanamalı ateş gibi biyolojik silah ajanları insandan insana bulaşarak salgın oluşturabilir. Böylece silahın hedef aldığı kitleden çok daha büyük bir kitleyi etkilemesi mümkün olmaktadır (kullanıldıkça çoğalan başka bir silah yoktur).

8. Üretimle Günümüzde Dünya Sağlık Örgütü (DSÖ), Birleşmiş Milletler (BM), Kuzey Atlantik İttifakı Örgütü (NATO) ve Biyolojik Silahlar Konvansiyonu gibi kuruluşlara göre 43 mikroorganizma (15 bakteri, 24 virüs, 2 mantar ve 2 parazit) biyolojik silah olarak geliştirilme ve kullanılma potansiyeline sahiptir. rinde antibiyotik, aşı, gıda ve yem üretim teknikleri gibi genel teknolojinin kullanılması nedeniyle üretimlerinin ve kamuflejının çok kolaydır.

9. Kitleler üzerinde panik etkisi yaratması ve sağlık sisteminde çökmeye neden olması sayılabilir.

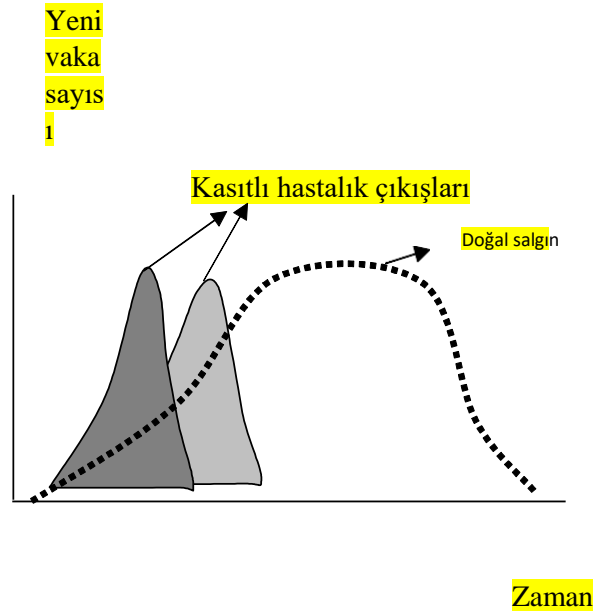
10. Biyolojik silah üretimi amacıyla üzerinde çalışıldığı tespit edilen, biyolojik silah olarak kullanılan veya kullanılma potansiyeline sahip olan önemli mikroorganizmalar ve toksinleri, ABD Hastalık Kontrol ve Önleme Merkezi (CDC) tarafından yayılım ve kullanım kolaylığı, oluşturacağı hastalık ve ölüm sayısının şiddeti ve kullanılma olasılığına dayanarak çok etken, etken ve düşük etkenli biyolojik ajanlar olarak üç gruba ayırarak değerlendirmişlerdir.

Tablo 1. Biyolojik Saldırı Amacıyla Kullanılabilecek Ajanlar ve Kategorizasyonu

Kategori		Ajanlar	Özellikleri
A	•	<ul style="list-style-type: none"> Variola major (insan çiçeği-smallpox) <i>Bacillus anthracis</i> (antraks) <i>Yersinia pestis</i> (veba) <i>Clostridium botulinum</i> toksini (botulizm) <i>Francisella tularensis</i> (tularemisi) Filoviruslar (Ebola, Marburg) Arenaviruslar (Lassa fever, Arjantin hemorajik fever vb) 	<ul style="list-style-type: none"> Ortamda kolay yayılabilmesi ve bireyler arasında kolaylıkla nakledilebilmesi Yüksek mortalite ve halk sağlığını tehdit potansiyeli Halk arasında panik ve sosyal karışıklıklara neden olması Halk

				sağlığı açısından özel hazırlıklar gerektirmesi
B	•	•	<ul style="list-style-type: none"> • <i>Coxiella burnetti</i> (Q fever) • <i>Brucella</i> spp (brusellozis) • <i>Burkholderia mallei</i> (ruam) • Alfaviruslar (Venezuela ensefalomyelitisi, eastern ve western equine ensefalomyelitisi) • Risin toksini • <i>Cl. perfringens</i> epsilon toksini • <i>Staphylococcus</i> enterotoksin B ? <i>Salmonella</i> spp ? <i>Shigella dysenteriae</i> ? <i>Eschericia coli</i> O157:H7 ? <i>Vibrio cholerae</i> ? <i>Cryptosporidium parvum</i> 	<ul style="list-style-type: none"> • Kısmen kolay yayılım • İlimli bir morbidite, düşük mortalite • CDC'de ek teşhis olanaklarına ihtiyaç duyması
C	•	•	<ul style="list-style-type: none"> • Nipah virus • Hantaviruslar • Tick-borne ensefalitis ve hemorajik- fever virusları • Sarı humma • Multidrug-resistant tüberküloz 	<ul style="list-style-type: none"> • Elde edilebilir olması • Üretimi ve yayılımının kolay olması • Yüksek morbidite ve mortalite potansiyeli • Halk sağlığını tehdit potansiyeli

* Khan ve ark.'ndan (13) adapte edilmiştir, ? İşaretli etkenler gıda veya su ile yayılabilirler, CDC : (Üstün & Özçiftçi, 2020)



Şekil 1. Doğal ve Kasıtlı Hastalık Çıkışlarına Ait Muhtemel Epidemik Eğriler

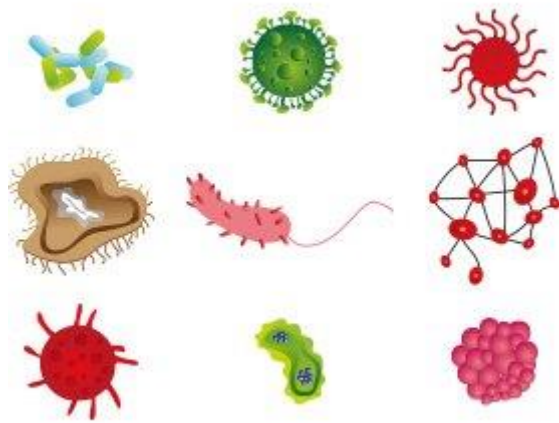
Epidemik eğriler bir fikir veriyor olsa da kesin olarak "kasıtlı hastalık çıkışına" işaret etmez. Çünkü benzer eğriler gıdalardan kaynaklanan salgınlarda da gözlenebilir. Bu noktada değerlendirilmesi gereken epidemiyolojik ip uçlarına şu örnekleri verebiliriz

- 1) Yoğunlukla belli özellikleri taşıyan bir popülasyonda, yaygın, beklenenden şiddetli seyreden ve büyük ihtimalle inhalasyon yoluyla bulaştığı gözlenen bir hastalık çıkışı
- 2) Belli bir hastalığın doğal şartlarda daha önce hiç görülmediği bir coğrafi bölgede, mevsimsel olarak beklenenden farklı bir sezonda veya doğal vektörlerinin bulunmadığı bir ortamda gözlenmesi
- 3) Bir veya daha fazla hastalığın birden fazla odakta aynı anda simultane olarak ortaya çıkması
- 4) Zoonotik hastalık salgınları
- 5) Farklı antimikrobiyel dirençlere sahip veya daha önce gözlenmemiş varyant ve suşlardan kaynaklanan salgınlar (Durumu., 2020)
- 6) İstihbarat faaliyetleri ile elde edilen veriler veya şüpheli grupların üstlendiği olaylar
- 7) Askeri olanaklar (bomba, füze vb) veya bireysel yollarla (enjektör vb) müdahale (Üstün & Özçiftçi, 2020)

B.Biyolojik Silahların/Ajanların Sınıflandırılması

Bir saldırıda kullanılacak biyolojik ajanlar bakteriler, virüsler ve toksinler olmak üzere üç temel gruba ayrılabilir. (Burgu & Akça, 2003)

1) Bakteri



Resim 1

Bakteriler tek hücreli mikroorganizmalardır. Yeryüzünde ortaya çıkmış ilk yaşam formları arasındadır ve günümüzde toprak, hava, deniz, okyanus, asitli sıcak su kaynakları, radyoaktif atıklar, yer kabuğunun derinlikleri gibi birçok farklı ortamda mevcuttur. Besin döngüsünde çok önemli rollere sahip olan bakteriler gibi bazı bakteriler yararlı; bazıları zararsız; bazıları da kolera, şarbon, veba gibi hastalıklara sebep olan hastalık yapıcı zararlı bakterilerdir.

Biyolojik saldırılarda kullanılma potansiyeline sahip bakteriler ve neden oldukları hastalıklar (parantez içerisinde belirtilmektedir) şunlardır:

- *Bacillus anthracis* (Şarbon)
- *Yersinia pestis* (Veba)
- *Vibrio cholerae* (Kolera)
- *Francisella tularensis* (Tularemi)
- *Coxiella burnetti* (Q ateşi)
- *Brucella spp.* (Bruselloz)
- *Burkholderia mallei/pseudomallei* (Ruam/Melioidoz)
- *Rickettsia prowazekii* (Tifüs)
- *Chlamydia psittaci* (Psittakoz)
- *Salmonella spp.* (Salmonellosis (Bağırsak Enfeksiyonu))
- *Shigella dysenteriae* (Dizanteri)

Bakterilerin oluşturduğu enfeksiyonların tedavisinde antibiyotikler kullanılmaktadır.

2) Toksin



Resim 2

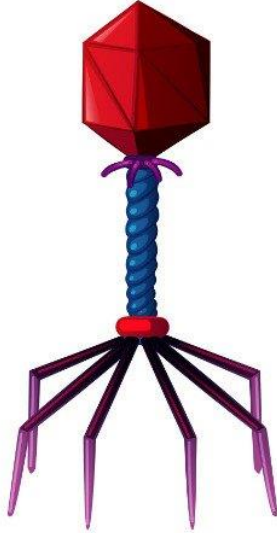
Bakteri, bitki, mantar ya da hayvan gibi canlı varlıkların ürettiği zehirli maddelerdir. Bu maddeler; temas halinde veya vücut dokuları tarafından absorbe edildiğinde hastalık yapma özelliğine sahiptirler. Diğer kimyasal zehirlerden farklı olarak bu maddeler canlılar tarafından üretilmektedir. Diğer biyolojik ajanlardan farklı olarak da cansızdırlar, dolayısıyla kendilerini çoğaltamazlar. Toksinler bu sebeplerle hem kimyasal hem de biyolojik ajan olarak değerlendirilmektedir. (<https://www.afad.gov.tr>)

Biyolojik saldırılarda kullanılma potansiyeline sahip toksinler şunlardır:

- *Clostridium botulinum* toksini
- Risin
- *Clostridium perfringens* toksini

- Stafilokokal enterotoksinler
- Saksitoksin
- Trichothecene mycotoxin
- Aflatoksin

3)Virüs



Resim 3

Canlı hücreler dışında çoğalamayan, sadece protein ve genetik malzemeden oluşan çok küçük parçacıklardır. Canlılığın bütün özelliklerini taşımadıkları için bazı bilim insanlarınca cansız sayılan bu varlıklar bitkileri, hayvanları, mantarları ya da bakterileri enfekte ederek çoğalırlar. (Burgu & Akça, 2003) Virüsler AIDS, grip, suçiçeği, kuduz gibi insanda birçok hastalığa sebep olurlar. Antibiyotiklerden etkilenmedikleri için virüslerin neden olduğu hastalıkların tedavisi zordur. Bu hastalıklardan korunmanın en iyi yolu, bağışıklık kazanmak için aşılmadır.

Biyolojik saldırılarda kullanılma potansiyeline sahip virüslerin yol açtığı hastalıklar şunlardır:

- Çiçek hastalığı
- Ebola
- Venezuela doğu ve batı at ensefalomyeliti
- Lassa
- Kırım-Kongo kanamalı ateşi
- Sarıhumma

C.Biyolojik Ajanların Yayma Yolları

Biyolojik ajanların yayılmaları; havaya püskürtülmeleri, insanlara hastalığı taşıyan hayvanların enfekte edilmesi ya da su ve gıdaların biyolojik ajanlarla kirlenmesi ile sağlanabilir.

1)Aerosollar:

Püskürtme yapan her türlü pompalı materyallerdir.

2)Su ve gıdaların kontaminasyonu (kirlenme):

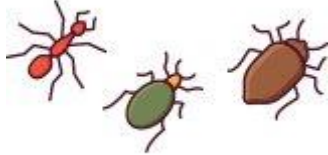
Ortak kullanılan göl gölet ve nehirler gibi durgun veya akarsuların kirletilmesidir.

3)İnsandan insana bulaşma:

Kapalı veya açık mekânda hapşırarak veya öksürmek yoluyla havaya damlacıklar bırakmak kuvvetli nefes üfleme veya dokunsal temas yoluyla virüsü taşıyan bir insandan başka bir insana bulaşmasıdır.

4)Hayvanlar:

Bazı hastalıkların yayılmaları pire, fare, sinek, sivrisinek ve besi hayvanları gibi hayvanlarla sağlanabilmektedir. (<https://www.afad.gov.tr>)



Resim 4

D.Biyolojik Savaş:

Askeri veya sivil sahada, biyolojik ajanların yol açtığı anormal yaygın gizemli hastalık belirtilerinin ve ölümlerin ortaya çıkması. Normal olmayan hayvan sürüleri, sulardaki ve yiyeceklerdeki tat ve kokuların bozulması gibi açıklanması güç olaylar bulunulan bölgenin biyolojik veya kimyasal bir taarruza maruz kalmasına literatürde Biyosavaş, Biyolojik/Kimyasal Taarruz denir. (FM Chemical, Biological, Radiological, and Nuclear Operation, 2020)Bu derhal hiyerarşik yönetime rapor edilir.Bu yöntemler Nükleer saldırılar hariç, kimyasal ve biyolojik saldırılar tarihte normal klasik savaşın bir tamamlayıcısı olarak kullanılırdı. Bugün ise kuantum fiziğindeki, gen ve genom teknolojisindeki gelişmeler, ulaşım ve bilişim teknolojisinin hız ve çeşitlilik kazanması sonucunda, kimyasal ve biyolojik saldırı yöntemlerinin, tekbaşına savaşların ve dünya sosyolojisinin kaderini değiştirebilecek stratejik boyuta ulaştırdığını rahatlıkla söyleyebiliriz. (TERCAN , 2020)

Ancak Biyolojik deneyler biyolojik ve kimyasal saldırılar Cenevre antlaşmasının 49'ncü maddesine göre uluslararası alanda insanlığa karşı işlenen suçlar kapsamında sayılmasından da hareketle, günümüzde daha çok biyoterör veya kaza hallerinde bu tür bir durumun ortaya çıkabileceği değerlendirilmektedir. (<https://www.afad.gov.tr>)

E.Biyoterör

Başka bir deyişle biyoterörizm; insan, hayvan ve bitkilerde hastalık veya ölüm oluşturmak amacıyla mikroorganizmaların ya da toksinlerinin kullanılmasıdır. İdeolojik, politik veya dini amaçlarla toplumu korkutmak, halkta panik oluşturmak (indirekt yoldan *Sağlık Hizmetlerinde Tıbbi Cihaz Sektörü 205* hükümetleri de paniğe sevk etmek) hedeflenir. Biyoterörizm, terörizmin sinsi bir boyutudur. Biyolojik savaş ajanlarının terörist saldırılarda kullanılması, bu ajanların kolay elde edilebilmeleri ve düşük maliyetle büyük miktarlarda üretilebilmeleri, genel güvenlik sistemlerince saptanamamaları ve kolayca taşınabilmelerine bağlanabilir.

Elibüyük'e (2008) göre biyolojik savaş; kasten insanları, hayvanları ve bitkileri öldürmek ya da hasta etmek amacıyla toksinlerin veya mikroorganizmaların kullanılmasıdır. Bağdatlı ve Çeviker'e (2009) göre; canlıların, başka bir canlının çeşitli ürünlerince (toxin, antijen vb. virülans faktörleri) veya direkt olarak başka bir canlı tarafından hayatının sonlandırılmasında etkin olan biyolojik silahın, kullanılması ile oluşan durum biyolojik savaş veya biyoterörizm olarak adlandırılır. Biyoterörizme maruz kalan çevrede tüm canlılar eskisinden daha kötü ve zor şartlarla baş başa kalmaktadırlar. Biyolojik silahların kullanımı, insanları veya insanların mevcudiyetinde önemli role sahip kaynakları (su, hava, bitki, toprak vb.) yok etmesinin yanında, ayrıca kimi zaman da fiziksel, biyokimyasal ve biyolojik süreçler

sonunda ortaya çıkan çeşitli bozulmalar sonucu kullanılamayacak hale getirebilmektedir. Tüm bunların sonucunda, o çevredeki insanların hayatlarında kalıcı değişiklikler, genel depresyonlar ve panik havası oluşturmaktadır.

F) Tarihteki Biyolojik Saldırıları

Dünya tarihinin yazdığı üzere biyolojik ve kimyasal silah ve savaşların tıpkı askeri silah ve savaşlar gibi saldırı ve yok etme amaçlı kullanılabilmesi sayesinde, mikroplar ve bakteriler de en öldürücü silah olarak her zaman gündeme gelebilmiştir .

Tarih Biyolojik ajanların milletler ve halklar tarafından silah olarak kullanımının uzun bir tarihi vardır. Biyolojik silah kullanımına ilişkin örnekler Kartacalı general Hannibal'ın Bergamalı düşman gemilerini alt etmek için yılan zehiri kullandığı milattan önce 190 yıllarına kadar tarihlendirilmektedir. Tarihsel açıdan salgın hastalıkların oluşturduğu bazı büyük pandemilere bakıldığında bunlar arasında; en önemlileri aşağıda tabloda gösterilmiştir. (<https://www.afad.gov.tr>)

Tablo 2 Traihte Gerçekleşen Biyolojik Saldırıların Tarihçesi

Tarih	Biyolojik Saldırıları
MÖ 184	Yunan gemi güvertelerine içi zehirli yılanlarla dolu testilerin atılması.
MS 1155	Kral Barborosa tarafından İtalya Tortona'daki su kaynaklarının insan cesetleriyle kirletmesi
MS 1346	Tatar ordusunun günümüzde Ukrayna sınırlarında yer alan Feodossia (Kaffa) kentini kuşatmaları esnasında mancınıklı vebadan ölmüş insan ve hayvan cesetleri atması. Takip eden yıllarda
1348-52	oluşturarak 25-30 milyon insanın ölümüne neden olmuştur .
MS 1495	İspanyollar tarafından Napoli'de Fransızlara lepralı hasta kanı ile karıştırılmış şarapların verilmesi
MS 1500'ler	İspanyol Kaşif Pizarro' n u n Orta ve Güney Amerika'da yerlilere çiçek virüsüyle kontamine kıyafetleri vermesi.
MS 1650	Polonya ordusu tarafından kuduz köpek salyası içeren kürelerin düşman birliklerine atılması.
MS 1710	Rus ordusu tarafından Estonya'da İsveçlilere karşı vebalı cesetlerin kullanılması.
MS 1763	Kuzey Amerika'da İngiliz ve Fransızlar arasındaki savaşta F r a n sa tarafında yer alan K ı z ı l d e r i l i l e r e , Kuzey Amerika'daki İngiliz Kuvvetlerinin komutanı olan Sir Jeffrey Amherst tarafından çiçek hastalarının yattığı hastaneden al ın a n kontamine battaniyeler ve mendillerin dağıtılması. Bu uygulamadan ilham alan kaptan Ecuyer 1763'de çiçek virüsü ile enfekte mendil ve battaniyeler hediye ettiği Ohio Vadisi yerlilerinde büyük bir epidemiyi çıkmasını sağlamıştır. Bu epidemiyi daha önce çiçek virüsüyle hiç karşılaşmamış ve immunolojik açıdan tamamen korunmasız durumdaki yerli kabilelerde büyük kayıplara neden olmuş ve %90'a varan ölümler görülmüştür.
MS 1797	Napolyon İtalya seferinde kuşattığı Mantua Şehrinde yaşayanlara sıtma hastalığı bulaştırmaya çalışmıştır
MS 1800'ler	Kuzey Amerika'da beyaz yerleşimcilerin yerli halka çiçek ya da kızamık nedeniyle ölmüş kişilerin battaniyelerini dağıtması.
MS 1862	Amerikan İç Savaşı sırasında çiçek ve sarı humma virüsü içeren kıyafetlerin dağıtılması

(Üstün & Özçiftçi, 2020)

Toplumlar ve hükümetlerin biyolojik silahlara karşı gösterdikleri tepkiler uluslararası bir anlaşmanın ortaya çıkmasını sağlamıştır.1972 yılında, genelde Biyolojik Silahlar Anlaşması olarak adlandırılan “Bakteriyolojik ve Toksin Silahlarının Geliştirilmesi, Üretimi ve Depolanması ve İmhası”na dair anlaşma 79 ülke tarafından imzalanarak 1975 yılında yürürlüğe girmiştir. Bugün 170’den fazla ülkenin taraf olduğu bu anlaşma biyolojik ajanların saldırı amaçlı geliştirilmesi, üretilmesi, stoklanması, temin edilmesi ve kullanılmasını yasaklamaktadır. Ancak bu anlaşmaya rağmen dünyamızda biyolojik silahların kullanımı devam etmiştir.

Sovyetler Birliği de bu anlaşmayı imzalamış olmasına rağmen şarbon ve çiçek virüsü gibi ajanları üreterek ve stoklayarak geniş bir biyolojik silah programı yürütmeye devam etmiştir.

Biyoterörizm günümüzde giderek büyüyen bir tehdittir. Bugün 17 ülkenin aktif olarak yürüttüğü biyolojik silah programı olduğu düşünülmektedir. Bir saldırıyı önceden tahmin etmek ve engellemek çok zordur. Bu yüzden olası bir saldırıya hazırlıklı olmak ve saldırı gerçekleştiğinde alınması gereken kişisel tedbirleri bilmek çok önemlidir.

Biyolojik silahların da bir başka kategori olarak savaş literatüründe yer alması yüzünden, sonraki dönemlerde de benzeri biyolojik savaş senaryoları gündeme getirilerek uygulanmıştır. Bir anlamda normal silahlardan daha kolay kullanılan bu malzemeler günümüze kadar her türlü savaş senaryosu içinde yerlerini almışlardır . (Kılıç, 2006) Devletlerin büyüyen güçlenmeleri sonucunda silah alanında da yenilikler yapılmış ve bakteri, virüs ya da parazitlerin yaşam yeri olarak büyük laboratuvarlar, zamanla biyolojik ve kimyasal silah üretim merkezleri konumuna gelmişlerdir. Şarbon, çiçek ve sıtma gibi hastalıkların mikroplardan bulaşması yüzünden laboratuvarlar hem silah hem de mikrop üretim merkezleri olarak devreye girerek bugüne kadar emperyalistlerin güdümünde etkinliklerini sürdürebilmişlerdir. Hastanelerin ötesinde Tıp Fakültelerinin ve Üniversitelerin gelişmesiyle mikrop alanındaki bilimsel çalışmalar son yıllarda hızla artmış ve güçlü mikrobiyoloji enstitülerinde insan toplumlarına yönelik mikrobik tehditlerin ortadan kaldırılması doğrultusunda önemli bilimsel gelişmeler elde edilmiştir. Çağdaş dünyanın en ileri alanlarından birisi olarak ortaya çıkan ilaç sektörü, bugünün dünyasını ayakta tutan önemli alanlardan birisi konumuna gelmiştir.

Laboratuvar çalışmaları hastalıkları önleyecek güçlü ilaçlar üretebildiği gibi, yeni hastalıklara yol açacak güçlü zehirler ve bakterileri de biyolojik silah olarak mikrobiyoloji biliminin verileri doğrultusunda devreye sokabilmişlerdir.(<https://www.afad.gov.tr/kbrn/biyolojik-silahlarin-tarihcesi>)

Evet, tekrar özetle ifade etmek ve altını çizmek gerekirse, Berlin Duvarı’nın yıkılışından ve Doğu bloku’nun 1991 yılında çöküşünden beri bir türlü dengesini bulamayan Dünya, insanların doyumsuz ihtiyaçlarının neden olduğu çalkantılı bir süreç yaşıyor. Bölgesel çatışmalar, terör olayları, “büyük hayaller” peşinde koşan liderler, silahlanma yarışı, sonsuz iktisadi büyüme fantezisi ve bunu canlı tutmak için ısrarla körüklenen tüketim, gezegenimizin kaynaklarının artan bir şiddetle sömürülmesi, bunun neticesinde ortaya çıkan gelir dağılımı adaletsizliği, çevresel felaketler, egemenlerin çıkarlarına hizmet etmekten başka bir işe yaramayan ve büyük krizlerde etkisiz kalan küresel yönetim mekanizmaları, kitlesel göç hareketleri, hastalıklar, açlık, temiz suya erişimde yaşanan büyük sorunlar kaynakların yetersizliği ve hızlı nüfus artışı her türlü kaos ortamını da birlikte getirmiştir.

Dünya bilişim teknolojisinin de baş döndürücü bir şekilde gelişmesiyle birlikte yaşanan büyük kaoslar ve güç dengelerindeki kaymalar, dinsel fanatizm bloklardaki çatlaklar ve üstüne küresel felaketlerin de bir biri peşisıra eklenmesi sonucunda her türlü negatif fikirlerin soyuttan somuta geçtiği ve geçmeye de devam edeceği bir küresel köye dönmüştür. Dünya sanki dijital orta çağa girmiş gibidir.

SONUÇLAR VE BULGULAR

Araştırma ve incelememizden çıkardığımız sonuç. Coronavirüs zaten büyükbaş hayvanlarda, yarasalarda vb benzer bazı canlılarda mevcut bir virüsdür. Virüs canlılarda yaşayan, kimyasal ve doğal yöntemlerle mutasyona uğrayabilme özelliği vardır. Hayvanlarda bağışıklığı güçlendirici antikor geliştirme

yönünde pozitif katkısı olan türleri de vardır. Ancak sığırlarda ağır ishal vakalarına da yol açtığı görülmektedir.

Bu coronavirus (Covid-19) ajanı laboratuvarlarda bir grup bilim adamı tarafından mutasyona uğratarak ve farklı virüslerle birleştirilerek gelişmiş bir biyolojik ajana/silaha dönüştürülmüş de olabilir ya da kaza eseri ortaya çıkmış yarasalardan da insana bulaşmış olabilir. Nitekim ciddi bazı laboratuvarlar ve bilimsel dergilerdeki makaleler Covid-19'un yapay yollarla geliştirilmiş olamayacağına dair bilimsel kesin hükümler vermektedir.

Yapay koşullarda ve doğal koşullarda da kendi kendine mutasyona uğrama özelliği olan bu Covid-19 ile başa çıkacak tek bir model aşının da yeterli olabilirmi? Bir dizi aşı familyası mı gerekebilir? Bu da tartışılabilir.

Bugün Çin de böceklerdeki hücrelerden elde edilmeye çalışılan, fare ve maymunlarda denemesi başarıya ulaşan aşı da insan vücudunda covid geçirmiş gibi antikor üretmesine sebep olmaktadır. Yani covid-19 virüsünü dolaylı olarak yenmek üzerine bir aşıdır. Dünya Sağlık Örgütü'nün 24.08.2020 tarihinde üzerinde çalışıldığını açıkladığı bir dizi aşı sorunu büyük ölçüde çözebilir.

Corona (Covid -19) daki çoklu RNA ve DNA ların değişkenlik özelliği ile bulunan aşının ancak bir önceki dalgada mutasyon geçirmemiş virüsün aşısı olması sonucunu getirecektir. Sonbaharda başlayacak İkinci dalgada vücut bağışıklık sistemini güçlendirecek aşılarda COVID-19'a önemli bir darbe vurulacak ancak virüs ortadan kalkmayacaktır. Ancak korkutuculuğunu git gide kaybettirecektir, maske, mesafe ve hijyen yöntemiyle de yayılma sürati düşürülecektir. Ölümler bağışıklık sistemi çok düşük kimselerde olacak, hayatını kaybedenlerin oranları makul oranlara inecektir.

Önemli olan tüm devletlerce, ihtiraslı zengin bir takım kimselerle beraber bu kişilerin ayarttığı moral değerlerini kaybetmiş genetik alanındaki bazı bilim adamlarını ve bunların yapmakta olduğu gizli çalışmalarını insanlık namına izlemek ve deşifre etmek, önlemektir.

Yoksa bu kontrolden çıkabilen virüsler tüm insanlığın yaşamı başta olmak üzere tüm moral değerlerini ve insan olmanın onurunu ayaklar altına almaya devam edecektir.

Ulusal devletler aklı; zenginliğine, teknolojisine, robotlara ve uzayda olabilecek yaşam formlarına güvenerek dünya gezegeni için Tanrıyı kıyamete zorlamaya çalışan kliklerle mücadele etmelidir.

TARTIŞMA

Bu süreçte, Virüs'ün yapısı nedir? Bulaş imkanı ve yolları nasıldır? Virüsten nasıl korunulur? Tedavi yolları nelerdir? Koruyuculuk vasfı yüksek olan aşı geliştirme hususları, Tıp ve Biyo-Kimya alanının ve de Virolojinin, genetik Biliminin konusudur. Ancak salgının çıkış nedeni, sosyal, siyasal, dini, ekonomik ve teknolojik etkileri Semptomları nelerdir? Bu sorularla da sosyal bilim uzmanları veya disiplinlerarası bir kurul ilgilenmelidir.

Salgınla ilgili olarak kesin tahliller ve analizler çıkış sebepleri tam olarak ortaya konuluncaya kadar her türlü iddia ve savlar bilim çevrelerinde kabul gören hipotezler olmalıdır. Konuya bilimsel dayanağı olmadan önyargı içinde yaklaşmak, tarihi gerçekler, bunca haber ve internette makale varken yapay biyolojik saldırı iddialarına kapıları kapatmak; bilimin gelişmesinde temel olan "şüphe ve sorgulama" kavramlarına hizmet etmemektedir.

Komplo teorisi yaftalaması; bilimsel analiz, iddia, savların, önünü kapamaktadır. Tarihi gerçeklerin üstünü örtmeye yaramaktadır. Birçok bilimsel verilerin işaret ettiği, gerçekleşmiş olan veya gerçekleşebilecek olgular için önlem almamamızı sağlamaktadır.

SONUÇ

Yukarıda sıraladıklarım, insanın neden halen müteakmil bir tür olmadığını idrak etmemiz için yeterli olur sanırım. Bugün dahi kudretimizin her şeye yeteceğine inancımız o kadar yüksek ki, gezegenimizin kaynaklarını bencilce tüketmekten çekinmiyor, utanmıyoruz. Neticede doğa veya art niyetli gruplar bizden intikam almak için çeşitli enstrümanlarını devreye sokuyor. İşte bugün içinde bulunduğumuz pandemi bunlardan biri: ancak elektron mikroskobu ile görülebilen küçük bir virüs, kendini gezegenin hakimi sanan kibirli insanlığı esas duruşa geçirdi.

Covid-19 küresel salgını ile dünyada ortaya çıkan manzara gösterdi ki, küresel bir savaşın içindeyiz. Gelişmiş ülkeler başta olmak üzere birçok ülkenin sağlık sistemi çöktü, siyasi birliklerin üye destek mekanizmaları felç oldu, halklar panik içinde evlere kapandı, İtalya Başbakanı durumun İkinci Dünya Savaşı'ndan sonraki en büyük kriz olduğunu ifade etti, ordular sokaklara indi, semavi dinlerin kutsal mekanları ve ülkelerin sınırları içindeki ibadethaneler kapatıldı. Ülkelerin silahlı kuvvetleri sokağa indi. (Erkekoğlu & Gümüşel, 2020)

Artık bildiğimiz dünyanın sonuna geldik, bir süredir sancılarını gözlemlediğimiz paradigma değişimi pandeminin etkisiyle hızlanacak gibi görünüyor: Küresel yönetim mekanizmalarını işlevsel hale getirmek kısa vadede mümkün görünmüyor, bu yüzden devletlerin salgına ilk tepkileri içe kapanmak oldu. Pandemi süresince bir yandan ulusal sınırlar içinde mücadele etme motivasyonu sürecek, diğer taraftan sağlık, gıda tedariki gibi az sayıdaki temel alanda yeni küresel işbirliği olanakları aranacaktır. Ancak ayrıca bu belirsizlik ortamı uluslararası ilişkilerde tansiyonu yükseltme ve sıcak çatışmaları tetikleme potansiyeline sahiptir.

Virüs çok hızlı yayılıyor; bunu doğal bir pandemi olarak görmenin, yani sadece tıbbi yöntemleri kullanarak çözüm üretmeye çalışmanın, süreci yönetmek için yetersiz kalacağına dair emareler var. Dolayısıyla orduların ve istihbarat teşkilatlarının sahada daha aktif olacağını beklemeliyiz.

Salgından ötürü dijital araçların kullanımındaki motivasyon ve adaptasyon dikkate değer. İlk bakışta olumlu bir gelişme gibi gözükse de bu iklim, zaten tartışmalı pek çok noktası olan dijital dönüşümü, Dünya için dijital distopyaya dönüştürme potansiyeli taşıyor.

Dünya'nın pandemiyle birlikte ortaya çıkan gelişmeleri ciddiye alarak stratejik orta akıl mekanizması oluşturması, yeni bir topyekün mücadele doktrini geliştirmesi ve vatandaşlarıyla şeffaf bir iletişim ağı kurması gerekiyor. Çünkü her şey daha yeni başlıyor.

Biz çalışmamızda Covid-19'un süreç ve sonuç açısından sadece biyolojik bir silah olup olmadığını değil aynı zamanda online ve smart teknolojinin gelişmesine yarayan, yalnızca dijital şirketlerin borsada daha da hızlı yükselmesine yol açan ve canlıların yaşadığı değil robotların, bilişim sistemlerinin ve yapay zekaların "big data"nın hakim olduğu bir dünyaya işaret fişegi gönderdiği sonucuna vardık. Süreç ve sonuçları açısından biyolojik bir toz bulutu kaldıran Covid-19; dünya sosyolojisinde ikinci "big bang" etkisi yapacak büyük kırılmalara yol açacak, blokları ve kurum kuruluşları silikleştirecek ve gittikçe ve artan bir ivme ile dünyayı yeniden formatlayacak güce sahip olacağı çıkarımını yapabiliriz. (Dixon, 2010)

Bu nedenle; COVID-19 pandemi tecrübesi sonrasında, biyogüvenlik alanının giderek önem kazanacağı değerlendirilmektedir. Bu çerçevede, üç ana eğilim önemlidir.

Öncelikle, insanlığın biyo-medikal araştırmalar, biyo-teknolojiler, moleküler biyoloji gibi sahalarda kaydettiği ilerleme, devletlerin ve devlet dışı grupların patojenleri askeri amaçlarla kullanmasına daha çok olanak sağlamaktadır. Bugüne kadar laboratuvar ortamında yapılan çeşitli deneyler (*örneğin, 2001 yılında, çiçek hastalığına neden olan variola virüsünün aşya dayanıklı suşunun üretilmesi; 2002 yılında bilim insanlarının polio virüs sentezlemeleri*), düşmanca niyetlere sahip olan ellerde mevcut teknolojik ilerlemenin ne denli tehlikeli olabileceğini göstermiştir.

İkinci husus, ekolojik dengedeki bozulmalardan ötürü, daha önce görülmeyen bazı bulaşıcı hastalıkların ortaya çıkması, bilinen kimi enfeksiyon hastalıklarının da geri gelmesidir. Bu kategoride değerlendirilen SARS, 2000'li yılların başında 30'ya yakın ülkede 8,000 kişiyi enfekte etmiş ve 774 insanın ölümüne sebep olmuştur. Son olarak, küreselleşme durumu daha da karmaşık hale getirmektedir. SARS, 2003 yılında Çin'de ortaya çıkmasının ardından ilk 24 saatte 5 ülkeye, 2 ay içinde de 20 ülkeye sıçramıştır (Gregory, D. Koblenz, International Security). COVID-19 ise çok daha yaygın bir patern izlemiştir. Özetle, önümüzdeki dönemde devletlerin biyo-güvenlik alanında son derece aktif olmaları beklenmelidir. Bu sonucun, uluslararası silahsızlanma rejimlerinin belki de en zayıf halkası olan biyolojik silahların yayılmasının önlenmesine ilişkin ne gibi gelişmelere yol açacağı, üzerinde ciddiyle durulması gereken bir konudur.

COVID-19 salgını, kırılğan ya da başarısız devletler riskini de beraberinde getirmektedir. Özellikle merkez ülkeler, Türkiye, Avrupa vb. yakın ve orta süreçte savunma planlamasının, bazı kritik sistem ve alt-sistemlerde tedarik zincirinin beklenmeyen şekilde aksayabileceği göz önünde bulundurularak

detaylandırılması ve alternatiflenmesinde yarar olduğu düşünülmektedir. Ülkeler sadece ülke içindeki salgın hastalık tehditlerini değil, askeri stratejik ilgi sahasındaki biyoterrorizm ortamını da yakından takip etmelidir. Bu nedenle, tıbbi istihbarat (MEDINT – medikal istihbarat) yeteneklerinin geliştirilmesi ve sivil asker işbirliği planlamalarının ve tatbikatlarının ülke, ülkeler ve uluslararası kuruluşlar (Nato, AB vb.) çapında uygulanması zaruridir.

Bütün bu tartışmaların sürdüğü ortamda çok güçlü bir şekilde şu sonucu çıkartabiliriz. Covid-19 süreci önceden bir kısım bilim adamı, yazar ve yazılımcı tarafından öngörülmüş bir süreçtir. Sürecin yapay olarak laboratuardan çıkıp çıkmadığına dair kesin bir yargıya varamamakla birlikte, bugün bu teknoloji vardır. Ve Covid-19 süreci kesin olarak biyolojik bir savaş gibi yürütülmüş, sonuçları itibarıyla da biyolojik bir dünya savaşında elde edilebilecek felaketler, değişimler, dönüşümler kazanımlar ve kayıplar yaşanmıştır. Yaşanmaya da devam ediyor, bir zaman daha devam edecektir.

TEŞEKÜRLER

Öncelikle Covid-19 saldırısı çıktığı günden bugüne kadar fedakarca görev yapan bu uğurda hayatlarını hiçe sayan tüm dünyadaki sağlık çalışanlarına teşekkür ederim. Makalemi yazmamda gözlem ve tecrübeleriyle fikir veren tıp doktoru kızım ile eşine ve veteriner hekimliğinde eğitim gören oğluma teşekkür ederim.

ÖNERİLER

Ulus devletler siber sınırları dahil kara deniz ve hava sınırlarını kontrol altına almalıdır.

- Biyolojik ve kimyasal terör saldırıları konularında fazlaca savunma uzmanları yetiştirilmelidir ve bu konularda bilim insanları halkı bilinçlendirmelidir.
- Dünya genelinde insanlar maske mesafe ve hijyen konularında bundan sonra çok bilinçli bir eğitimden geçerek değişmez ortak bir kültüre sahip olmalıdır.
- Ortak kullanım alanlarında virüslü insanları tespit edebilecek, derhal test yapılmasını sağlayacak cihazlar geliştirilmeli ve yaygınlaştırılmalıdır.
- Koruyucu aşı çalışmaları konusunda uluslar ortak bir çatı veya platform altında çalışmalarını sürdürmelidir.
- Milletler arasında tecrübe ve bilgi paylaşımında sansürler kaldırılmalıdır.
- Hava alanları limanlarda ve garlarda okullarda, büyük alışveriş merkezlerinde, ibadet yerlerinde, futbol stadlarında biyolojik durumlara karşı çok detaylı ve salgın alarm durumunun seviyelerine göre önlemler alınmalıdır.
- Sağlık çalışanlarının ve hastanelerin durumu iyileştirilmelidir.
- Evde bakım hizmetleri yaygınlaştırılmalıdır.
- Karantina kampları ve otelleri hizmete geçirilmelidir.
- Medya eğitim kanalları kriz yönetim merkezleri ve bilim kurulları tarafından toplumu aydınlatmaya devam edilmelidir.
- Dünya sağlık örgütü başta olmak üzere Birleşmiş Milletler dahil büyük krizlerde yetersiz kaldıklarından dolayı reform yapılmalıdır.
- Online ticaret ve uzaktan eğitim vb sektörleri geliştirilmelidir. Robot teknolojisinin kullanımında ve temassız para kullanılması konularında küresel birliktelik sağlanmalıdır.
- Biyolojik ve kimyasal ajanları kullandığı tespit edilen devletlere, kurum veya kişilere insanlık suçu kapsamında ağır yaptırımlar uygulamaya konulmalıdır.

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STUDENTS' PERCEPTION TOWARDS EDUCATION IN THE NEW NORMAL**Shubankar MAHAPATRA**

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ABSTRACT

The unprecedented attack of the pandemic COVID 19 has brought forth a unique, challenging situation in front of the world, vis-a-vis India. Like in many countries, in India, the spread of this pandemic has jeopardised the country's ecological system. The ever-increasing trend of the pandemic has led to closure of all socio-economic activities. Education sector has also not been spared. Severe disruptions have taken place leading to huge academic losses. The students have been confined to their homes instead of attending to regular traditional classroom sessions in schools and colleges. In higher education too, online classes have been enforced as an alternative and the students have been forced to adopt virtual mode of learning and appear in online examinations. This has dealt a huge blow to the students, who are altogether experiencing a non-familiar teaching and learning environment. The authors have tried to delve into this problem of this new normal based on the online survey conducted through a structured questionnaire within few districts of West Bengal. The response obtained from the survey has reflected the perception of unique issues of the students' community.

Key words: Covid-19, New Normal, Disruptions in Education, Teaching Pedagogy, Learning losses, Students' Perceptions.

INTRODUCTION

The deadly and infectious disease Corona Virus also known as Covid-19 has deeply affected the global economy. This tragedy has also brought significant changes in teaching and learning pedagogy in the education sector, and this new change are likely to resonate across the education sector globally. The Covid-19 pandemic outbreak forced many schools and colleges to remain closed temporarily. Several areas are affected worldwide including India and a full ongoing semester has lost traditional class room teaching in schools and colleges in our country. The online classes are likely to continue in future, till the normalcy comes to our daily life. Various schools, colleges, and universities have discontinued in-person teaching. As per the assessment of the researchers, it is uncertain to get back to normal teaching anytime soon. As social distancing is the new rule of the present situation, which in turn discards the possibility of returning to traditional class room teaching in near future. The whole academic fraternity including the students' community are facing sea changes in new learning environment. Educational units are struggling to find options to deal with this challenging situation. These circumstances make us realize that scenario planning is an urgent need for academic institutions (Rieley, 2020). This is a situation that demands humanity and unity. There is an urgent need to protect and save our students, faculty, academic staff, communities, societies, and the nation as a whole. Several arguments are associated with e-learning. Accessibility, affordability, flexibility, learning pedagogy, life-long learning, and policy are some of the key issues related to online pedagogy. It is said that online mode of learning is easily accessible and can even reach to rural and remote areas. It is considered to be a relatively cheaper mode of education in terms of the lower cost of transportation, accommodation, and the overall cost of institution-based learning. Flexibility is another interesting aspect of online learning; a learner can schedule or plan their time for completion of courses available online. Combining face-to-face lectures with technology gives rise to blended learning and flipped classrooms; this type of learning environment can increase the learning potential of the students. Students

can learn anytime and anywhere, thereby developing new skills in the process leading to life-long learning. The government also recognizes the increasing importance of online learning in this dynamic world. During the severe outbreak of Corona Virus disease, virtual teaching and learning methodology can serve as panacea in this crisis time of Covid situation.

ONLINE LEARNING OR E-LEARNING

Rapid developments in technology have made distance education easy (McBrien et al., 2009). “Most of the terms (online learning, open learning, web-based learning, computer-mediated learning, blended learning, m-learning, for ex.) have in common the ability to use a computer connected to a network, that offers the possibility to learn from anywhere, anytime, in any rhythm, with any means” (Cojocariu et al., 2014). Online learning can be termed as a tool that can make the teaching–learning process more student-centred, more innovative, and even more flexible. Online learning is defined as “learning experiences in synchronous or asynchronous environments using different devices (e.g., mobile phones, laptops, etc.) with internet access. In these environments, students can be anywhere (independent) to learn and interact with instructors and other students” (Singh & Thurman, 2019). The synchronous learning environment is structured in the sense that students attend live lectures, there are real-time interactions between educators and learners, and there is a possibility of instant feedback, whereas asynchronous learning environments are not properly structured. In such a learning environment, learning content is not available in the form of live lectures or classes; it is available at different learning systems and forums. Instant feedback and immediate response are not possible under such an environment (Littlefield, 2018). Synchronous learning can provide a lot of opportunities for social interaction (McBrien et al., 2009). Amidst this deadly virus spread such online platforms are needed where (a) video conferencing with at least 40 to 50 students is possible, (b) discussions with students can be done to keep classes interesting, (c) internet connections are stable, (d) lectures are accessible in mobile phones also and not just laptops, (e) possibility of watching already recorded lectures, and (f) instant feedback from students can be achieved and assignments can be taken (Basilaia et al., 2020).

ONLINE TEACHING IS NO MORE AN OPTION, IT IS A NECESSITY

The major part of the world is on quarantine due to the serious outbreak of this global pandemic Covid-19 and therefore, many cities have undergone phases of lock down and even in the process of unlocking, the schools, colleges, and universities have not opened with the incessant rise infectious cases. The online teaching and online learning have turned into blessings like panacea for the crisis. The Corona Virus has made institutions to go from offline mode to online mode of pedagogy. This crisis will make the institutions, which were earlier reluctant to change, to accept modern technology. This catastrophe will show us the positive side of online teaching and learning. With the help of online teaching modes, we can contact a large number of students at any time and in any part of the world. All institutions must experiment different options of online pedagogical approaches and try to use technology more aptly. Many universities around the world have fully digitalized their operations understanding the dire need of this current situation. Online learning is emerging as a successful methodology amidst this chaos. Therefore, the quality enhancement of online teaching–learning is crucial at this stage. Online education in most of the Indian Institutions has increased exponentially after the Covid-19 outbreak. There was an overnight shift of normal classrooms into e-classrooms, that is, educators have shifted their entire pedagogical approach to tackle new emerging conditions and adapt to the changing situations. During this tough time, the concern is not about whether online teaching–learning methods can provide quality education, it is rather how academic institutions will be able to adopt online learning in such a massive manner (Carey, 2020). Resistance to change will not help any educational unit across the world. They will be judged on their pace to adapt to the changes in such a short period and their ability to maintain the quality. The reputation of educational units is on stake and under scrutiny. How well they behave and how well they maintain their quality of education amidst this crisis shows their adapting capabilities. The shift from face-to-face lectures to online classes is the only possible solution. Indeed, academic institutions would not be able to transform all of their college curricula into and online resource overnight. Distance, scale, and personalized teaching and learning are the three biggest challenges for online teaching. Innovative solutions by institutions can only help us deal with this pandemic (Liguori & Winkler, 2020). There is a requirement of a quick shift to online learning mode; therefore, the products by Google can be really useful under such problematic situations; they are (a) Gmail, (b) Google Forms, (c) Calendars, (d) G-Drive, (e) Google Hangouts, (f) Google Jam board and Drawings, (g) Google Classroom, and (h) Open Board Software (not a Google product, helps in recording meetings in the form of files). These tools can successfully be used as an alternative for face-to-face classes (Basilaia et al., 2020).

MATERIALS AND METHODS

The study is an empirical research involving online survey from the college students pursuing mainly under graduate and post graduate courses. The responses were collected from odd 500 students during the month of June-July, 2020. The online responses were collected from Institutions of Kolkata and surrounding areas. Then the data, so collected were analysed and findings presented in the study.

DATA SOURCE

It is based on primary data, interaction/interview of our respondents were taken for this survey using Google Form through structured questionnaires, in regard to know their perspective opinions.

SAMPLE POPULATION

A Sample of 500 respondents, to study their behaviour in few districts of West Bengal. Out of which 58% are male and 42% are female.

SAMPLE FRAME

Research was conducted through online mode like WhatsApp, Messenger, Instagram etc.

SAMPLING METHOD

This research was made using stratified random sampling method.

STRUCTURES QUESTIONNAIRE

Structured questionnaire specifies the set of response alternative and response format. A structured questionnaire may be multiple choice, dichotomous or a scale. Statistical tool utilised are pie chart and funnel.

SOFTWARE USED

Microsoft Excel is a commercial spreadsheet application written and distributed by Microsoft. MS-Excel was used to organize and analyse raw data collected from survey. It was also useful in making graphical representation of the organized data.

RESULTS

Results can be defined as the final outcome of some systematic examination, sequence, action etc expressing both in terms of quality and quantity of performance. It gives a bird-eye view of current scenario.

DATA ANALYSIS

For the purpose of finding out the effectiveness of “**Students’ perception towards education in the new normal**” 500 respondents were surveyed and following were the outcomes.

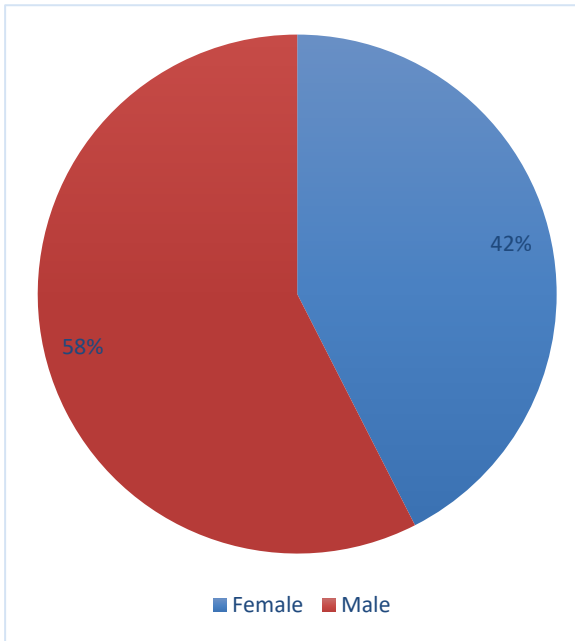


Figure 1: Gender based responses.

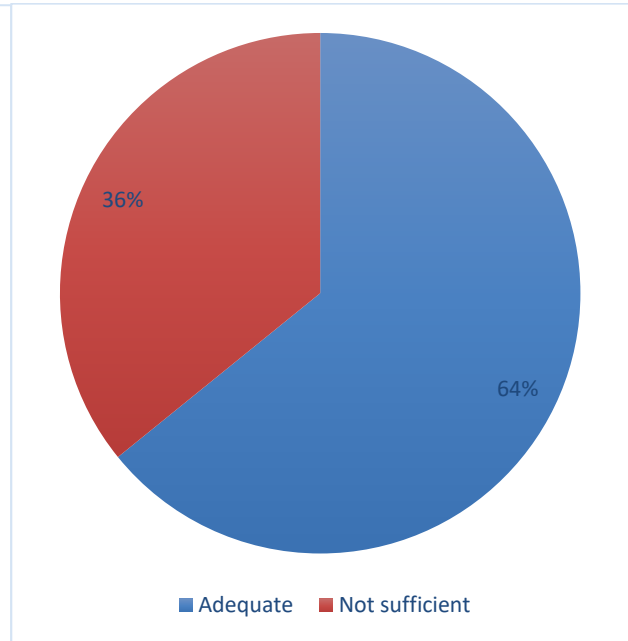


Figure 2: Feedback on virtual teaching methodology

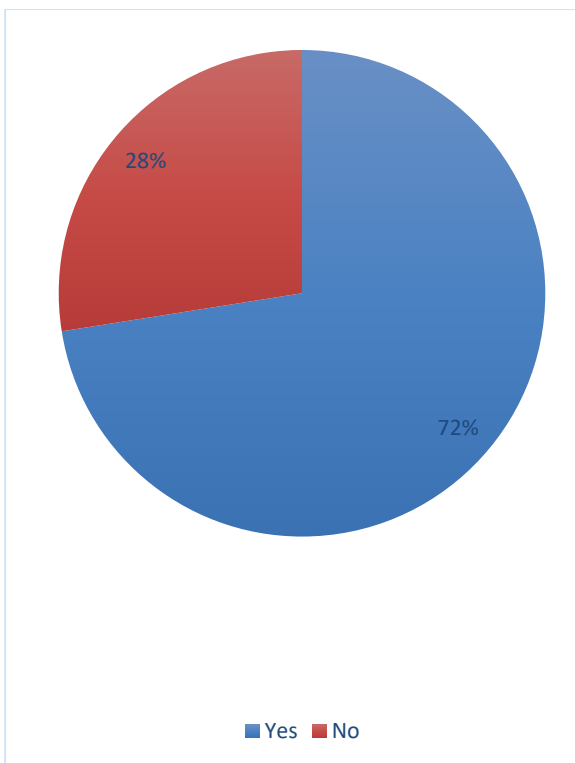


Figure 3: Feedback on students' preferences to virtual teaching pedagogy

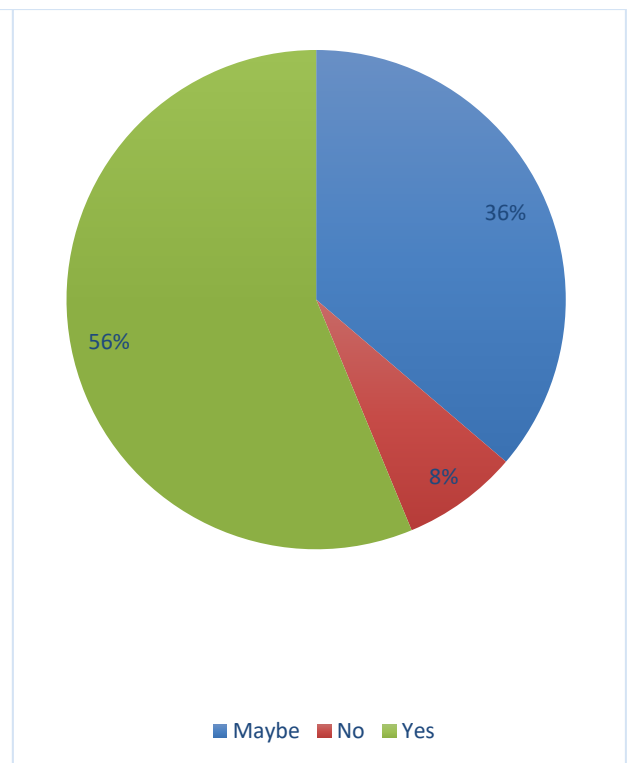


Figure 4: Whether students feel digital teaching is the correct option under Covid 19

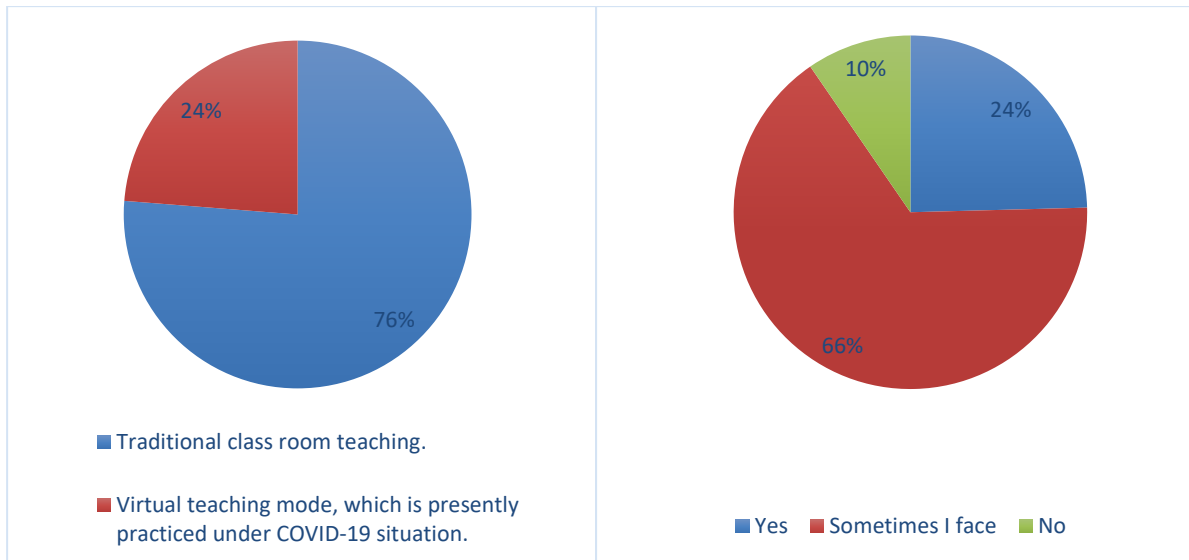


Figure 5: Feedback on teaching methodology

Figure 6: Responses regarding whether students are facing technical problems

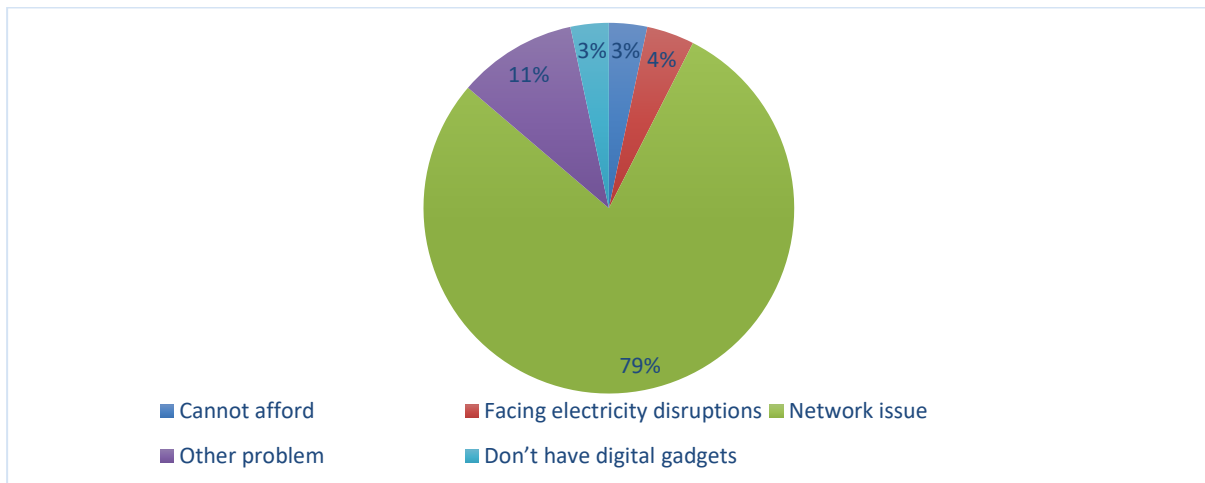


Figure 7: Responses facing multiple problems

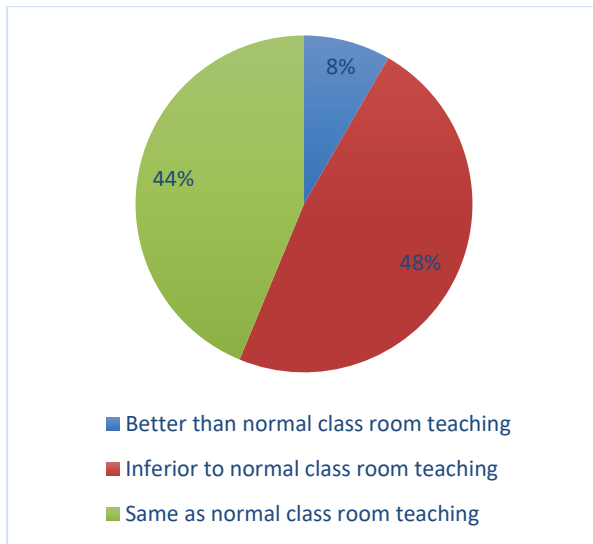


Figure 8: Feedback on virtual teaching quality

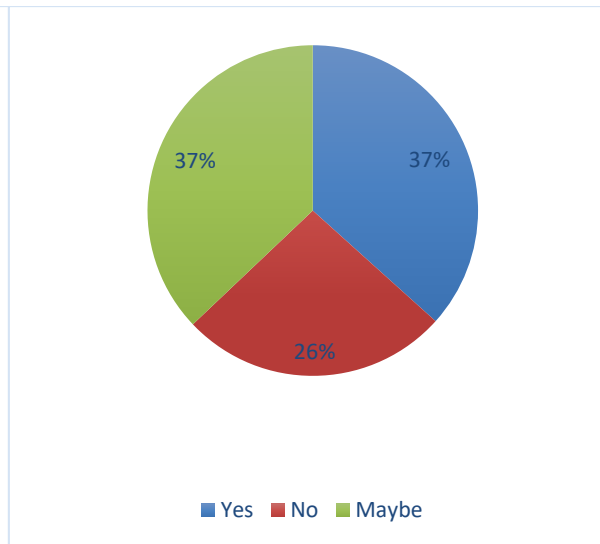


Figure 9: Feedback on Examination willingness

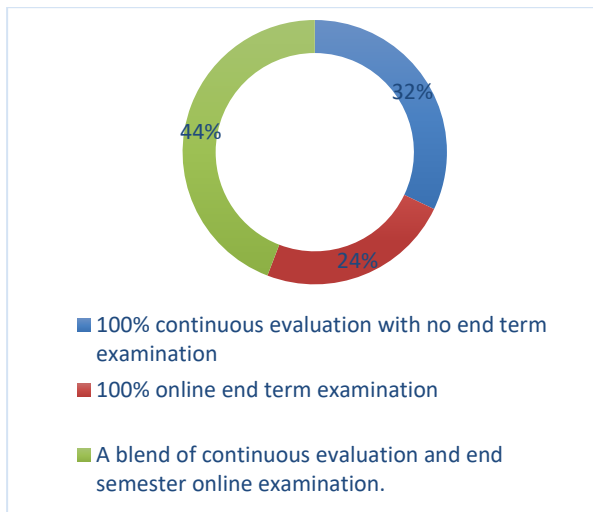


Figure 10: Responses on evaluation methods.

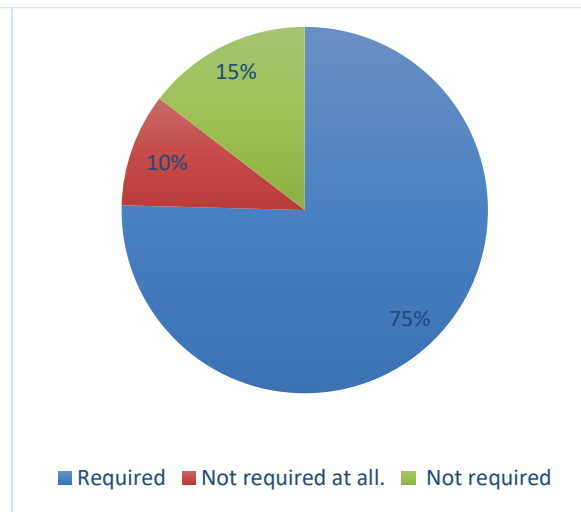


Figure 11: Feedback on various quizzes, webinar, Cultural and other programs the Institutes.

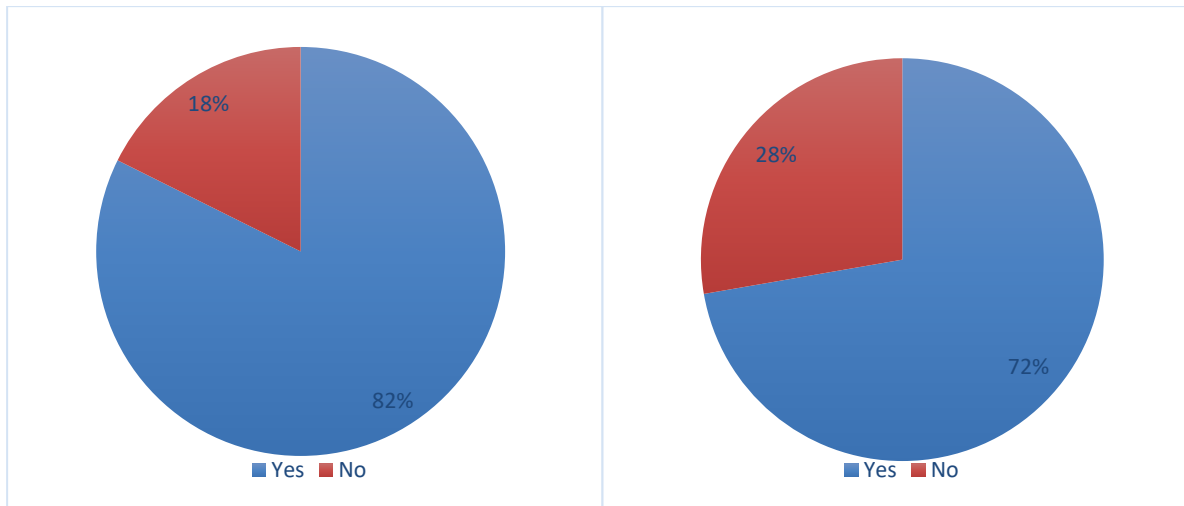


Figure 12: Responses on learning loss

Figure 13: Feedback regarding learning space

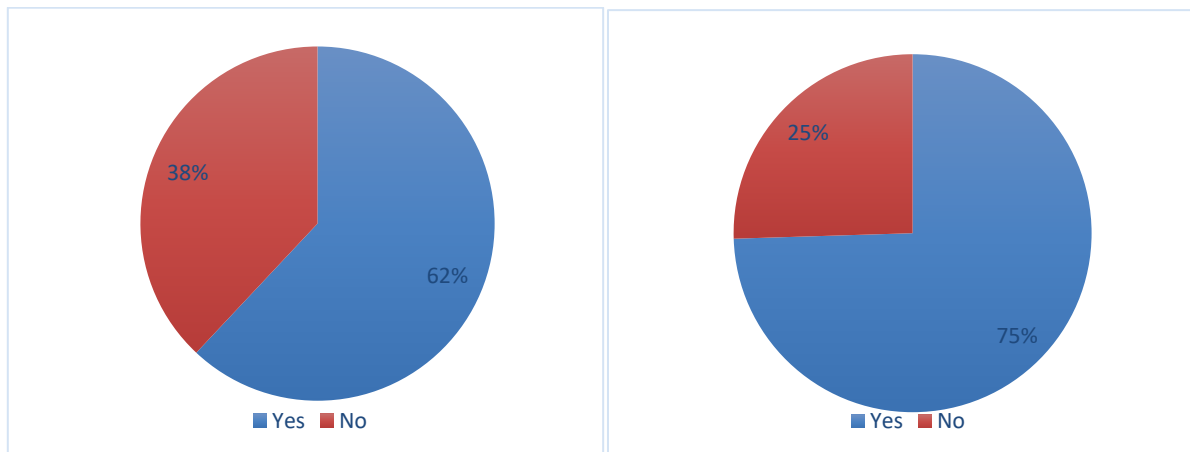


Figure 14: Responses on learning environment

Figure 15: Feedback on the impact of Pandemic

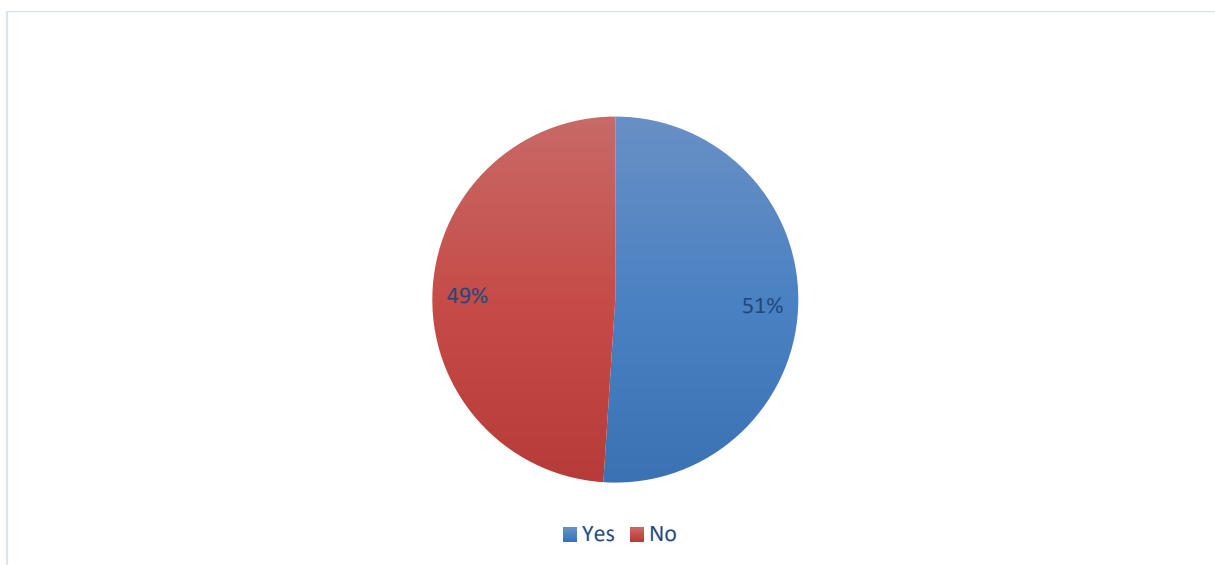


Figure 16: Feedback of the economic impact on studies

We furnish below the significant findings of our research:

- Most of the students express that the virtual teaching methodologies of their respective institutions are adequate under this COVID academic environment.
- More than 70% students like the virtual teaching techniques adopted by their institutions.
- Majority of the students' community feel that digital teaching techniques are the correct teaching option under this COVID situation.
- More than 75% students express their likeliness to virtual teaching pedagogy.
- Majority of the students report to facing technical problems, while joining virtual classes.
- Around 80% of the students admit that they face challenges of facing serious network issue while having fewer problems with regard to availability of electricity and digital gadgets.
- Regarding, teaching quality of the online mode, less than 10% of the students feel that online teaching quality is better than traditional class room teaching, while around 50% of the students feel that online teaching quality is inferior to traditional teaching quality. This is one of the major findings of the study and this is may be due to unfamiliarity to new teaching environment and inadequacy of the digital skills that still exist among the majority of the academic fraternity.
- Majority of the students express their willingness to appearing online examinations at the end of academic sessions.
- Around 44% of the students want combination of continuous evaluations and end semester online examination, while 33% of the students prefer continuous evaluation with no end term examination.
- Majority of the students like various webinars, online quizzes and other programs, conducted by their institutions during this Covid Pandemic situation.
- Around 82% respondents feel that there is a learning loss during the Covid'19 pandemic.
- Around 72% of the respondents confirmed that there was enough learning space for digital learning at their homes.
- A sizable section 38% of the respondents feels that there is no learning environment at their places.
- Around 75% of the respondents feel that the pandemic has economically hit their families.
- Almost half of the respondents' i.e.51% feels that negative economic impacts might have a heavy burden on their continuation of studies. These are serious findings of the present research.

DISCUSSION

Our suggestions enumerate the following based on the findings of the research:

- The institutions should continue to carry on digital education during this abnormal time of Corona virus pandemic.
- The teaching fraternity should try to enhance the online teaching skills and better delivery of lectures through online mode. The objectives of online teaching should be designed in such a way that students' participation gets increased.
- A blend of evaluation techniques with continuous assessment and end semester online examinations may be conducted.
- The institutions should continue to carry various webinars and other online events to bring innovations and remove monotony of the present academic environment.
- The network issues and other challenges may properly be given attention by the teaching community and administrative authorities of the institutions. The issues should be discussed with the suffered students and efforts should be made to reach feasible solutions.

CONCLUSION

The whole teaching environment is facing unprecedented challenges and abrupt changes. However, our struggle under the current situation should be continued with positivity and zeal to uphold the sustainable objectives and outcomes of the present academic activities. From our research, it is evident that the students are also paying respect and justification to the presently practised virtual teaching methodology under current COVID pandemic situation. The present situation demands proper address to the challenges of the digital pedagogy, being followed in almost all academic institutions in India. Surely, we can expect improved teaching quality and enhanced participation of the students' community to this newly adopted diffusion in teaching pedagogy. The present situation demands more synchronization with respect to policy makings, diffusion of new teaching methodologies, solving the present challenges and mutual address to these issues with active participation of students' community, Academic fraternity and institutional authority.

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THE IMAGE OF THE DRAGON IN AZERBAIJANI ARCHITECTURE AND ART

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ABSTRACT

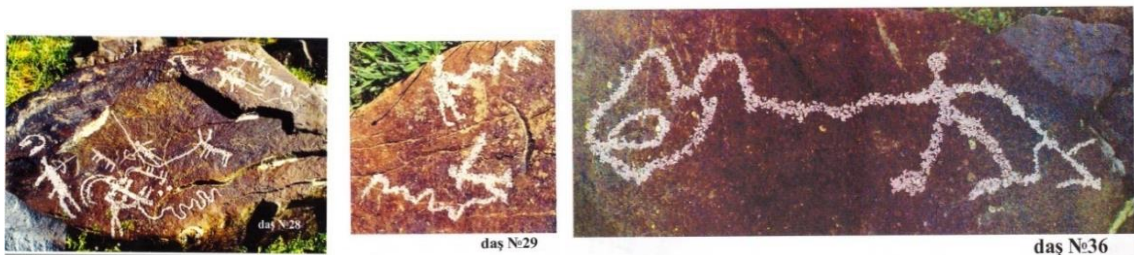
The indigenous inhabitant – Azerbaijanis-living nowadays in Azerbaijan Republic are inheritors of ancient states, which were important centres of world civilization. These states are Manna, Midia, Atropatena, Albania (the part of former Azerbaijan territory is placed in territory of Iran Islamic Republic now). In those ancient states urban culture developed, but in mountain and low-lying places the agriculture and cattle-breeding were spread widely. In big city-states Zoroastrism engendered. Engendering of Zoroastrism was connected with adoration to heavenly bodies. The animal and plant totems, shamanism was widely spread among simple peasants and it saved it's importance up to that time. The christianity, engendered at the beginning of our era, later Islamic world outlook was adopted in Azerbaijan. It became the reason of picturing of animals in new style.

Outstanding Azerbaijani archaeologists carried out very serious investigations in different regions of Azerbaijan. These pictures were fixed both on rocks and different works of plastic art since early Paleolith up to our days. Famous Russian historians of art Lukonin and Rudenko pointed, that "animal" style of Scythian art is generated from "animal" style, developed in Azerbaijani state Manna.

In the article the history and symbolics of different animals, such as sheep, horse, bull, goat, deer, lion, different birds e.g. peacock, turkey, owl, phantastic bird Phoenix, hunting birds eagle and falcon, serpent- dragon and other symbols is spoken about. These symbols were used in rock pictures, ancient ceramics works, in artistic metal works, national carpets and embroidery, gravestones, architectural decor very widely.

INTRODUCTION

In Azerbaijani art since Early Paleolithic age and late Stone Age (Neolith) in Gobustan, Gamigaya and Kelbajar many petroglyphs were fixed on the rocks. In these petroglyphs pictures of different animals, existed in Azerbaijani fauna are met, e.g. horse, lion, ram, goat, bull, and snake. After domestication of some animals in petroglyphs the black birds or kites, turkey, elements of -S- form, which were the symbol of water, dragons, ducks began to be pictured. As a result, the pictures of widely –spread animals were reflected in mythology also. Most of these pictures are connected with dragon.



Picture 1

So, in this article we would like to inform about the investigations, carried out in connection with the roots of dragon pictures, widely spread in Azerbaijani art, including midcentury miniature and carpet making.

It's known, that the type of dragon is widely spread in all national mythologies. According the scientific investigations of well-known experts (E. Dak) the engendering of dragon picture was connected with images of dinosaurs, which existed in Mesozoic era, 100 thousands years before human beings created. In mythes the dragons are represented as destructive and beneful animal. In different

countries all over the world dragon continued to be used in myths, tales, different spheres of art. According to antic tradition, dragon is the embodiment of force, which creates chaos in cosmos. In gnosticism dragon is represented as Uroboros, who ate the dragon tale and rules the alternation of year season. In christianity dragon is protector of Earth.

As for Bible, the dragon is symbol of Satan here. Pliny, Galen, Pascal and many other well-known historians expressed different opinions about dragon image. E.g. in ancient Parthia, Wales, Rome the daragon was considered as national emblem. In church Del Castello Sforzesko, erected in midcentury period in Milan (Italy) on gate the dragon is pictured gulping the human.



Picture 33

On the nose of vikings' ships also the dragon was pictured. ((sigils.ru/symbols/dragon.html)) In celtic beliefs the dragon was a symbol of highest authority and power. (www.symbolist.ru/ceatures/dragon.html). In ancient China dragon was one of symbol both of power, Emperor himself and natural phenomenon. E.g. the dragon was considered as symbol of water, clouds, rain, thunder, the spring itself. In general, in China the dragon is a symbol of abundant rain.

The image of dragon was widely spread in art of Turkic peoples also. Outstanding scientist Rempel L.I. accounted, that in Central Asia art the dragon was engendered as unit of horse and snake. That's why it's called "horse-dragon" or "hippokampa". It's head was long, it had long mane and tale. This tale reminds many-headed snake. In Central Asia such picture was found on ancient embroidery of I-II century b.c. Analogous picture of dragon was found in 1940 on limestone during archeological excavations in Dunotepe in Termez. Here dragon was pictured alike horrible gryphone. It has horns, curled ahead, the wings, rised upwards and it's left wing is protruded ahead.



Picture 2

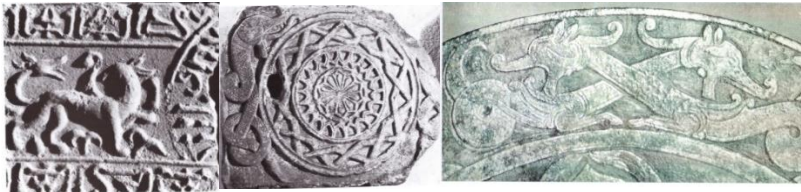
Well-known scientist Emel Esin in his book "Iconographic motives in Turkish art" retraced iconographic pictures from Central Asia till Ottoman Empire. Emel Esin discovered dozens of transformed forms of dragons in different spheres- architecture, masonry and others.



Picture 3

Ahmet Chaychi in his famous work "Pictures of Planets and Constellation in Anadolu art" gives detailed information about pre-Islamic Turkish astrology, Islamic Astrology, Seljuk astrology, their pictures of zodiac. The scientist wrote about signs of zodiac, their reflection in pictures of human being, animals, birds and dragons also. All these pictures, fixed in manuscript books, stones and porcelain are presented in Ahmet Chaychi's book also.

In museum Inje Minareli (Konya) on stone the picture of dragon is fixed. In museum "Topkapi" (Istanbul) the piece of Seljuk mirror with dragon picture is kept. Ahmet Chaychi analyses both mentioned dragon pictures in his book.



Picture 4

This fact coincide with the idea, expressed by many authoritative scientist all over the world. This idea is that "the initial knowledges about the heavenly bodies belonged to Turkic tribes". This idea is confirmed also by Polish scientist Yan Gevelyi also. While working on the heavenly map, Gevelyi among animals, designate the years, represents the dragon picture in Little Bear constellation. It's head reminds the bill of wild bird, but the body looks like python. In this work Polish scientist refered to "risale" (poem) about stars- "Ziji of Ulugbek", written in Samarkand by Ulugbek, the grandson of Great Tamerlane.

So, the image of dragon, which begins on late Stone age epoch (China, V millenium b.c.) is considered to be most ancient picture in human history. At first it was totem of tribe. Then, transforming gradually, it was pictured as creature with swine head and snake body. There is also another, very interesting imagination about dragon. According it the dragon can change it's appearance very often. Dragon can be invisible or diminish up to size of cocoon. While transforming, the dragon could get the appearance of camel with horns, his eyes reminds devil, rabbit or lobster eyes.

Picture 5



It's neck was covered by scales alike snake or fish, it has frog belly and cow ears ; it had lion feet and eagle leg. There are 80 cogs on it's waist. That dragon's hair remind horse mane, from his mouth the fire erupts. The dragon is always flying among clouds and units four main important elements in itself. E.g. China Emperor Yuan (1271-1368) had his own symbol- dragon with five fingers and hoofs. The others were considered as ordinary python.

The cult of dragon has very important position in Chinese mythological system. In China four sacred animals-dragon, tiger, Phoenix and turtle- stand particularly highly. The dragon is symbol of Orient and spring, Phoenix is symbol of South and summer, tiger is symbol of West and autumn, turtle is symbol of North and winter.

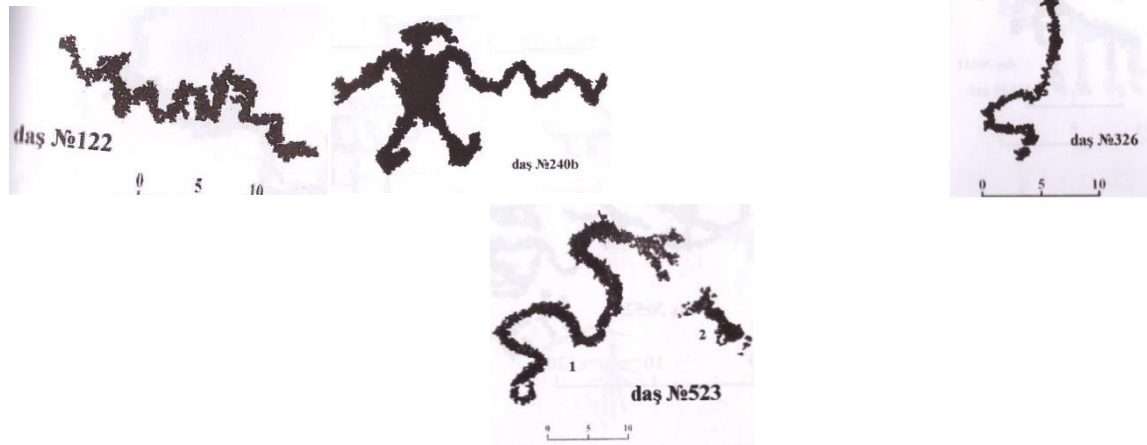
In Chine according the folk beliefs dragon was the holder of water element and presented the humidity to those, who was devoted to him. Dragon saved peasants from misfortune and countless accidents. In Chinese Gods hierarchy dragon took third position after Earth and Heavens.

Mahmood Gashgarli (XI century) in his reliable dictionary interpreted the word "dragon" as "big snake", "tremendous serpent". Mahmood Gashgari underlined very interesting fact- "dragon" year was marked by heavy fall of rain, abundance and predominance of boys bith. (**Qasqarli**) So, to Gashgarli's mind the larger size was the only difference between snake and dragon. "Mardushan" tribes, lived at one time in territory of Azerbaijan also worshipped to snake. They pictured their governors with snake on their shoulders. Sometimes, the Goddesses with human appearance also were pictured with snake. This fact is confirmed by picture of idol, kept in Cairo museum.



As for Azerbaijan, the snakes, pictured on rocks were found in Nakhchivan, in Gamigaya petroglyphs. In Western regions of Azerbaijan in III-II millenium b.c. the snakes were worshipped as totem. In Nakhchivan territory the name of mountain- “ Ilanlidag” (Snake mountain), connected with ancient beliefs is kept till nowadays.

Picture 6



Picture 7

Among Azerbaijani people, the attitude to snake is different. From one side, the snake is considered as protector of home, dwelling, of all property. The snakes leave as a rule as family. Such snakes are called “home snakes”. According the myth, exists in Azerbaijani folk creativity such snakes are seven brothers. According another legend, the snakes love the gold most of all, they like to sleep on gold. It’s the reason, that among people very interesting belief exists also - the snakes always gather in the places, where treasures are buried.

Besides, the snakes are the symbol of family happiness and health. That’s why, if anybody wanted to ruin one’s family, they killed the ‘home snake’ of that family. According the legends, the life of family, whose snake was killed, ended by catastrophe.

In Azerbaijani art the pictures of snake-dragon were met in artistic metal –filigree, gravestones, artistic fabrics and embroidery, carpet making and miniature. E.g. in bronze woman’s adornments (II millenium b.c.), on golden basin, found in Hasanlu hill (IX-VIII centuries b.c., Southern Azerbaijan) three-headed dragon is pictured. These pictures are based on worship to dragon-snake in Azerbaijan.

Finally, the dragon pictures were widely spread in Karabakh piled carpets of XV-XVII centuries. E.g. on copper shield, made in Sefevids’ period the woman, dancing with snake is pictured.



Picture 8



Picture 9



Picture 10

The snake was pictured in embroideries of XIX century also.



*Photo 11 Picture 12 Picture 13
Picture 15 Picture 16*

Picture 14

In tale “Malikmammad”, very popular both in Northern and Southern Azerbaijan the father- governor wanted to become younger and had to eat the apple from magic tree, guarded by dragon. Dragon guarded that tree all day long, so governor’s sons couldn’t stand all night and went to sleep. That’s why, they couldn’t pick the apple (in some versions- pomegranate) for their father. But the youngest son Malikmammad cut his finger by dagger and spinkled cut finger by salt. As a result he couldn’t sleep because of pain and picked that magic apple for his father. His elder brother were dishonorable to him. When they were coming back home, they made Malikmammad to climb down in well and cut the strand.

Malikmammad found himself in dark kingdom, here the dragon blocked up the water and didn’t give water to humans. The humans could get the water only when they give dragon young beautiful girl to eat, and dragon slept after it. In that underground kingdom the last girl, had to be given the dragon for eating was the daughter of underground world king. Malikmammad fought with dragon, killed him. The people liberated from dragon and got a water. Malikmammad married king’s daughter and killed the snake, which crawled on tree in order to eat the Phoenix eggs. After it Malikmammad sat on Phoenix back and with king’s daughter came to his father. Meeting with father, Malikmammad told him everything, what his brothers made to him. Father ordered to execute the head of his two brothers, who betrayed him.

Malikmammad married and became wise and generous governor. The content of this tale, created in ancient time was pictured in carpet, woven in Shirvan region of Azerbaijan in XIX century. It’s kept now in collection of professor V. Muradov.



Photo 17 Photo 18

Photo 19. Photo 20



Photo 21 **Photo 22**

As it's known, the snakes can live both on ground and under it. It's the reason, that it's considered among people as symbol of dark world. Basing on present graphic material, we can affirm, that our ancient ancestor's imaginations about Universe and Cosmos were fixed in three-level system. E.g. on piled carpet, woven in Tabriz in XIX century sacred Life tree is pictured. On right and left side of tree deer, goat, dog, rider and humans are placed. These pictures are the symbols of life, but the snake, twined the tree, is symbol of dark world, the birds, on the top of tree are the symbol of ghosts.

From this point of view the picture of snake is given on the carpet as world of deads. At present this carpet is kept in collection of in Baku, in Museum of Literature Institute by name of Nizami. The first description of that carpet was given in book by R. Efendiyev "Kinds of Azerbaijan decorative-applied art", published in 1976. Later, the same description was given in book by R.Tagiyeva "Azerbaijani plot carpets" (1988).

In the same time, among Azerbaijani terekeme tribes the dragon had positive character and was the symbol of helpful waters. E.g. on the pileless carpets "Verni", woven by terekeme, the elements, look like "5" were pictured. These pictures were the protectors of family and are stylized pictures of dragons, which were the symbol of happiness and prosperity.

So, it's quite natural, that since ancient time till nowadays the "nobdars"- drains, placed on the house roofs in Azerbaijan, their ends were made either in dragon or in snake head form. In the same time, on the handles of "aftava" (household thing) sometimes the pictures of dragon mouth are met also.



Photo 23 **Photo 24** **Photo 25**

As it's seen from our investigation, in Azerbaijani art two kinds of dragons-snakes existed. One of them was concerned with most ancient time –the Stone Age. In religious-philosophical imaginations of ancient Azerbaijanis that dragon was a symbol of evil, demonic forces. Such belief was connected with Zoroastrism. The second dragon was the symbol of rain waters, good and kindness.

It must be also pointed out, that Zoroastrism was connected only with beliefs of Azerbaijanis ancient ancestors, lived in ancient states Mannah and Midia (III millenium b.c.). Zoroastrizm is connected neither with Ahamenians nor Indo-European tribes, connected with history of modern Iran. As a matter of fact, Sasanids dynasty (VI b.c.) conquered Midia and perceiving Zoroastrian cost of mind, transformed it radically. Early Zoroastrism was based on heavenly bodies and seven planets. So, the name of Zoroastrism formed by means of ancient Greek words: "zoor"- counting and "astr"-star. It means, that ancient Greeks considered astrologers as scientists.

Perhaps, the most widespread dragon image in Azerbaijani art was one of animal pictures, connected with group of stars – symbol of 12 months. (That group of stars reminded the picture of dragon). Besides, according main rules of Zoroastrizm (alike general imaginations of world phylosophy) the world-Univerce- was based on fight, confrontation of two beginnings – Good and Evil. The dragon is one of such forces and it represents Evil. Another one is Phoenix, it's positive force symbol.

The second sample of unique dragon carpet was found in Munich museum. That carpet was woven in Azerbaijan in XV century and very often is marked in books as sample of Turkish art. That picture was repeated often in carpets of Tabriz school, in their borders and medallions. This feature proves, that pictures of that carpets are connected with Zoroastrism. Later, these motifs were used in all spheres of Azerbaijani art. (it's necessary to point out, that the turks, lived in territory of modern Turkey were never connected with Zoroastrism and it's motifs were not used in Turkish carpets or architecture). It's known from investigations, that single pictures of dragon are the exact indication, that the dragon was a symbol of positive forces (alike in China and Far East). But if the dragon is pictured fighting with Phoenix, it's a symbol of demon forces and is connected with Zoroastrism. In Azerbaijani art of midcentury period, miniatures and in red calico the scene of dragon killing are met also. In Tabriz carpets of XV-XVI centuries, many different samples of dragon and Phoenix pictures exist. E.g. among them we can see samples, on which dragon is pictured as dinosaur, or as creature with dragon head, horse body and tail. The head part of them was alike wolf or lion. As for Phoenix, it could be pictured as crow, partridge, peacock, parrot, eagle and in many other forms. This feature proves, that both images- Dragon and Phoenix- were perceived as mythic characters. The artists also gave them in syncretic form, they wished.



Photo 25Photo 26

The image of kind dragon was pictured in main part in “dragon carpets”, woven in Karabakh, mainly in Barda in XVI-XVII centuries. These carpets are kept in Vashington Textil museum. Such carpets were collected by first director of Textil museum George Meyer all his life and there are 150 carpets of such kind. “Dragon carpets” were exhibited during one year (1975-1976) in connection with 50 year jubilee of Textil museum. (1925-1975) (Charles Ellis)

The author of exhibition catalogue included some of those “dragon carpets” in Karabakh, Shusha, some others in Shirvan carpet groups. These “dragon carpets” are absolutely Azerbaijani ones both from size and ornament point of view. The main feature, which proves, this position are ornaments “khatai”, used in borders of all palace carpets. These carpets with dragon pictures were woven by Azerbaijani carpet makers, worked in Tabriz carpet workshops in Sefevi state period (XV-XVI centuries). We would like also to explain the roots of “khatai” pattern, it's genesis.

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20. ve 21. YÜZYIL AFİŞ TASARIMLARINDA “PANDEMİ”

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ÖZET

İnsanlık tarihi boyunca pek çok farklı dönemde ve coğrafyada salgın hastalıklar ortaya çıkmış ve bu hastalıklar toplumları derinden sarsan olumsuz etkileriyle ciddi boyutlara ulaşmışlardır. Dünya ölçeğinde Sarı Humma'dan Kolera'ya, Veba'dan Aids'e, İspanyol Gribi'nden Domuz Gribi'ne, Sars'tan Ebola'ya kadar pek çok salgın hastalık toplumların kırılmasına, toplu ölümlerin gerçekleşmesiyle dünya nüfusunun yeniden şekillenmesine neden olmuştur. Öte yandan bu konuda toplumları bilinçlendirmek için çeşitli sosyal kampanyalar da gündeme getirilmiştir. Bir salgının tüm dünyayı olumsuz etkilemede bulaşma tehlikesini en aza indirmek, toplumu bilinçlendirmek ve hastalığın risklerine karşı bilinç uyandırmak için tasarlanan bu sosyal kampanyalarda her dönem grafik tasarımın evrensel dilinden de yararlanılmıştır. Günümüz dünyasında, çok yakın tarihlerde yaşadığımız ve küresel boyutta milyonlarca insanın ölmesine neden olan Covid-19 salgınına yönelik toplumsal bilincin oluşturulması, grafik anlatımlara başvurmayı ve çeşitli tasarımlarla Covid-19 risklerine dikkat çekmeyi tıpkı yukarıda bahsettiğimiz salgınlarda olduğu üzere tekrar gerekli kılmıştır. Bu çalışmamızda, 20. ve 21. yüzyıllar içinde ortaya çıkmış pek çok salgın hastalığın grafik tasarım içindeki yeri ve günümüz tasarım dünyasında Covid-19 salgının afiş tasarımına nasıl yansıdığı araştırılmıştır. Ayrıca ortaya çıkan tasarımların grafik açıdan nasıl ele alındıkları da analiz edilmiştir. Değerlendirmemiz, alanında araştırma yapan pek çok yeni araştırmacıya da kaynak oluşturacak şekilde ele alınmıştır. Konuyu grafik anlatım içinde yansıtan en iyi mecra olarak afiş tasarımları seçilmiş, belirtilen tarih aralığında tasarım algısının evrimi ve çeşitliliğinin, aynı zamanda da benzerliklerinin günümüze uzanan süreci aktarılmıştır.

Anahtar Kelimeler: Pandemi, Salgın Hastalıklar, Sosyal Mesafe, Grafik Tasarım, Afiş Tasarımı.

“PANDEMIC” IN 20TH AND 21ST CENTURY POSTER DESIGNS**ABSTRACT**

Epidemic diseases have occurred in many different periods and geographies throughout the history of humanity, and these diseases have reached serious dimensions with their negative effects that deeply affected the society. Many epidemic diseases, from Yellow Fever to Cholera, from Plague to Aids, from Spanish Flu to Swine Flu, from Sars to Ebola, have resulted in the breaking down of societies and reshaping the world population with the occurization of collective deaths. On the other hand, various social campaigns have been brought to the agenda to raise awareness of the communities on this issue. In these social campaigns, which are designed to minimize the danger of infection, to raise awareness of the society and to raise awareness against the risks of the disease, the universal language of graphic design has also been used in every period. In today's world, the creation of social awareness about the Covid-19 epidemic, which we have experienced very recently and caused the death of millions of people globally, has made it necessary to refer to graphic explanations and draw attention to the risks of Covid-19 with various designs, just as in the epidemics mentioned above. In this study, we investigated the place of many epidemic diseases that emerged in the

20th and 21st centuries in graphic design and how Covid-19 epidemic reflected on poster design in today's design world. Also, how the emerging designs are handled graphically are analyzed. Our evaluation has been handled in a way to provide resources for many new researchers who are doing research in their field. Poster designs were selected as the best medium reflecting the subject in graphic expression, the evolution of the perception of design perception and diversity, as well as the similarity of the process in the specified date range to the present day.

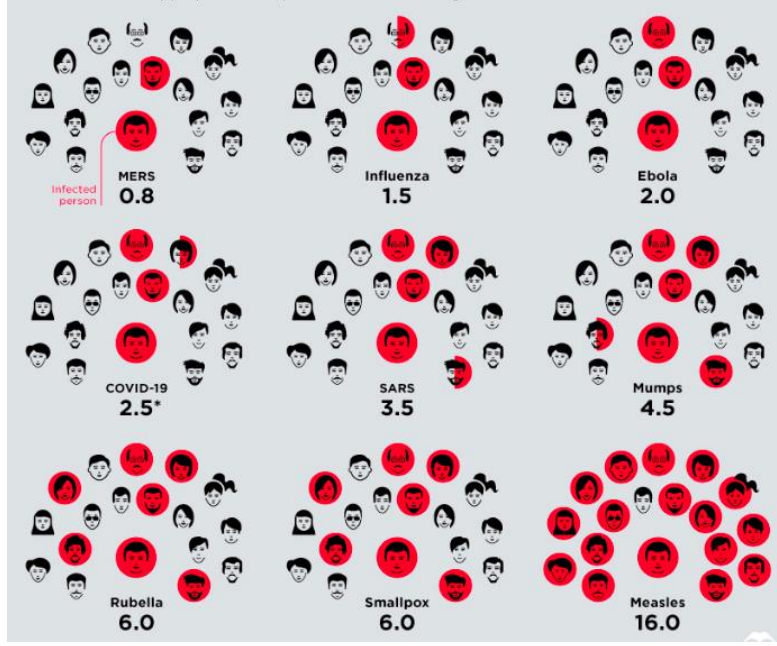
Keywords: Pandemic, Epidemics, Social Distance, Graphic Design, Poster Design.

GİRİŞ

İnsanlık tarihi boyunca maruz kalınan salgın hastalıklar, tüm dünyada yaşamı olumsuz etkilemiştir. Hastalıkların hangi coğrafyada ortaya çıktığı önem gözetmeksizin, hızla yayılarak toplumları etkilemiş ve böylece bu salgın hastalıklar sadece küçük bir bölge problemi olmanın ötesine geçmiştir. Evrensel bir duruma dönüşmeleri de toplumlar arası paniğe sebep olmuştur. Dönemin bilim insanları, farklı dönemlerde ortaya çıkan hastalıkların tamamen yeni bir hastalık mı olduğuna ya da grip gibi daha tanıdık bir durumla mı karşı karşıya kaldıklarına emin olamamışlar, bu sebeple de hastalıklara dair net bir tanı koyamamışlardır. Bu bilinmezlik ve karmaşa içeren ortam, toplumlarda kafa karışıklığına da sebep olmuş ve toplumun önde gelen isimleri halkı bilinçlendirmek için bir takım tedbir amaçlı iletişim dilleri ortaya çıkarmışlardır. Dönemin gazeteleri ve haber bültenleri günlük salgın tablosunu güncel olarak paylaşmış ve salgın sürecinde halkın içinde bulunduğu durumu analiz etmiştir. Covid-19 pandemisi de bu örneklerin içinde yer almıştır.

SALGIN	ZAMAN	ETKEN	ÖLÜM
Antonine Vebası	165 - 180	Suçiçeği/Kızamık virüs olabilir	5 Milyon
Çiçek Japon	735 - 737	Variola majör virüs	1 Milyon
Justinian Vebası	541 - 542	Yersinia pestis	30-50 Milyon
Kara veba	1347 - 1351	Yersinia pestis	200 Milyon
Yeni Dünya Çiçek	1520	Variola major virüs	56 Milyon
Londra Büyük Vebası	1665	Yersinia pestis	100.000
İtalya Vebası	1629 - 1631	Yersinia pestis	1 Milyon
Kolera Pandemisi 1-6	1817 - 1923	V.cholera	1 Milyon +
Üçüncü Veba	1885	Yersinia pestis	12 Milyon (Çin ve Hindistan)
Sanhumma	1800 sonları	Sanhumma virüsü	100-150.000 (ABD)
Rus Gribi	1889 - 1890	H2N2 virüs olabilir	1 Milyon
İspanya Gribi	1918 - 1919	H1N1 virüs	40-50 Milyon
Asya Gribi	1957 - 1958	H2N2 virüs	1.1 Milyon
Hong Kong Gribi	1968 - 1970	H3N2 virüs	1 Milyon
HIV/AIDS	1981 - günümüz	HIV	25-35 Milyon
Domuz Gribi	2009 - 2010	H1N1 virüs	200.000
SARS	2002 - 2003	Coronavirüs	770
EBOLA	2014 - 2016	Ebola virüs	11.000
MERS	2015 - günümüz	Coronavirüs	850
COVID 19	2019 - günümüz	Coronavirüs	11.400 (20 Mart 2020)

Resim 1. Tarihte Salgın Hastalıklar, Etken ve Ölüm Oranları, (URL 1)

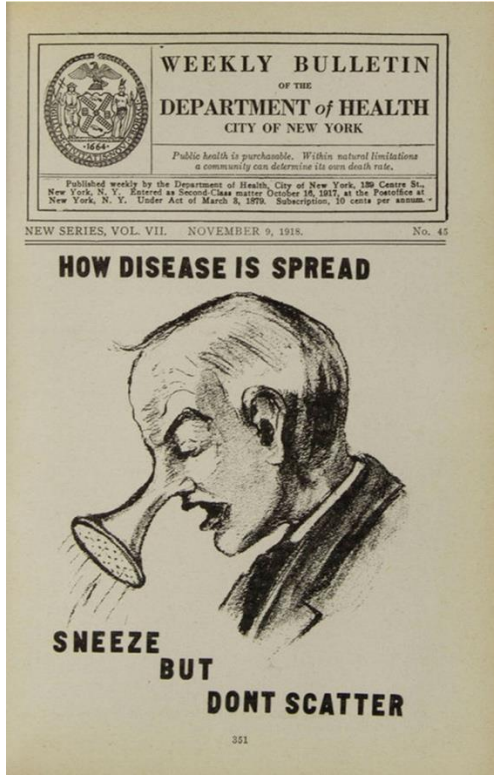


Resim 2. Salgın Hastalıkların Yayılma Oranları,
(URL 2)

1.1 20. ve 21. Yüzyıl Afiş Tasarımlarında “Pandemi”

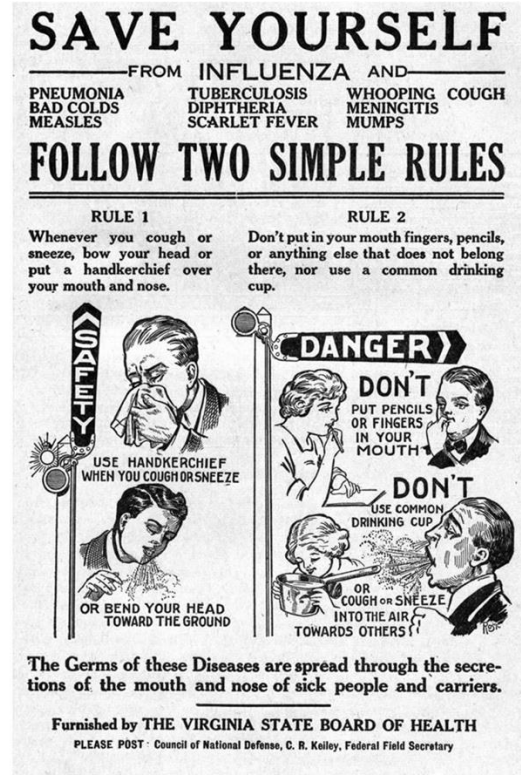
1918 yılında, 1. Dünya Savaşı sırasında ortaya çıkan ve “İspanyol Gribi” olarak tanınan salgının ilk vakaları Avrupa’da görülmüş, dönemin Amerikan halkı ise salgının yetersiz beslenme, savaş kaynaklı ve okyanus aşırı bir salgın olduğuna kendilerini inandırmışlardır. Ancak salgın, hızlı bir şekilde Amerika’ya da sıçrayarak binlerce insanın ölümüne sebep olmuştur. Ne var ki, salgının dünyaya yayıldığı dönem Amerika’da toplu taşıma araçları, kitle iletişim araçları, kitle tüketimi ve kitle savaşı gibi yeni formlar hayata kazandırılmıştır. Bu durum, salgının toplumları kısa sürede ve geniş çapta etkileyecek boyuta ulaşmasını hızlandırmıştır. Halk sağlığı yetkilileri, bu ölümcül ve kitlelerin yok olmasına sebep olacak salgına karşı halkı bilinçlendirmek için okulların kapanması, sosyal mesafe tedbirlerinin alınması ve bir takım dönemsel yasaklar gibi yoğun önlemler almışlardır. Alınan önlemler, salgının sonucu doğrultusunda artan ölümleri 1918-1919 yılları arasında büyük ölçüde azaltmaya yardımcı olmuştur. Yetkililer, grafik anlatımlara başvurmuş ve çeşitli tasarımlar yardımıyla toplumsal bilinç oluşturmayı ve salgınları önlemeyi başarmışlardır. Alınan bu tedbirleri incelemek ve anlamak bu nedenle büyük önem taşımaktadır.

O yıllarda, İspanyol Gribi ilk başta basit bir grip olarak anlaşılmış, sonradan halk sağlığı yetkilileri karşı karşıya kaldıkları bu hastalığın daha önce hiç karşılaşmadıkları bir durum olduğunu fark etmişlerdir. Yetkililer bu yeni durumu araştırmayı ve önlemeyi hızlı bir şekilde o dönem gelişmekte olan yeni iletişim ağlarını da kullanarak, halka açık bir şekilde süreci yürütmüşleridir. Her kış ve sonbahar aylarında nezle olmaya alışkın olmak bir anda alışıksız olunmayan bir durum haline dönüşmüştür. Hasta olan kişilerin basit bir nezle mi geçirdikleri yoksa yeni bir hastalık türüne mi yakalandıkları konusunun belirsiz olması insanları panik ve kaos ortamına itmiş, öte yandan halk, sokakta öksüren ve hapşırarak insanlardan korkar hale gelmiştir. Aynı zamanda, bu tür halk sağlığı mesajları temel bir grafik aracı olan poster kullanılarak da iletilmiştir. 1. Dünya Savaşı da Amerika Birleşik Devletleri’ndeki gazete okuma oranını tüm zamanların en yüksek seviyesine ulaştırmıştır. Medya açısından oldukça zengin bu iletişim aracı, 1918-1919 salgınına benzeri görülmemiş bir hız ve ayrıntıyla ortaya çıkarmış ve İspanyol Gribi tam anlamıyla kitleleri ilgilendiren ve tüm dünyada bilinen bir salgın haline gelmiştir.



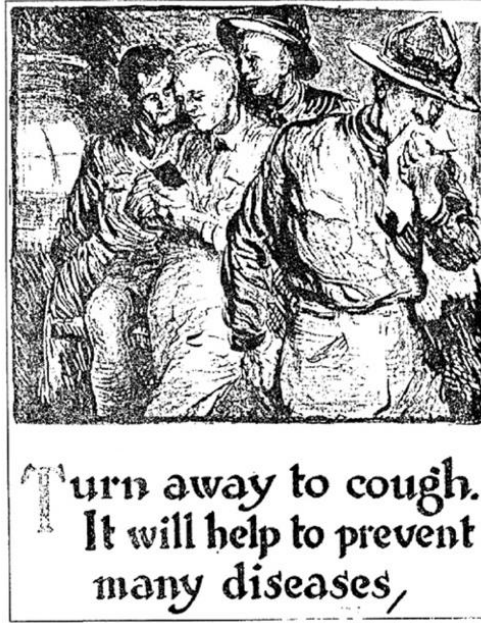
Resim 3. Sağlık Bakanlığı Haftalık Bülteni, “Snneeze But Don’t Scatter” Afiş, 1918, New York (URL 3).

Resim 4. Sağlık Kurulu Bülteni, Virginia Eyaleti “SaveYourself” Afiş, 1918, Virginia (URL 4).



31 hafta süren ve 20 milyondan fazla kişiyi ölüme sürükleyen İspanyol Gribi, 1. Dünya Savaşı'ndan daha fazla kişinin ölümüne sebep olmuştur. İspanyol Gribi salgını 1. Dünya Savaşı ile aynı zamana denk geldiği için Avrupa'dan evlerine dönen askerler anavatanlarına dönmüş ve bu süreçte hastalığın yayılması da hızlanmıştır.

New York'un sağlık departmanından 1918 tarihli bültenler, vatandaşları mendil kullanmaya ve kalabalıktan kaçınmaya teşvik etmiştir (Bkz. Resim 3 ve Resim 4). 24 Eylül'de sağlık görevlileri metro ve tren istasyonlarına, yükseltilmiş tren platformlarına, sokak arabalarına, vitrinlere, polis bölgelerine, otellere ve diğer kamusal alanlara en az 10.000 poster yerleştirmişler, bu posterler üç farklı mesaj taşımıştır; bir seri poster, insanlara öksürüklerini ve hapsirmelerini örtme talimatı vermiş, diğer seri de insanları tükürmemeye teşvik etmiştir. Son seri ise New York'luları grip ve zatürrenin dönüşünü önlemeye yardım etmeye çağırmıştır. Bu doğrultuda kamu hizmeti kampanyaları da, broşürler ve posterler gibi, internet, radyo ve televizyon öncesi medya şeklinde yayılmıştır. Bu kampanyalar hapsirme ve öksürükten sokaklara tükürmeye kadar her türlü kötü alışkanlığı engellemeye odaklıdır.



Poster by National Tuberculosis Association

A POSTER REPRODUCED AS A LANTERN SLIDE

This poster made an excellent lantern slide. It was used to illustrate a health talk. Eyes and ears were directed to a single idea. See discussion on page 70. The exhibit of which it is a part was reproduced in several forms—as two-color posters in quantities, as panels, lantern slides, and half-tones.

The panels were made by mounting and binding the posters, as shown on page 30c.

**Resim 5. Amerikan Akciğer Derneği,
1918, (URL 5)**

Doç. Dr. Oya Tokgöz, *Temel Gazetecilik* adlı makalesinde konu hakkındaki düşüncelerini şu şekilde dile getirmiştir;

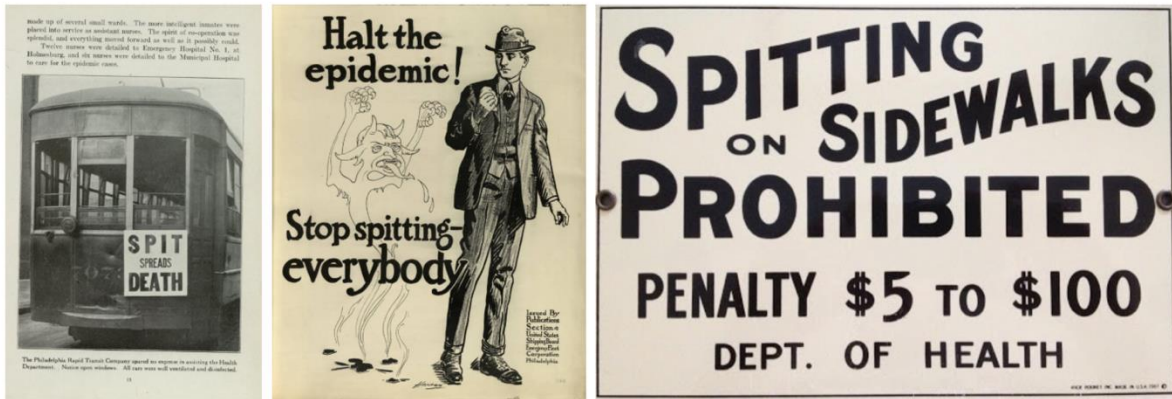
“Haber kâğıtları ve haber mektupları, Avrupa’da 14. yüzyıldan itibaren gazetenin öncüleri olarak hem bilgi toplama hem de ticari sorunları çözüme ulaştırma amaçlı kullanılmıştır” (Tokgöz, 1981: 63).

Prof. Dr. Recep Aslan, *Tarihten Günümüze Epidemiler, Pandemiler ve Covid-19* isimli makalesinde İspanyol Gribi hakkındaki görüşlerini aşağıdaki gibi belirtmiştir;

“İspanyol Gribi’nin adı gribin İspanya’da başlamasından dolayı verilmemiştir. İspanya, Birinci Dünya Savaşı’na katılmamış ve 1918 yılında çıkan bu grip haberlerini dünya üzerinde sansürsüz olarak yayımlayan tek ülke olmuştur. Grip haberlerinin İspanyol basınında sansürsüz yayımlanıp, bu bilgilerin tüm dünyaya yayılmasından dolayı, 1918 yılında çıkan bu gribin adı İspanyol Gribi olarak kalmıştır” (Aslan, 2020: 37).

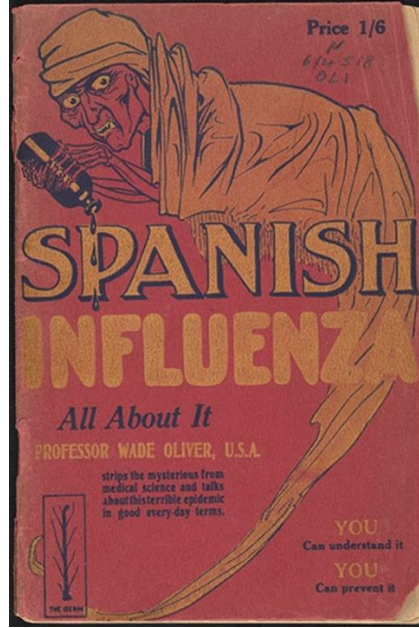


Resim 6. Amerikan Akciğer Derneği,
1918, (URL 6)

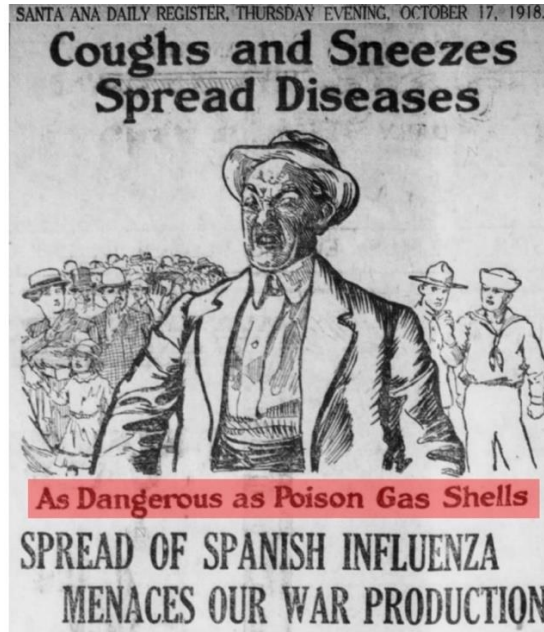


Resim 7. Amerikan Akciğer Derneği,
1918, (URL 7)

O dönemlerde tükürmenin çok yaygın olduğu ve kuru tükürük partiküllerini teneffüs ederek hastalığın yayılmasının başlıca nedenlerinden biri olduğu düşünülmüştür. Bunun sebebi ise tükürmenin, salgının hızlı bir şekilde yayılmasına yol açmış olmasıdır. Ayrıca, dönemin sağlık çalışanları da tükürmenin, salgının yayılmasındaki en etkili faktör olduğuna inanmışlardır. Tükürmeyi durdurma girişimlerine örnek olarak, iyi giyimli bir adamı enfekte etmek için hazırlanan ve tükürük şeklindeki şeytanımsı varlığı tasvir eden poster, insanlara hastalık bulaştırmayı önleme amaçlı tasarlanmıştır (Bkz. Resim 7). Bir diğerinde ise trenler, duvarlar ve vitrinler gibi kamuya açık yerlere sağlık görevlileri tarafından asılan “*Spit Spreads Death*”, Türkçe anlamı “*tükürük ölümü yayar*” olan poster çalışması yer alır. Son poster ise halkı uyarıcı niteliktedir ve tehdit edici cezaları da içermektedir. O dönemlerde poster çalışmaları genellikle çizim odaklı tasarlanmış, halka verilmek istenen mesajın net olarak ifade edilmesine çalışılmıştır. 1918 yılında yayımlanan, dört bir yana asılan ve bilgilendirici nitelik taşıyan bu posterler salgının kontrol altına alınmasına yardımcı olmuştur.



Resim 8. Avusturalya Ulusal Müzesi,
“İspanyol Gribi Hakkında Her Şey” Afiş,
1918, Acton (URL 8)



Resim 9. Santa Ana Register Gazetesi'nde Bulunan
1918 Yapımı Afiş Tasarımı (URL 9)

1918 yılında dünyanın üçte birini enfekte eden İspanyol Gribi, o dönemlerdeki kısıtlı seyahat imkanlarına rağmen bir ada ülkesi olan Japonya'ya kadar ulaşmıştır. Bunun sonucu olarak da halkı eğitmek ve bilinçlendirmek için Japon Sağlık Merkezi, salgının ne olduğuna, bu durumla nasıl başa çıkılacağına dair açıklayıcı bir el kitabı yayımlamış ve bunun yanında konuyla ilgili posterler bastırarak ülkenin her yerine dağıtmıştır. 455 sayfalık el kitabında, hastalığın bilinen durumu hakkında gerçek bilgiler yer alırken, net vaka sayısını ve ne tür semptomların sergilendiğini gösteren metin ve grafiklere de yer verilmiştir. Ayrıca, salgının yayılmasını önleyecek 4 kural da bu el kitabında yer almıştır. Bunlardan ilk kural “**uzak dur**” ki bu temel olarak “*sosyal uzaklık*” demenin daha basit bir yoludur. Kural 2 “**ağzınızı ve burnunuzu örtün**”,

kural 3 “aşı olun” ve kural 4 ise “gargara” yapmanın önemine vurgu yapmaktadır. El kitabıyla birlikte yayımlanan posterlerin amacı da ülke çapında farkındalığı arttırmak olmuştur. Japonya’da bilinçlendirmek amaçlı yayımlanan bu el kitabı dönemin yetersiz koşulları gereği çabuk tükenmiştir. Daha sonra kitap yeniden yayımlanmış ve güncel olaylar ışığında siyah beyaz bir sürüm olarak 30 Nisan 2020’ye kadar dijital ortamda ücretsiz erişim imkanı taşımıştır. Yayımlanan posterler düşünüldüğünde, son 100 yılda sürecin ve işleyişin o kadar da değişmediği görülmektedir. Salgın, bu posterlerin genelinde Amerika’da yayımlanan örneklerinde olduğu gibi şeytanımsı bir varlık şeklinde tasvir edilmiş ve evlerdeki sofralara kadar girip, çocukları hasta eden bir virüs olarak betimlenmiştir. Ayrıca poster tasarımları, maske kullanmadan öksürmenin partikülleri daha hızlı yayacağı konusunda toplumu uyarmaktadır.



Resim 10. Japonya Merkez Sağlık Bürosu, 1918, Tokyo (URL 10)



Resim 11. Japonya Merkez Sağlık Bürosu, 1918, Tokyo (URL 11)

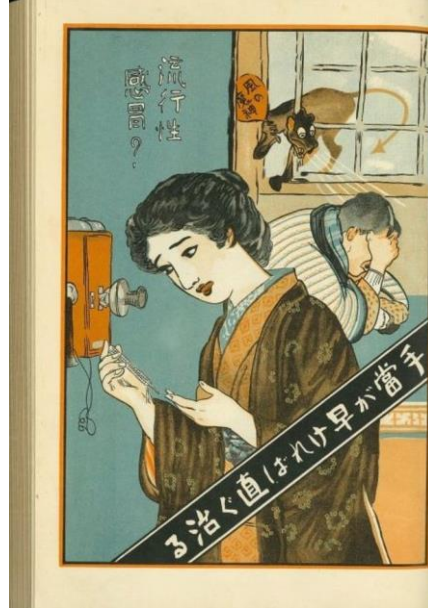


**Resim 12. Japonya Merkez Sağlık Bürosu,
1918, Tokyo (URL 12)**

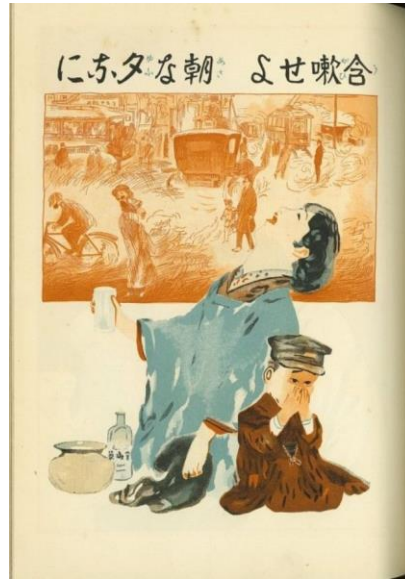


**Resim 13. Japonya Merkez Sağlık Bürosu,
1918, Tokyo (URL 13)**

Posterlerin tasarımında illüstratif öğeler kullanılmış, halkın salgın dönemindeki durumu yansıtılmaya çalışılmıştır. Çizimlerde kullanılan canlı turuncu renklerin yanı sıra soğuk, yumuşak tonlu renkler arasında bir armoni ve denge yakalanmaya çalışılmıştır. Böylece posterler halkın dikkatini çekmeyi başarmış ve iletmek istedikleri mesajlar doğrultusunda hedeflenen başarı yakalanmıştır. Bu posterlerden yola çıkarak günümüzde de çok benzer durumların yaşandığı söylenebilir. Tarih kendini tekrarlamamakta ancak çoğunlukla ritmik bir halde ilerlemektedir. Bu durumda aynı ritmi birkaç kere duymamız mümkün olmaktadır. 1918 salgını da bu şekilde ele alınabilir. 2020’de yaşadığımız salgın o zamanki salgına çok benzer olduğundan, günümüzde de bu tür posterler görmemiz mümkündür.



Resim 14. Japonya Merkez Sağlık Bürosu, 1918, Tokyo (URL 14)



Resim 15. Japonya Merkez Sağlık Bürosu, 1918, Tokyo (URL 15)

Yazar M. Kemal Temel, *Gelmiş Geçmiş En Büyük Katil: 1918 İspanyol Gribi* isimli kitabında İspanyol Gribi hakkındaki düşüncelerini şu şekilde ifade etmiştir;

"...İnsanlar gripten pek korkmuyordu; daha çok yaşlıları öldürdüğü düşünülen grip, toplum düzenini bozmadan sürüp giden mutlak bir dert olarak görülüyordu. Ne var ki 1889 pandemisi gribin artık ne denli hızlı yayılabileceğinin bir işaretiydi; pandemi daha tehlikeli bir tür virüsten kaynaklanmış olsaydı, sonuçlar çok daha ciddi olabilirdi. Ve 1918'de bu daha tehlikeli tür geldi" (Temel, 2015: 193).

İspanyol Gribi sırasında sosyal hayat adeta durmuş, toplum büyük bir kaos ve belirsizliğin içine düşmüş olup, umutsuzluk ve mutsuzluk duygularının hâkim olduğu bir sosyal alan ortaya çıkmıştır. Sanatçılar ve

tasarımcılar da bu durumdan bir hayli etkilenmiş, eserlerinde olumsuz duyguları yansıtmışlardır. Yetkililerin halkı bilinçlendirmek için yürüttüğü kampanyalara sanatçılar ve tasarımcılar da katılmış, çalışmalarını bu alanda yoğunlaştırmışlardır. Bunun sebebi ise; İspanyol Gribi'nin, normal bir grip gibi üç gün ile sınırlı olmadığına anlaşılması ve ölümlerin artması olarak düşünülebilir. Çünkü o dönemlerde insanlar, gündelik yaşantılarına özgürce devam edememiş, sosyal hayatın her anında salgın ile karşı karşıya kalmışlardır. Sanatçı ve tasarımcılar da bu kaos ve belirsizlik ortamının içinde eserlerini üretmişlerdir. Toplumun genelinde hâkim olan boşluk hissi dönemin tasarımcılarında da mevcut olmuş ve bu durumu çalışmalarına da yansıtmışlardır.



**Resim 16. One Oregon Gazetesi, Oregon Üniversitesi
1918, Portland (URL 16)**



**Resim 17. One Oregon Gazetesi,
Oregon Üniversitesi,
1918, Portland (URL 17)**

Daha önce de belirtildiği gibi salgından dünyanın üçte biri etkilenmiş, sağlık örgütlerinin halkı bilinçlendirmek adına yürüttüğü bu kampanyalar doğrultusunda grafik tasarımdan yararlanılmıştır. Bu kampanyaların en önemlilerinden biri ise önceki salgın yıllarında maske takmayı reddeden toplumlara maske kullanmaya teşvik edici posterler olmuştur. Hatta San Francisco'da yasayı protesto etmek için "Anti-Maske" kampanyası başlatılmıştır. Dünyanın genelinde erkeklerin maske takma oranı kadınlara göre daha düşük olup, bazı erkekler tarafından maske takmak ve kişisel hijyene dikkat etmek efeminen bir yaklaşım olarak

adlandırılmıştır. Bu nedenle Amerikan Halk Sağlığı liderleri, maske takmayı ve kişisel bakıma dikkat etmeyi vatanseverlik olarak göstermeye çalışmıştır. 1918'den 1930'lara kadar olan iki savaş arası dönemde de erkekler "hijyenik disiplinin zayıf halkaları" olarak görülmüştür. Bu nedenle, erkek nüfusun üyelerini, hastalığı kontrol altına almaya ikna etmeye yardımcı olmak için, dönemin yetkilileri genellikle vatanseverliği teşvik eden "daha erkeksi bir sağlık eğitimi" sunmayı amaçlamışlardır. Bu nedenle dağıtılan posterlerde genellikle erkek bir birey kullanılmıştır. Bu tür posterler sayesinde yüz maskeleri, bugün Koronavirüs Pandemisi sırasında olduğu gibi, hastalığın yayılmasını önlemeye yardımcı olmak için her yerde yaygınlaşmıştır.



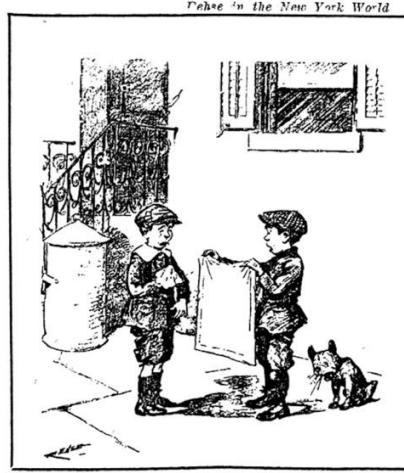
Resim 18. Alberta Şehir Arşivleri, 1918, Alberta (URL 18)



Resim 19. Birleşik Devletler Ulusal Tıp Kütüphanesi, 1918, Bethesda (URL 19)

Yukarıdaki görselde (Bkz. Resim 19) görüldüğü üzere yaşlı bir erkek birey olarak tasvir edilen figür halkı temsil etmekte ve küçük çocuğu mendil kullanması için teşvik etmeye çalışmaktadır. Genç ya da yaşlı her

bireyin, öncelikle kendisinin, daha sonra da toplumun sağlığını düşünüp koruyarak payına düşeni yapması gerektiğinin önemi vurgulanmıştır. Bu tarzda yayımlanan diğer bir poster ise, iki erkek çocuk arasındaki etkileşimi tasvir eden bir çizim şeklindedir. Bir erkek çocuğun annesi tarafından kendisi için yaptığı mendili gururla sallayan bir tavır yansıtmaktadır. Ana karakter olan çocuk, annesinin doğum gününde ona verdiği büyük mendili sallarken, bir yandan da bu mendilin 100 hapsirik kapasitesi olduğunu söylemektedir. Bu çizim de o dönemlerde her yaşta erkeklerin maske takmaya ve mendil kullanmaya karşı verdikleri mücadeleyi önlemek için yapılmıştır.



"Did ya get that for yer birthday? Gee! that's some hankachif."
"Yeh, me mother made it fer me. It's good fer a hundred sneezes."

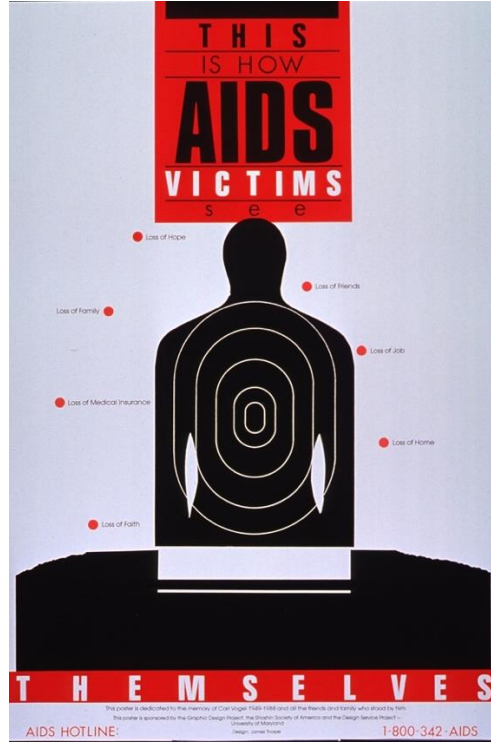
**Resim 20. George Rehse,
1918, New York (URL 20)**

"20. yüzyılda 1918, 1957 ve 1968 yıllarında olmak üzere toplamda üç pandemi meydana gelmiştir. 1918 yılındaki İspanyol Gribi 20-40 milyon, 1957'deki Asya gribi ve 1968'deki Hong Kong Gribi 1'er milyon insanın ölümüne neden olmuştur" (Eşidir ve Bak, 2020: 32). Tarihin akışını değiştirip, yaklaşık 1 milyondan fazla kişinin ölümüne sebep olan bir diğer salgın ise Asya Gribi olmuştur. Bu salgın hastalık, 1957 yılında Çin'de başlayarak önce Uzakdoğu'ya, ardından da Avustralya, Amerika ve Avrupa'ya kadar yayılmıştır.

Günümüze yaklaştıkça 1980'li yılların başında cinsel yolla bulaşan hastalıklar ortaya çıkmıştır. Bunlardan en yaygın olanları ve toplum tarafından en çok önyargı ile karşılaşılan ya da korkulanı ise HIV ve AIDS hastalıklarıdır. Bu hastalıklar cinsel yolla ve kan yoluyla bulaşabilen hastalıklar olduğu için, toplumun büyük çoğunluğunda hastalığa sahip olan bireyi dışlama yönelimi vardır. Çin'de yapılan bir çalışmada; HIV/AIDS virüsüne sahip bireylerin toplum tarafından dışlanma korkusuyla tedaviyi erteledikleri görülmektedir. Bu önyargı ve toplumsal damgalama, toplumun hastalık hakkında yeterince bilgi sahibi olmamasından kaynaklanmaktadır.

Prof. Dr. Veli Duyan konuyla ilgili görüşlerini *HIV/AIDS'e İlişkin Damgalama ve Sosyal Destek* adlı makalesinde şu şekilde belirtmiştir;

"Baş döndürücü hızla ilerleyen tıbbın yetersiz kaldığı bu hastalığın meydana getirdiği fiziksel rahatsızlıklarla savaşmak zorunda olan hastalar; sosyal desteğin kaybedilmesi, izolasyon duygusu, dışlanma ve terk edilme korkusunun da tehdidi altındadır. Bu korkular ile hayatlarını sürdürmeye çalışan hem yaşam denetimlerini hem de toplumsal statülerini önemli ölçüde yitiren hastalar, sorunlar karşısında yeni başa çıkma stratejileri geliştirirler. Sorunlarla baş etmede sosyal desteğin önemi kaçınılmazdır. Ancak sosyal destekten yoksun kalan HIV/AIDS hastalarının çoğu kendilerini toplumsal yaşamdan izole etme yolunu tercih ederler ve bu durumda sorunlar/korkularla başa çıkmada saklanma ve soyutlanma yöntemlerini benimserler" (Duyan, 2001: 3-11).



Resim 21. This is How AIDS Victims See Themselves, 1989, Maryland (URL 21)

Yukarıdaki posterde (Bkz. Resim 21) görüldüğü üzere, HIV/AIDS hastaları kendilerini hedef olarak görmekte ve dışlanmış hissetmektedirler. Türkçesi “kendileri” olan “themselves” kelimesi tipografik açıdan ele alındığında espasların geniş tutulması ile hasta bireylerin kendilerini dışlanmış hissettiği anlatılmaktadır. Ayrıca, bu bireylerin ev ve iş bulmakta zorlandıklarına da vurgu yapılmaktadır. Posterin üst kısmında yer alan başlık şeklindeki yazı ise, toplumun önyargıları yüzünden bu bireylere yapıştırdıkları etiket olarak düşünülebilir. Öte yandan tasarımda bu hastalıkları tasvir etmek için kırmızı renk kullanılmış ve hastalığa vurgu yapılmıştır. Ortada duran bireyin siyah renkte olması ise yine tasarımcının önyargı hakkında vermek istediği mesaj olarak yorumlanabilir. 1989 tarihli bu poster HIV/AIDS hastalıklarının keşfinden sadece 9 yıl sonra tasarlanmıştır.

Korona virüs ismi ise, ilk kez 2003 yılında Sars-Corona Virüsü (SARS-CoV) olarak Çin’de ortaya çıkan bir hastalık olarak duyulmuştur. Bu hastalık Covid-19’da olduğu gibi akut solunum yetmezliğine neden olan bir korona virüs türüdür.

Micheal Madigan ve John M. Martinko konuyla ilgili görüşlerini *Brock Mikroorganizmaların Biyolojisi* adlı kitapta belirtmişlerdir;

“Korona virüsünün neden olduğu ağır akut solunum yolu sendromu (SARS) vakası ilk olarak 2002 yılının ikinci yarısında Uzak Doğu Asya’da görülmüş ve gribal bir enfeksiyon olarak kayıt altına alınmıştır. Ancak, sonraları ağır semptom gösteren hastalarda solunum yetmezliği nedeniyle ölüm vakaları görülmeye başlanmış ve bu nedenle hastalık sert akut solunum sendromu anlamına gelen “Acute Respiratory Sendrome” olarak isimlendirilmiştir” (Madigan ve Martinko, 2016: 284).

2019 yılında Çin’de ortaya çıkan ve hala günümüzde etkisini sürdürmekte olan SARS-CoV-2 virüsünün ise nasıl meydana geldiği belirsizliğini korumaktadır. Virüsün nasıl ortaya çıktığı hakkında çeşitli tahminler olsa da yetkililer henüz net bir sonuca varamamışlardır. Ortaya çıktığı günden beri gelişen teknoloji sayesinde uluslararası seyahat özgürlükleri virüsün daha hızlı yayılmasına olanak sağlamıştır.

T.C. Maltepe Üniversitesi Rektörü Şahin Karasar konu ile ilgili görüşlerini *#EvdeKal COVID-19 Günlerinde Sağlık ve İletişim Stratejileri* adlı kitapta yer alan *BİZ BİZE YETERİZ Pandemi Döneminde Sektörel Bir Değerlendirme* isimli makalesinde şu şekilde belirtmiştir:

“Wuhan’da ortaya çıkmasının ardından hızla dünyaya yayılan COVID-19, eş zamanlı olarak binlerce insanı tehdit ederek, kolaylıkla bulaşma özelliğinden dolayı kısa zamanda dünya çapında

bir tehdit oluşturdu. Dünya Sağlık Örgütü'nü pandemi ilan ettiği virüsün yayılmasını önlemek amacıyla da her alanda olduğu gibi Havacılık alanında da bir dizi önlem alındı. İlk adım salgının yayılmasını önlemek amacıyla virüsün yoğun görüldüğü ülke ve şehirlere yönelik uçuş iptalleri hayata geçirildi ancak kısa süre sonra birçok havayolu şirketi uçuşlarının tamamını geçici olarak durdurdu” (Karasar, 2020: 168).

Birçok kişiyi etkileyen virüsün henüz bir tedavisi ya da aşısı bulunamamıştır ancak, aşı denemeleri dünyanın her yerinde hızla devam etmektedir. Covid-19 salgını geçtiğimiz Mart ayında Dünya Sağlık Örgütü tarafından Pandemi olarak ilan edilmiştir.

Journal of Biotechnology and Strategic Health Research dergisi özel sayısında konuyla ilgili görüşler belirtilmiştir;

“COVID-19 salgını halen net bilinmeyen küresel etkileri ile devam etmektedir. Dünyada olduğu gibi Türkiye’de de sağlık otoriteleri salgınla mücadele kapsamında bir dizi önlem almıştır. Alınan tüm önlemlere rağmen onaylanmış vaka ve yoğun bakım tedavi ihtiyacı oluşan hasta sayısı ülkemizde ve dünyada artmaktadır“ (Dikmen vd., 2020: 29-36).

Virüsün hızlı bir şekilde yayılışının ardından dünya genelinde hissedilen virüs, başlarda toplumları korkutmasa da ölümlerin ve enfekte olan hastaların artmasıyla birlikte korku ve paniğe neden olmuştur. Virüsü kontrol altına almak için Tayvan dışındaki çoğu ülke birkaç ay karantina ilan etmiş, okullar tatil olmuş ve sosyal temas azaltılmaya çalışılmıştır. Ancak ölümlerin ve vakaların artması, yetkililerin paniğe karşı yürüttükleri kampanyaların önemini kaybetmesine neden olmuştur.

Özellikle kış aylarında ortaya çıkan virüsün, yaz aylarında direncini kaybedeceği ve biteceği yönünde söylentiler olsa da, Covid-19 etkisini yaz aylarında da sürdürmeye devam etmektedir. Buna karşın yetkililer uluslararası boyutta kampanyalar başlatmış ve bireyleri maske takmaya, kapalı ortamlarda ve toplu taşımalarda sosyal mesafeyi korumaya teşvik etmişlerdir.

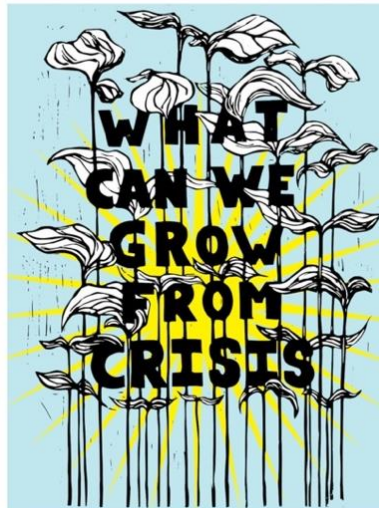
Uluslararası bir sanat grubu olan Amplifier de 2020 yılının Mart ayında sanatçıları Covid-19 çevresinde sanat eserleri üretmeye davet etmiş ve bu daveti bağımsız bir kampanyaya dönüştürmüştür. Amplifier ve ortaklarının başlattığı bu acil durum kampanyası, Uluslararası Halk Sağlığı çalışanları ile iş birliği içinde yürütülmüştür. Kampanyanın ana fikri ise stresli salgın günlerinde zihinsel sağlığı koruma ve sosyal değişime katkı sağlayarak ilham veren tasarımların oraya çıkmasıdır. İspanyol Gribi dönemlerindeki gibi virüsten sonra dünyanın hiçbir zaman aynı yer olmayacağı ve değişeceği fikrine sahiptirler. Amplifier ve ortakları yeni dünyada yanımıza neler alacağız ya da neleri geride bırakacağız gibi soruların cevaplarını sorgulamış, bu çerçevede dünyanın her yerinden tasarımcıların katılacağı bir poster kampanyasına açık çağrı sunmuşlardır. Amplifier ve ortakları sanatın iyileştirici gücüne inanmış ve bu doğrultuda eserler beklemişlerdir. Virüsün etkisi azaldığında ya da tamamen yok olduğunda bile bu posterlerin yaşayacağı fikrinden yola çıkarak tasarımcıları üretmeye teşvik etmişlerdir.



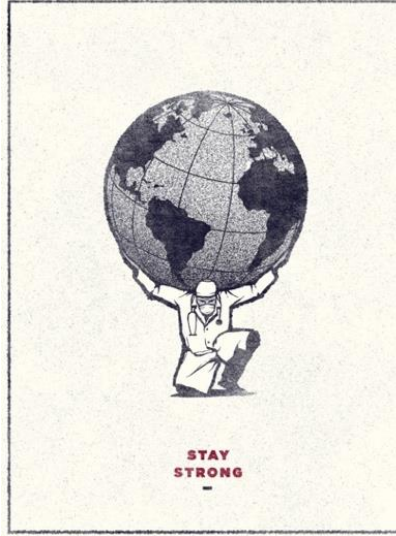
**Resim 22. Amplifier, “Open Call For Art”
2020 (URL 22)**

Amplifier Sanat Topluluğu'nun yayımladığı yarışmaya birçok tasarımcı katılmış, birinci olan afiş henüz belli olmamıştır. Birinciyi belirlemek için isteyen herkesin oy kullanabileceği yarışma süreci, toplumda yer alan her bireyi katılımcı olmaya da teşvik etmektedir.

Katılan afişler için, Amplifier'in yarışmanın duyuru afişinden örnek aldığı söylenebilir. Posterlerde genellikle canlı renkler kullanılmış ve “maske tak” gibi uyarılarda bulunulmuştur. Bunun yanı sıra posterlerde çerçevenin dışına çıkmayı başarmış örneklerle de rastlanmakta ve tasarımcıların salgından sonraki hayata da odaklandıkları posterler tasarladıkları görülmüştür. Bu posterlerin bazıları çizimden oluşurken, bazıları da tipografiden yararlanmıştır. Yarışmaya katılan posterlerden bazıları aşağıdadır.



**Resim 23. Pete Railand,
“What Can We Grow” Afişi,
Amplifier, 2020 (URL 23)**



**Resim 24. Sandin Medjedovic,
“Atlas” Afişi
Amplifier, 2020 (URL 24)**



**Resim 25. Canvas Paints,
“Give Love” Afişi
Amplifier, 2020 (URL 25)**

SONUÇ

İnsanlık tarihi boyunca salgın hastalıklar sayısız ölümlere yol açmış, toplumları belirsizlik, umutsuzluk, mutsuzluk ve kaos ortamına sürüklemiştir. Yıllar boyunca değişmeyen durumlardan biri de yetkililerin toplum bilincini yükseltmek için tasarımcılarla iş birliği halinde olmasıdır. Öte yandan tasarımcılar alınması gereken tedbirlere dikkat çeken afiş tasarımları yapmış ve hala yapmaya devam etmektedirler. Bu sebeple İspanyol Gribi'nin üzerinden 100 yılı aşkın bir süre geçmesine rağmen, insanoğlunun güncel problemleri çözmek için geliştirdiği çözümler benzerlik göstermektedir.

20. yüzyıldan itibaren günümüze kadar gelen pandemi ile ilgili afiş tasarımlarına bakıldığında, tasarımcıların grafik tasarımın temel ilkelerinden biri olan “denge” terimini ustalıkla kullandıkları sonucu çıkarılabilir. Özellikle afiş renkleri kapsamında birbirlerine kontrast renkler tercih edildiği sonucuna varılmıştır. Bu kontrast renklerle dengeli bir tasarım ortaya çıkarmak amaçlanmıştır.

İspanyol Gribi'nin ortaya çıktığı dönemlerde teknoloji günümüzdeki kadar gelişmiş olmadığı için, afişler el çizimleri olarak tasarlanmıştır. Zaman zaman gazetelere basılmış, zaman zaman da baskı alınıp ülkelerin her yerine dağıtılmıştır. Afişler, günümüzde basılmamakta, teknolojinin verdiği rahatlıkla online olarak yayımlanmaktadırlar.

Bunun yanı sıra eski dönemlerdeki salgınlarda maske takmanın erkek bireyler için bir tehdit unsuru olarak görülmesi durumunun günümüzdeki süreçte kaybolduğu gözlemlenmiştir. Afişler de hem kadın hem erkek figürleri kullanılmaya başlanmıştır.

Sonuç olarak, bu belirsiz ve bir hayli uzun süren salgın döneminden, tarihte pek çok örneğini gördüğümüz gibi normalleşme sürecine geçileceğine inanarak, grafik tasarımın iletişim gücünün etkisine her zaman ihtiyaç duyulacağı düşünülmektedir. Bu doğrultuda kuralların, verilerin, toplumu bilinçlendirmenin en etkili yollarından birinin grafik tasarımın temelini oluşturan afiş tasarımları olduğu sonucuna ulaşılmaktadır.

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CONVID-19 AND SUICIDE BEHAVIORS: A REVIEW ON THE MENTAL HEALTH IMPLICATION OF ECONOMIC CONTRACTION ON AUSTRALIAN CONSTRUCTION INDUSTRY WORKERS.**Falana Justina N.**

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ABSTRACT

Australia is facing an unprecedented economic challenge due to the ongoing Coronavirus disease (COVID - 19) pandemic which has affected many sectors and has shaken up the construction industry having negative effect on the construction projects. Many ongoing construction projects have temporarily shuttered as large numbers of workers all around the world are being thrown out of work by COVID -19. However, this study envisage a colossal increase in suicidal behaviors among Australian construction workers as a result of downsizing of the labor market in the approaching months if not years as workers who lost their job maybe under mental stress and have the tendency of attempting suicide. This study therefore, examines econometrically the congruency between unemployment and suicide behaviors among construction workers in Australia. Information's were extracted on economic situations, mental health and suicide from the literature. Conclusion and recommendations were made based on the findings obtain from this study.

Keywords: Suicide, Coronavirus (CONVID – 19), Economic Recession, Construction Workers, Job loss/Unemployment, Australia.

1.0 INTRODUCTION

The ongoing Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus 2 which first emerged in Wuhan, China, December, 2019 and was declared as pandemic by the World Health Organization (WHO) on the 11th March, 2020 (WHO Director, 2020). On the 25th of January 2020, the first case which was confirmed in Australia was identified in Victoria. This was a case of a man who had returned from Wuhan, China and was tested positive for SARS-2 CoV-2 (Australian Government Department of Health, 2020) since then, the spread of this disease has worsened and more deaths have occurred. However in an attempts to limit the spread of COVID - 19 transmission in Australia there are various measures which were taken into consideration for preventing and managing this disease and one of them is the announcement of the strict lockdown rule, which was adopted worldwide. On March 23, 2020, Australia began living under a strict new lockdown rules and strong restrictive measures which was mandated by the Australian government.

Evidently, construction activities are majorly outdoor activities and require a lot of people involve to execute construction projects, however obeying the rules of lock down and social distancing measures were quite challenging thus leading to stop work in most construction projects. This has led to a quite number of workers losing their job, some were laid off or furloughed, salaries and wages were reduced and economic hardship were experienced among workers in the construction industry.

The Australian Bureau of Statistics, (2020) estimated an increase rate of 6.4% in unemployment in April 2020 and decrease in wages by 5.4 per cent. In August 2020, the Reserve Bank of Australia (RBA) predicted that the unemployment rate will rise to about 10 percent at quarter ending in December, 2020 and the report further stated that there will be a Gross Domestic Product (GDP) contraction of about 6 percent, and 17 percent decline in business investment (RBA Forecast Table, 2020). This means the unemployment peak is yet to come and if this should continue it could affect the mental health of construction workers who are affected, they get depressed, some even indulge in new lifestyle such as smoking and heavy alcohol consumption and all this could precipitate suicide. According to Barr et al., (2012) less than half of the rise in suicide that occurs during the period of recession is associated to an increase rate in unemployment.

However, following the event of CONVID – 19 pandemic and its lock down rules, this study anticipate that job loss, job insecurity, income inequalities and poverty are likely to become an increasingly important issue over the coming months due to the economic inactivity over the last few months and affected individuals including construction workers may be more vulnerable to suicide risks behaviors. It is therefore against this backdrops that the study examines the relationship between economic contractions, unemployment and suicide behaviors (i.e. suicide, suicide attempt and suicide ideation) among construction workers in Australia.

2.0 LITERATURE REVIEW

2.1 Suicide, Economic Contraction and Unemployment

The construction industry is indisputably among the most significant industry and the third largest industry in Australia because of the number of people it employs and its share in the GDP of the country. This indicate that the construction industry is one of the major drivers of the economy growth in Australia but presently the country is facing an unprecedented challenges of its kind as the COVID - 19 pandemic has not only have a negative effect on the health of individuals but also has inevitably affected the world economy which has in one way or other causes an economic contraction within the country and most business sector including the construction industry. It becomes more challenging as many construction

industry loses a lot of income as a result of forcing most administrative works and construction projects to shut down.

Obviously construction projects rely mostly on site labours and participation to progress and complete work but strict measures such as social distancing, travel restrictions, curfew, lockdown etc. which was authorized in the country to arrest the spread of this disease turns out to be effective in preventing the spread of this said disease but unfortunately has directly have effect on the construction workers.

All efforts were made by the Australian government to manage the negative effect of CONVID – 19 pandemic lockdown measures, still the situation persist. Therefore this stressful situation created some sort of psychological pressure on construction workers as the closure of most construction sites may mean pay cuts, furlough-related inactivity and loss of job. This thereby affect their mental health of workers which is a suicidal risk factor.

Mates in Construction (MIC) a multifaceted workplace suicide prevention strategy developed in Australia operating in NSW also stressed that men who work in construction are 70 per cent more likely to die by suicide than any other employed men in other industries in Australia (The Daily Telegraph, 2017). Considering this fact makes construction workers more vulnerable in this current environment. A study conducted in Finland in the 1990s shows that Finland experienced a deep despair because its GDP dropped to about 14% and unemployment rate elevated from 3 to almost 20% (Honkapohja and Koskela, 1999). Carneiro et al., (2014) also reveal that the economic crisis in Portugal gave rise to job destruction as a result of downfall of existing firms, substantial increase in unemployment rate and reduction in salaries and wages.

Several researchers all over the world has worked on the association between economic contraction, unemployment and suicide across the world, for instance, Iglesias García et al., 2014; Webb et al., (2002); Santos et al., 2016; Mäki & Martikainen et al., 2012; Barr et al., (2012), Mattei and Pistoiresi (2019); Nordt et al., (2015) and among others. Many of these studies found an elevated rate of suicide risks among unemployed individuals as a result of economic downturns. An Australian study by Milner, Morrell, & LaMontagne, (2014) found out that the risks of suicide in unemployed men and women significantly increases by 22% and 19%, respectively, in 2008. (Coope et al., 2015) in his study revealed an analysis obtained from the coroner records estimated about 300 people who died by suicide in England in 2010 and 2011, the study also shows that 4% of suicides are related to recession, unemployment or financial-related difficulties. More so, Beautrais et al., (1998) also found an association between unemployment and mental disorders. It was found that many who attempted suicide as a result of job loss or being unemployed might have been suffering from an underlying mental illness.

This study therefore develop an analytic framework used to link the effect of ongoing CONVID – 19 pandemic on the Australian Economy having negative effect on the mental health of construction industry workers triggering suicide.

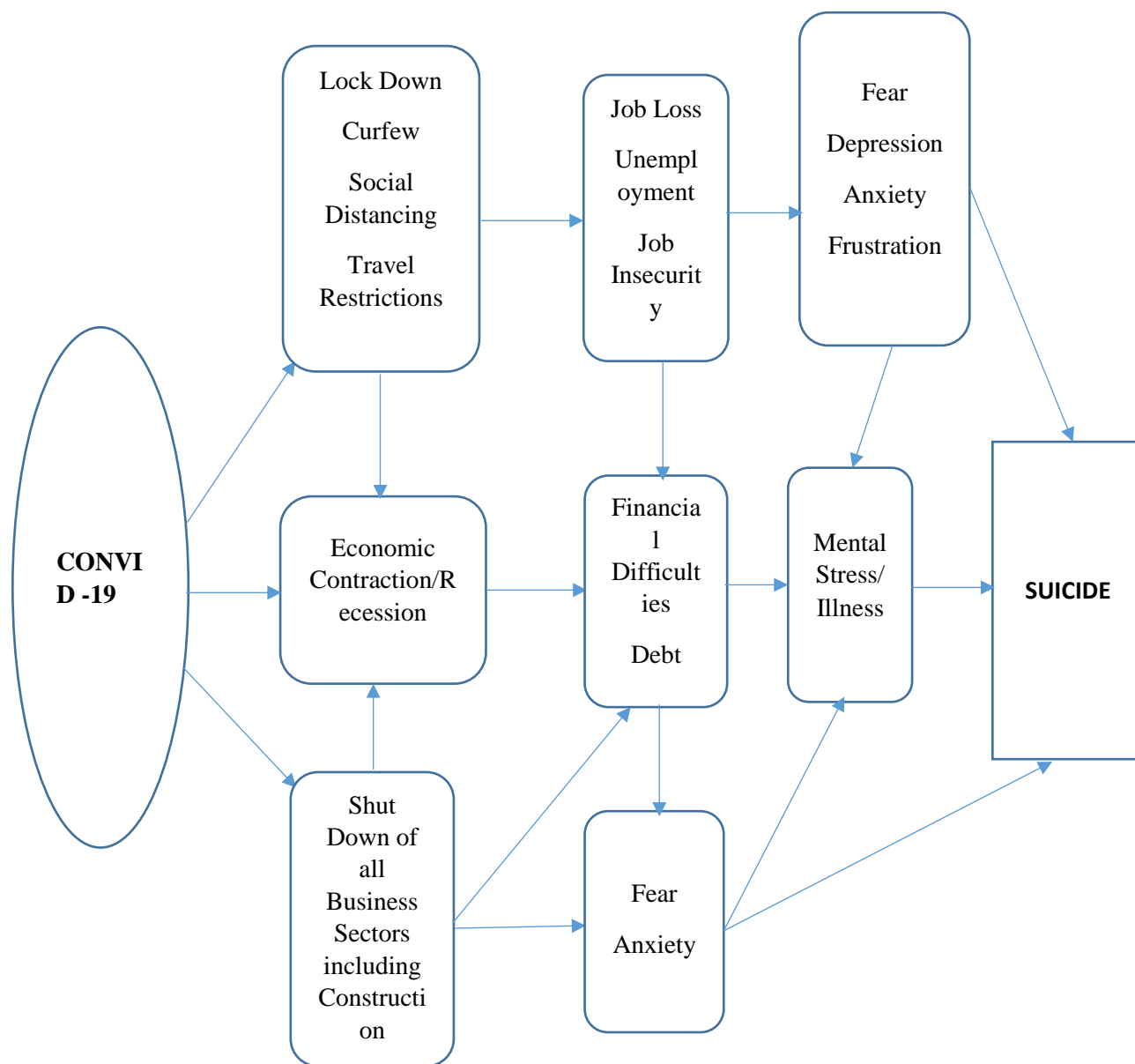


Fig 1. Causal Relationship between CONVID – 19, Economic Contraction, Job Loss/Unemployment and Suicide.

Based on figure 1, it can be hypothesized that there is a sturdy relationship between suicide and economic contraction. The study therefore found a strong relationship between the decline of growth of the economy as well as the increase rate of suicide.

2.2 FINDINGS AND DISCUSSION

A statistical report were extracted from the ABS, (2020) which revealed the rate of unemployment increased by 15,700 to 1,009,400 people, which signifies an unemployment rate increases by less than 0.1 percentage points to 7.5% while the underemployment rate decreasing by 0.5 percentage points to 11.2% and the underutilization rate decreased by 0.4 pts. to 18.7%. This can be seen in Figure 2 and 3 below.

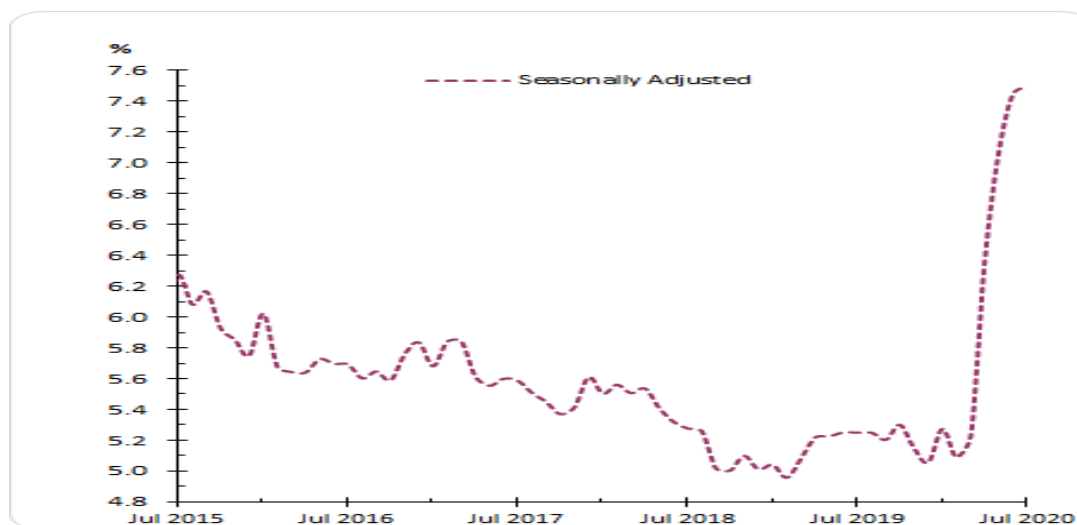


Fig 2. Employment to Population Ratio of People, from July 2015 to July 2020

Source: The Australian Bureau of Statistics Report, 2020.

Figure 2 above, indicate that unemployment rate in July 2020 is 2.2 pts higher than in July 2019. It signifies that the number of unemployed people rise by 15,700 in July 2020 to 1,009,400 people, and increased by 296,200 people from July 2019. The underemployment rate in July 2020 also indicate a 2.8 pts higher than in July 2019. The number of underemployed people decreased by 46,300 in July 2020 to 1,511,800 people, and increased by 32.3% or 368,800 people since July 2019 (Fig 2.).

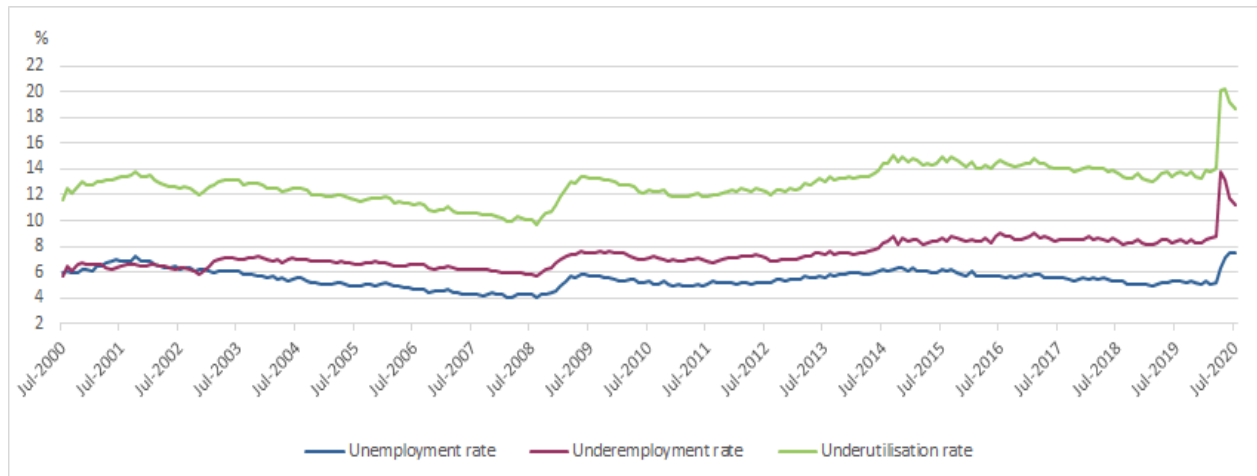


Fig 3. Underemployment, Unemployment and Underutilization Rates.
Source: The Australian Bureau of Statistics Report, 2020.

Data extracted from the Labour Force Survey (LFS) conducted by ABS, (2020) is presented in fig 4.

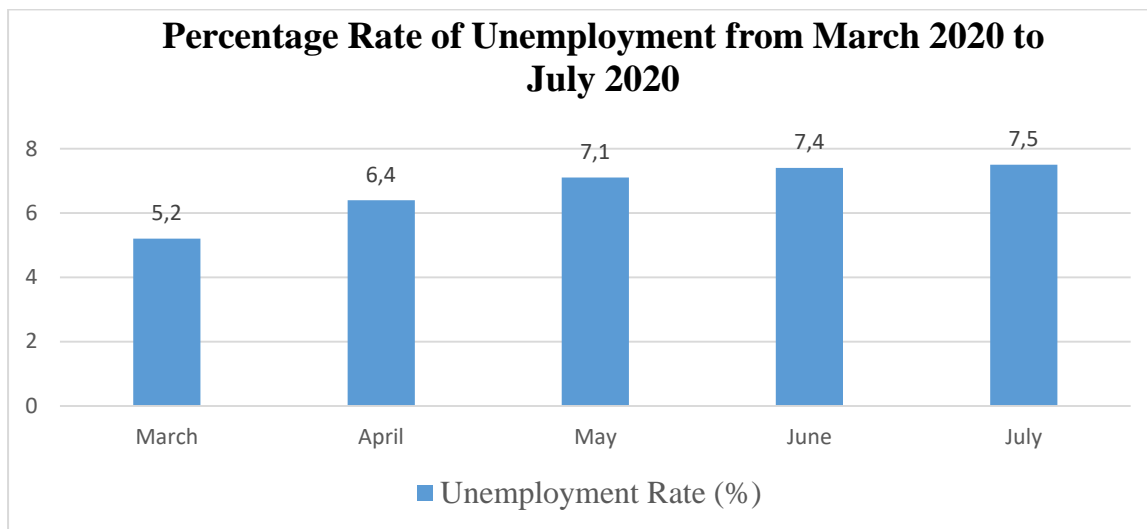


Fig 4. Percentage rate of unemployment from March 2020 to July 2020.
Source: Data extracted from the Labour Force Survey, 2020.

The LFS data started from when CONVID – 19 was declared as pandemic, March 2020. This means the LFS result affirm the rate of unemployment increases significantly from 5.2 % in March to 7.5 % in July.

Following this report, the general threat of job insecurity, job loss, unemployment coupled with the looming global economic instability by workers during this CONVID – 19 pandemic lockdown will negatively contribute to the mental illness among vulnerable construction workers which could trigger suicide behaviors.

3.0 CONCLUSION

Examining some previous studies and relating it with the present situation on CONVID – 19 era, it can be said that there is a strong body of evidence that shows a similar relationship between the period of economic uncertainty and increase rate of suicide behaviors. More so this study extracted an unemployment data from the ABS, (2020), this report shows a substantial increase in unemployment, underemployment and underutilization from March 2020 to July 2020. This study therefore extrapolate that the colossal increase in unemployment in Australia in March 2020 to July 2020 is as result of the implication of the CONVID- 19 pandemic on the Australian economy and the labour market. However, the economic shock, severity and duration of unemployment seen during this period will have negative effect on the mental health of workers, which is major factor initiating suicide.

4.0 RECOMMENDATIONS

Based on the findings of the study, the following recommendations were provided;

1. Adequate social welfare services should be provided during this CONVID – 19 pandemic to unemployed people or people who lose their job to eradicate the risk of suicidal behaviors.
2. In response to the Covid-19 outbreak, monetary authorities should provide financial support to affected households, business sectors including the construction industry.
3. Economic Injury Disaster Loans (EIDL) should be provided by the Australian government to the construction industries and other business sector to relieve them of their economic loss.
4. Psychiatrists and mental health professionals should raise awareness in the society on the high-risk warning signs shown among construction workers or anyone who is at immediate risk of attempting suicide.
5. Adequate suicide prevention interventions and unemployment reduction strategies/compensation should be provided during this COVID-19 and post CONVID- 19 era.

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THE IMPACT OF COVID-19 ON THE FUTURE OF SHOPPING MALLS

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ABSTRACT

Public spaces of the city have been considered as one of its assets, a social capital that can be used in the social integration of its resident. The shopping activity took place in urban public spaces of city with other social activities. The enclosed shopping malls which could be explained as multiple community, separated the public life from the city visually, physically, socially and mentally. Today's people prefer to find everything in same complex that is why shopping malls are preferred for shopping, entertainment and gathering. Therefore, shopping malls could be considered as public spaces for spend time and communal socialization not only shopping.

The COVID-19 pandemic causes people to avoid public spaces and increasingly confine to their homes. The crisis of COVID-19 continues to change the way people lives, works, socialize and spend time. The coronavirus pandemic continues to force public spaces such as shopping malls to close, indicate an unprecedented disruption of commerce and will continue to be impacted all around the world. Restrictions on the use of public space and social distancing have been key policy measures to reduce the use of malls during and after this pandemic.

This study aims to highlight emerging questions at the interface of COVID-19 and future of shopping malls. What will be the long term impacts of the COVID-19 pandemic on shopping malls during restrictions and once the restrictions have been lifted? It is possible that public places like malls are becoming increasingly devoid of shoppers, essentially transforming into ghost towns due to the COVID-19 which changes of our communications. Therefore; it will be critical to study and measure these changes in order to inform the design of retail places and malls in a post-COVID-19 world.

Keywords: COVID-19, Shopping malls, Public Space, Regeneration, Transformation.

Introduction

The Covid-19 outbreak which are experiencing is not the first global epidemic in world history. In the history of the world, besides many regional epidemics, there have been many global or intercontinental epidemics. As it is today, previous global epidemics have had significant social, economic and psychological consequences as well as loss of lives. Today's global COVID-19 epidemic have long-term economic, social, psychological and health environmental effects as well as short-term losses.

Public spaces like shopping areas are indispensable places for human. The buying and selling of goods played a very important role in the development of towns and cities (Dixon, 2005). Shopping places has been changed with modern movement. At the same time, these spaces embrace particular events that have collective social, historical and cultural associations; projections of these events influence the physical transformations, which can each be re- identified through time. One of the basic features of traditional shopping areas is the association between urban fabric and social structure (Birol, 2005). However, contemporary shopping places has been emerged as closed box independent from tissue of city which lost their spatial values. On the other hand, it is inevitable that nowadays, these enclosed centers are preferred

for spending leisure times through the recreational, cultural and entertaining facilities offered in these places besides do shopping.

Shopping malls sustain its existence as a social and commercial venue where continuously persuades social interactions, meetings, gatherings and communications. Therefore, the communal socialization in shopping areas have been affected by the social and cultural elements which change and re-identified modern shopping places.

As the situation around COVID-19 rapidly evolves, socialization and shopping behaviors have been forced to change and make quick decisions. Social distance and the restriction use of public spaces dictated by COVID-19 health emergency affects access to public space and with it creating a range of impacts on different levels. Long term impact of the pandemic on public spaces like shopping malls will be discussed as the main focus point of this article. The rapidly changing behavior of shoppers, impress the future of shopping centers, spending habits and communications.

This study aims to summarize preliminary research questions, assumptions and ideas about how the COVID-19 pandemic crisis might change the use of shopping malls within in the restrictions. On the other hand, which changes will stay with us once the immediacy of the pandemic has passed in the ensuing months and years.

Shopping Places as Public Spaces

Smithsimon (1999) defines public spaces as the centers of social life where provide people with the possibility to interact with each other and learn about and identify the society they live in through their everyday uses. This conception also incorporates privately owned spaces like shopping centers and retails besides publicly owned spaces like public parks and streets. As Carr et al (1992) explain, shopping places are not only retail environments; they are also a type of public space mostly aim to satisfy social and communal needs of people.

The concept of shopping malls is shaped around the idea of a communal space inspired by traditional town centers and squares which is a place not just for shopping, but to socialize and feel connected. It can be imagined as a miniature “city under a roof”, fully enclosed from the outside world, but covered in natural skylight, the climate-controlled environments which should mimic actual city centers. In recent decades, they are the heart and soul of communities, the foundation of retail economies, and a social sanctuary for todays people (Moazemi, 2018).

The history of shopping places begins with Greek agora and continues with Roman forum. Greek’s agora, usually located in the center of the polis and the focal point of the town, both functioned as a market place and the gathering place for political assembly. In other words, it had both an economic and political importance (Mattson, 1999; Zucker, 1959). It also served as meeting and gathering place of citizens for daily communication, formal and informal assembly.

By the 18th century, as a result of rise of bourgeoisie, the shopping streets developed in Europe (Koolhaas, 2001). Just before the Industrial Revolution, market places in cities were no longer spatially sufficient for the evolving trade. As a result, starting from Italy during the 16th century, and in northern Europe in the 17th century, the central streets of cities were lined with shops, pubs and coffee shops, where the shops were organized by type (Coleman, 2007). Besides the growth of new public spaces for leisure and public entertainment in 18th century, 19th century was marked with the emergence of new consumption places serving also as important public spaces like the shopping arcade, passages, shopping street, bazaar and department store (Rendell, 1998).

Since the end of 20th century, due to the globalization with the increasing use of technology in the design of several spaces, forms, usages, characteristics and definitions of shopping places have been changed dramatically (Smithsimon & Bindner, 1999). The activities that were once taking place in public spaces, like squares and streets, now are shifting towards to take place in closed spaces like shopping centers. The

increasing use of closed shopping areas as gathering places and social life centers which are isolated from rest of urban fabric can be seen in the developed communities (Sennett, 1987). Shopping malls are rather than providing community's demands; they have become the urban focal points that reflect the socio-cultural characteristics of the society with the sporting practices, cultural activities, entertainment and recreation areas, restaurants, cafes with in them. Contemporary shopping areas are also a place of recreation and a means of social interaction beside buying and selling activities.

The presence of retailing within mixed-use areas added to the public and communal life by making it safer and faster. Today's fast living conditions concerns are causing people to prefer mixed use developments where they can live, shop and work all within walking distance. Therefore; reflection of COVID-19 on social representations and the communication modalities of shopping malls gain importance. On the other hand, the long term impacts of the COVID-19 pandemic on public life and shopping malls, the depth and extent of regeneration and transformation of these public areas are unclear and unpredictable.

There is great uncertainty about how COVID-19 will impact future public space design, use and perceptions. It is unclear if the impacts of COVID-19 on the planning and design of public space will be as profound as they are in other aspects of our life (Corbera et al. 2020). How will our relationship with public space such as shopping areas change? How long will the changes endure? What is the relationship between shopping malls design and disease transmission? Will the new social behaviors and emotional connections with places be temporary or remain long-term?

Emerging questions on the impact of COVID-19 on Shopping Malls

There are many potential impacts of COVID-19 on urban nature and land use, urban density, public life, communication, energy, transportation, retail, and so forth. This article focus on how the current pandemic may change shopping malls as gathering and socialization places. Some questions are emerged especially as it relates to the future design, use and perceptions of shopping malls which are extensive but not exhaustive. It will be also expected circumstances to change between the time of writing and reading (Honey-Rosés et al, 2020).

Summary of the emerging questions about how the COVID-19 episode may change the design, use and behaviors in shopping places could be listed as follows;

1. Will people prefer open or closed shopping areas?
2. Will shopping malls experience regeneration and transformation (Indoor- Outdoor connection)?
3. Will shopping malls be re-designed or reconfiguring?
4. Will this global experience lead us to rethink the way we develop and (re)design our shopping areas?
5. Will we observe changes in the use and regulation of interior shopping malls?
6. Will we prefer the other open public spaces for gathering, spend leisure time and social activities?
7. Will shopping malls give its place to other shopping areas such as shopping streets? (The rise of online shopping)
8. Will the malls transform to another function?

Shopping and socializing activities in shopping malls are obviously the activities that are most likely to be impacted by COVID-19 crisis. In other words, COVID-19 is challenging the two activities that brought people together into the city. The rise of online shopping has heavily superseded buying and selling activities in shopping areas during pandemic restricts. Some strategies could be considered to regenerate shopping mall, to sustain definition of these closed places as socializing areas otherwise they have begun dying across the pandemic crisis. When a shopping mall closes, it will give a blighted building, deprive the community of a commercial service, a gathering and walking place, and tax revenue for local government. Therefore, malls can reclaim their status as public places. Some of the interior shopping mall

examples which had been taken in Ankara, Turkey during pandemic weekend could be supporting these positions (Figure 1, 2, 3, 4).



Figure 1-2 Atrium and social space of Panora Shopping Mall, Ankara, Turkey, July 2020, Personal archive.

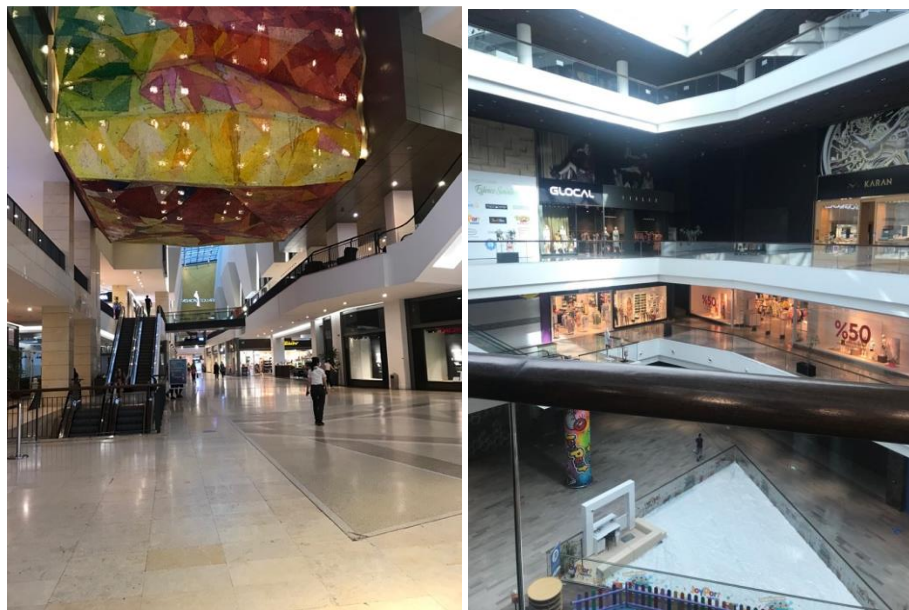


Figure 3-4: Atrium and social space of Gordion and One Tower Shopping Mall, Ankara, Turkey, Ağustos 2020, Personal archive.

Regeneration of shopping malls

Architects and urban designers aim to create places where people feel safe, comfortable and welcome. Public perceptions of shopping malls could have dictated what is designed and how (Pugalis 2009, Heffernan et al. 2014). However, the current pandemic threats are changing profoundly our relationship

with public spaces, especially when other people are present. Fears of contagion in closed indoor spaces may increase demand for more exterior spaces and improved ventilation (Honey-Rosés et al, 2020). Thence COVID-19 may provide particular strategies to re-design and regenerate closed shopping areas, which might need more outdoor spaces and more ventilation to descend the risk of transmission.

The tendency to move away from enclosed places increase because of COVID-19 threats. Shopping malls which could be considered as closed-box centers need more exterior spaces to integrated with urban fabric. For example, the hybrid centers are combining open spaces with enclosed interior space. Furthermore, shopping places are re-becoming public spaces with open and covered streets, a full integration with urban fabric (Coleman 2007, p.285) (Figures 5, 6, 7, 8).



Figure 5-6: Integrated urban regeneration Cabot Circus Shopping Center, Bristol, UK, 2008
(<http://www.chapmantaylor.com/projects/cabot-circus>)



Figure 7- 8. An open two level shopping area integrates with the street life of Nijmegen, The Netherlands
(<http://www.planum.net/street-life-nijmegen-the-netherlands>)(<http://www.youropi.com/nl/nijmegen/locations/marikenstraat-281>)

The other important emerging concept in re-design of shopping malls is to build up sustainable centers. As philosopher Prof. Ott (2003) described “Sustainability means that present and future persons have the same right to find, on the average, equal opportunities for realizing their concepts of a good human life”, So the changes needed to ensure that future generations on earth could enjoy the same quality of life that we enjoy today.

The social value of public space is wide ranging and lies in the contribution it makes to ‘people’s attachment to their locality and opportunities for mixing with others, and in people’s memory of places’. Places can provide opportunities for social interaction, social mixing and social inclusion, and can facilitate the development of community ties (Knox, 2007).

Recently, the most of the innovative malls in the world and Turkey are designed to be urban squares or city centers with its street-like atmosphere and ecological/natural approaches in both interior and exterior

spaces. New sustainable orders in mall designs are not only a big profit for the environment but also the building itself becomes provident. More open-air spaces and exterior shopping areas are introduced in hybrid type of centers in order to get rid of the feeling of being in enclosed spaces and to attract the customers with alternative spaces, such as street-like atmosphere (Figure 9- 10). Today's closed shopping areas become the center of mixed-used complexes, like as an urban public space, including many social activities besides shopping. So, they can be considered in the context of heart of communal socialization areas in urban design; integrating into daily city life with lots of alternatives.

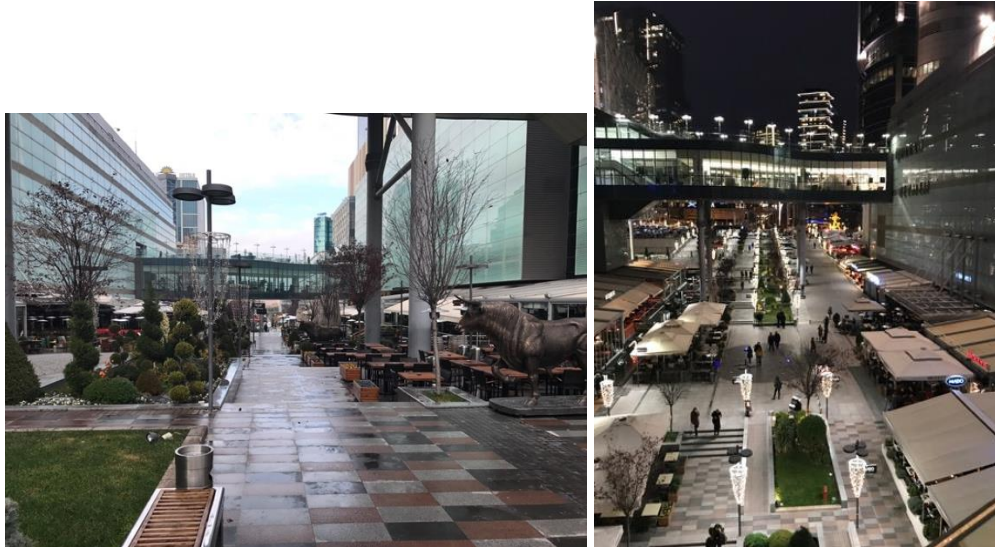


Figure 9-10: Life Street of Armada Shopping Mall, Ankara, Turkey

(Personal archive)

Regeneration of contemporary shopping areas according to COVID-19 pandemic circumstances, aims to updating the old enclosed shopping mall into a more actual type, for example remaking an enclosed mall into an open- air shopping and lifestyle center. Thence, strategies are suggested for regeneration of shopping malls to maintain the communal social and cultural life in these centers. Some of these strategies could be summarized such as; externalizing, adding transition and open areas.

Externalizing, as one of the strategies, means to reintegrate the mall back into the settlement fabric that has grown up around them in recent decades. So, externalizing is: integrating local grids and shopping mall accesses, designing for the pedestrian instead of automobile, finding new ways of utilizing public transition.

These open areas could be used for various purposes such as public gathering places with urban furniture, public and social activities for instance open air exhibition, performance and concert.

According to COVID-19 enclosed public spaces such as shopping malls are being ‘panopticons’ (Foucault 2012) thus, people actually like to be at outdoors places. Open spaces and landscapes can become central organizing and social spaces instead of the leftovers that they have become in recent years. Thus, to create outdoors, the ceiling can be opened or opening terraces, parking area and leftover spaces around shopping malls can be redefined for various activities such as open shopping streets and recreational spaces (Figure 11, 12, 13, 14).



Figure 11, 12, 13, 14: Molfetta Outlet Village Fashion District, Puglia, Italy
(Personal archive)

Open street and passage as one of the crucial strategies; is adding community-friendly transit provides pedestrian vitality. Pedestrians not only do shopping but they create the links and conversations that form the core of communities. Pedestrian access is one of the important aspects of integration, which forms a continuous street life from the urban fabric through the shopping mall. Montgomery (1998) states that, “successful urban places are based predominantly on street life, and the various ways in which activity occurs in and through buildings and spaces.” Besides, an integration of urban fabric and shopping mall as an enclosed public space is beneficial for the quality of city urbanity. Additionally, the shopping mall itself becomes a more successful urban public space. So, adding transit (open street and passage) not only provides accessibility, but also increases urban fabric integration of shopping mall socially.

Historically, shopping malls have been isolated, single-use developments that stand apart from the community. Their exterior presence is typically monolithic and over scaled, with blank architectural forms that are oriented inward-toward vast, climate-controlled shopping arcades and that turn their backs on surrounding neighborhoods. While shopping preferences were becoming more diverse, mall design, are becoming beyond the standards, in some fields such as climate. Customers are now seeking authenticity and a deeper sense of connection to their community, culture, climate, and daily lives. There is any more an emerging preference for outdoor, street front shopping areas, either in new centers or in older shopping districts, which are better integrated with other daily activities and urban fabric. Using design strategies that reflects the local culture, identity, and environment; developing parks and gathering places that enhance the mall’s public function; and providing top-notch infrastructure within the public realm.

Therefore; the recent strategies for shopping mall regeneration are formed according to recent trends in shopping places design. It could be assumed that the current pattern of shopping center evolution will continue. The urban public space quality of shopping environments will become more and more important (Figure 15, 16, 17, 18).



Figure 15, 16: Indoor and outdoor combination example in contemporary shopping places, Liverpool One Shopping Center, England (<http://www.bdp.com/en/projects/f-l/Liverpool-ONE/>)



Figure 17,18: Indoor and outdoor combination example in contemporary shopping places in Turkey. Forum Bornova Shopping Center, Izmir, Turkey, 2005 (<http://www.era-arch.com/work.php>)- Forum Aydin Shopping Center, Aydin, Turkey, 2006 (<http://www.era-arch.com/work.php>)

Transformation and Re-Functionalized Shopping Malls^{[1][2][3][4][5][6][7][8][9][10]}

The scope and method of interventions to a shopping mall in the process of re-functioning vary depending on the physical characteristics and architectural nature of the building. These criteria are extremely significant for ensuring the continuity of the shopping malls. The physical environment in which human beings live should be approached with formal or functional purposes.

Shopping malls such as many public spaces are a key feature of a flexible city, in part because of their ability to be transformed for emergency health purposes (Polko 2010). In India, empty malls are being turned into shelters for migrant workers who are unable to return to their villages. The value of large

public spaces may push us toward modular and decentralized designs that permit this flexibility (Honey-Rosés et al, 2020).

In order to achieve a sense of sustainability of the future built environment the natural elements have to be introduced into a system, which can be configured according to the existing hydrographic system which is already naturally interconnected.

The depth and extent of transformation is unclear, especially as it relates to the future design, use and perceptions of shopping malls.

Conclusion

The success of a particular public space such as shopping areas and community centers, is not solely in the hands of the architect, urban designer or town planner; it relies also on people adopting, using and managing the space-people make places, more than places make people. It means that people's social and cultural traditions and habits identify the place and lead to the various communal socialization and gathering places.

The COVID-19 pandemic is rapidly accelerating the transition to different social life circumstances. Changing commerce and consumer behaviors in profound ways will emerge a new social, cultural and economic reality. The pandemic could force planners and designers to create significant changes in retails and shopping malls.

Consequently, a key factor in the success of new type of shopping centers to be a socialization place rather than retail areas, is a strong reaction against the closed-off, somewhat drab interior spaces of closed-box centers as a result of COVID-19. New projects aim to banish all thoughts of dull, artificially lit interior spaces with the introduction of massive glass roofs and facades, offering a more seamless (uninterrupted) connection between the indoor shopping space and the world outside. Current shopping center projects are focused on creating a fresh indoor atmosphere, either creating open ceiling areas to allow plenty of natural light into the space, or even melding the concepts of internal and external with schemes that flow effortlessly from inside to outside. One step beyond to gain this connection is a combination of both external street and internal center. Shopping centers are striving to make sure that they're seamlessly integrated with open spaces and urban fabric.

As a result, Given the new impacts of COVID-19 on cities, new types of shopping malls will emerge which integrate more to urban fabric in order to sustain their lives. Thus existing shopping malls will have to regenerate themselves to keep pace with these circumstances and combine between indoor and outdoor space. We hope that public spaces such as shopping areas in the post-COVID world will remain valued for the possibilities they offer for people's socializing requirements, recreation, community building and cultural identity of society.

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THE NEED MAKES PEOPLE CREATIVE: COVID 19 URGENT NEEDS**Secil SATIR**

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ABSTRACT

At the present time the contagious features of COVID 19 differs from the onces of SARS, Plague and Cholera. First identified in Wuhan, China it starts with the common symptoms like high fever, cough and progresses to pneumonia. The usage of modern transportation as well as travelling in big groups has increased the spread of coronavirus. The expansion of COVID 19 around the world in just a few months created an inevitable situation. Easily entering the lungs via nose and mouth secretions it can make some damage that leads to the fatal consequences. Despite the high rate of recovered people the usage of mask, self protection, staying at home and some prohibitions are still necessary. All these facts are already known and don't represent innovative concepts. But if you look at this event with awareness, perception of design and the statement "the needs make people creative" you will see how creative an ordinary person can be and what he/she can do in order to protect his/her mouth and nose. The need to fight for survival and preventive measures taken to protect against the epidemic presented the most correct and accurate concept in design. The problem discussed in this report is considered from the point of view of what an ordinary person can achieve in an urgent situation without participation of designers. We are trying to show how ordinary people make efforts and transform ordinary objects, use practical materials and handmade items in order to protect themselves. In this report we resort to the method of analysis, comparison analysis and methods of interpretation. The report also uses the method of observing people wearing masks on the street.

Key words: world pandemic, COVID 19, protection.

INTRODUCTION AND BRIEF HISTORY OF PANDEMICS

By looking over the centuries we can see that there isn't any single epidemic left that could change the course of the history or totally destroy the humanity, sometimes it could just cause the collapse of a civilization. One of the most ancient epidemic diseases was discovered in China in a 5 thousand-year-old house built 3000 BC filled with skeletons. With the assistance of Chinese archaeologists Jarus (2020, www.livescience.com), there was discovered a prehistoric village (5 thousand years old), which was completely extinct and wiped off the face of the earth. In fact the dead bodies were filled in the house and burnt in order to get away from the danger. Jarus (2020, www.livescience.com), Started 430 BC the war between Athens and Sparta leads to the epidemic that caused more than 100 000 deaths. According to the source "Healthy people were suddenly attacked by a severe fever in their heads, they had red eyes and some inflammation, the internal parts of the body like throat and tongue were bloody and unnatural, emitting a horrible breath. Jarus (2020, www.livescience.com), Between 165-180 AD the cause of deaths of more than 5 million people was associated with the name of a doctor called Antonine Plague. This epidemic negatively affected The Roman Empire. The cause of death of more than 5 thousand people found in the city of Thebes Egypt was a thick layer of lime. Named after the bishop of the city in Tunisia (St. Cyprian) and the Cyprus Plague found In 1024 in the city of Luxor marked the end of the world. Named after the emperor Justinian, who fell ill and recovered himself, the Justinian plague caused the weakening and decline of the empire and also was known as the oldest epidemic.

Penetrated from Asia to Europe in 1346-1353 the Black Death killed more than half of its population; Colonization of the American continent in the 15th century (this context in the study of London College); thanks to the study carried out by the scientists, only during this century, the Smallpox epidemic killed up to 10 percent of the world population; the population of the region decreased from 60 million to 5-6 million. Around 1545-1548, "Pest epidemic" in Mexico and Central America killed 15 million people (in Mexican language Cocoliztli). Later in the 16th century, a cluster of Eurasian diseases carried to America by European explorers were called "American Plagues"; in 1647-1652 the cause of death of almost 76 thousand of people " Spanish Plague"; causing about 100,000 deaths in 1665-66the "Greater London Plague"; Killing up to 30% of the population of Marseille in 1720-23 "The Great Plague of Marseille"; First in Japan 1817, then in Moscow 1826, Berlin, Paris and London, the "Cholera" epidemic killed 1,500 thousand people, even in the Ottoman Empire during the Balkan War in 1912-1913 the "Cholera" epidemic caused serious number of deaths; In 1848 Typhus epidemic first appeared in the regions of Central and East Africa, Central and South America, Asia killed 20 thousand people; The "Spanish Flu" that in 1918-20 killed 50-100 million people within 18 months; In the 2000s the outbreak like COVID 19 which broke out right after the epidemics of HIV-AIDS,SARS, Ebola may destroy humanity. (www.livescience.com), (tr.wikipedia.org/wiki/Tifus), (www.ntv.com.tr/galeri/saglik), (www.bbc.com/turkce)

Methodology

The research about epidemic diseases, concept of necessity, masks was carried out by analyzing scientific literature. However, the methods used in this report are based on observing people walking through the streets, shopping or waiting at a bus stop. During the observation, which was take 3 times at different times with a break for a week, then repeated three times, it was found that the person's behavior did not undergo any changes. In addition, we have analyzed some examples of masks sent on whatsapp application and email.

THE CONCEPT OF NEED

The concept of need as an encyclopedic knowledge means to demand, to feel necessity in something or to desire. If this need is no accomplished the person falls into a difficult situation, troubles this is how it's determined by Fıkıh (İslam law)(Yaran, 2000: 573-574). Here the definition of desire or demand shows more to like or show interest to something, which differs from the definition of need. In some cases the concept of need is equivalent to the necessity:

"A baby does not need to wear shoes until he starts to walk. [verb-infinitive] I need you to do something for me. [Verb-infinitive] I need you here Wally.[Verb-noun-pronoun-adverb] The building needs to be repaired. We need to gather in the garden [verb-infinitive]; to desire, to miss, to need, to require, to seek (www.collinsdictionary.com) these definitions can be equivalent to the meaning of the concept of need but it depends on the situation..

When the concept of need is perceived in the context of the meaning of life, it's important to understand that in order to get satisfaction from the daily routines you have to possess a strong and healthy body; in order to realize our inner and outer thoughts it is necessary to integrate concrete and abstract necessities. The famous philosopher Richard Taylor debating about the good and evil sides of our needs organizes the conference where he talks about feeling, needs and desires of the ordinary people. (Taylor-eleştiri, 2000). Even the international organizations such as the World Bank have adopted basic needs intertwined with life as a policy within the context of neo-classical (neo-classical) theory. On the other hand, apart from basic needs, economists think about the concept of utility, and develop the concepts of production and

consumption with consideration of the social structure.. This report considers the concept of need as basic. Requirements artificial or real are divided into 2 groups by Veblen (Thorstein Bunde Veblen 1857-1929) who was the first creator of this idea. Basic needs are considered as real needs in this classification of requirements, not staying hungry, thirsty or without shelter. (Burhan, 2011: 20-33). The needs will gain structure that depends on the production power of societies, therefore it defines that the needs of societies will continuously develop, change and diversify in the course of evolution. Sadun Aren (1978) admits that the needs are numerous, their severity can be decreasing, repeating, interchangeable.

Management Information Systems Encyclopedia (MIS) places the notion of need as a subject, Seker (2014: 43) what can be defined by "Maslow's Pyramid of Needs". According to this hierarchy our needs have the next structure:

- Self-actualization needs (virtue, creativity, naturalness, problem solving, don't be prejudiced accepting the facts)
- Esteem needs (self-esteem, confidence, success, respect, respect of others)
- Love and belonging needs, (Love Belonging: love, affection, friendship, family, sexual intimacy)
- Safety needs (body, work, resources, ethics, family, health, property safety)
- Physiological needs (breath, food, water, sexuality, sleep, balance).

On the concept of need Gerald Fussell writes a blog in order to research how the school students gained self-actualization stage, how they face to the challenges, how to support them in taking conscious and difficult decisions, to examine their diverse and dynamic needs. Students will feel good and will be ready to learn, if they go to school being well-fed, clean, healthy, happy. Maslow, whose schematic description was developed and presented in a study by Fussell (2014), prepared the table of needs, especially to help students explore their basic and psychological needs. A 5 level pyramid known as the hierarchy of needs by Maslow schematically explains the needs of people. First as a subject of psychology it grows up into the motivational theory. The basic needs are placed at the bottom of the hierarchy

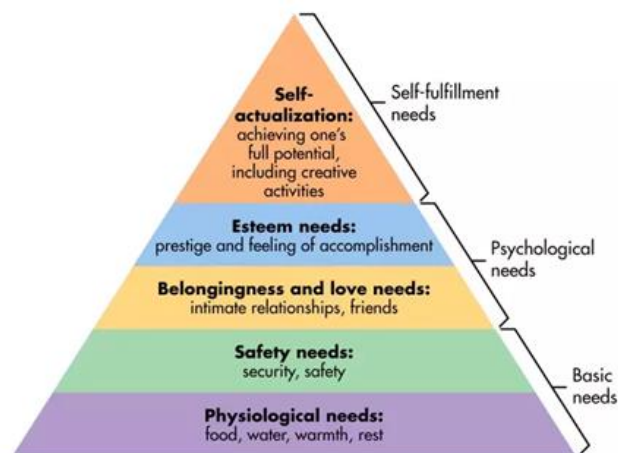


Figure 1: The hierarchy of needs by Maslow, (McLeod, 2020)

According to Maslow's hierarchical need layers the needs like breathing, drinking water, feeding, keeping warm, sheltering, resting, getting dressed and being reproduced are listed as physiological needs. The security is placed on the second layer while love and belonging are on the third layer, respect is listed on the fourth layer and self-realization is on the fifth layer. First four levels from the bottom are explained

deficiency needs. Physiological needs and safety needs are explained as basic needs while love, belonging and respect are defined as psychological needs. Self-actualization at the highest level is considered as growth and maturation. Divided into two groups the deficiency of the lower four levels of hierarchical needs provides a deeper explanation.

“Deficiency needs arise due to deprivation and are said to motivate people when they are unmet. Also, the motivation to fulfill such needs will become stronger the longer the duration they are denied. For example, the longer a person goes without food, the more hungry they will become. When a deficit need has been 'more or less' satisfied it will go away, and our activities become habitually directed towards meeting the next set of needs that we have yet to satisfy. These then become our salient needs. However, growth needs continue to be felt and may even become stronger once they have been engaged” (McLeod, 2020).

Maslow has researched that the effort to reach certain needs motivates people, he also emphasized the importance of reaching first basic needs. The higher the hierarchy of needs is, the higher the psychological and social needs come into play. Growth needs do not appear from a lack of something, but rather from a desire to grow as a person. Maslow stated that the order in which these needs are fulfilled does not always follow this standard progress. For example, for some individuals, the need for self-esteem is higher than the need for love. (Cherry, 2020). Cherry, 2020). For others, the need for creative fulfillment can replace even the most basic of needs. In the context of this report, the concept of safety needs that are above the physiological needs constitute the group of basic needs. “When an individual's physiological needs are met, safety and security needs come forward... These needs can be fulfilled by the family and society (e.g. police, schools, business and medical care). For example, emotional security, financial security (e.g. employment, social welfare), law and order, freedom from fear, social stability, property, health and wellbeing (e.g. safety against accidents and injury). The report aims to be healthy, what is more important to survive, in accordance with the concepts of "medical care, accident and injury". It depends on what we can do or achieve in order to protect against epidemics.

WHAT IS COVID 19

Emerged in Wuhan, China. coronavirus has spread all over the world by causing a lot of deaths and can be named as an unusual epidemic. It is thought to be transmitted from bats. The increasing number of epidemic diseases that people have lived during the last 30 years makes us think about the reasons behind them. The fact that the world population has significantly increased and it continues to increase, people travel a lot and in contact with each other what may be the cause of epidemics to increase. “The virus is spread primarily via nose and mouth secretions including small droplets produced by coughing, sneezing, and talking. The duration of this virus outside the body is very limited. For this reason, the person who spreads the virus and the person to whom it's transmitted have to stay in the close proximity to each other” (Hegarty, 2020-www.bbc.com/turkce).

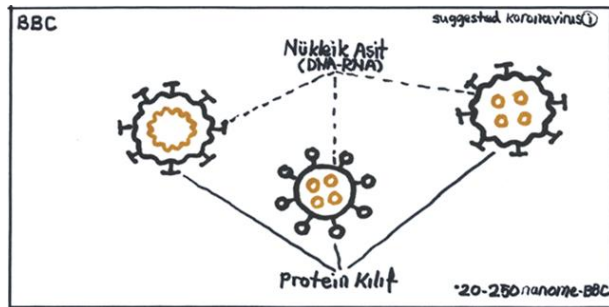


Figure 2: Schematic representation of Covid 19 (Coronavirus) “www.bbc.com/news” free-hand drawn ;

As you can see on the figure 2 the virus consists of nucleic acid and protein sheath. It is a kind of envelop which stores genetic material. Coronaviruses are positively charged RNA viruses that have four separate groups as "HKU1, NL63, 229E and OC43", varying in diameter from 60 nm to 140 nm (Öztañ, İřsever, 2020: 62) The coronavirus, which is a tiny virus that affects the respiratory tract, is a member of a large family of viruses. Coronavirus misleads by the way of transmission and by showing the symptoms of typical seasonal illness, it's medical treatment doesn't refer to the information area of design. However, the need to protect oneself urgently is somehow connected with masks, which are considered as products or objects of design.

COVID 19 MASKS

Due to their protective features, masks are primarily used to protect allergic people from dust, pollen, etc., in the medical field, they are simple objects used to protect doctors and nurses. In sports, theater, fashion, in addition to the use for protection purposes, masks were also used against infectious diseases in the earliest periods of history..The purpose of the report is to analyze masks according to their main qualities, and also group them according to the design perspective. Except for the masks seen by the author on the street, the masks in all other pictures were reconstructed by the author's free hand drawing, the colors were modified .

Special design masks

Special Design masks are masks which are the result of designer ideas. From the point of view of usage, they become important as they are designed with the user in mind, of course, taking into consideration the protective properties of the mask. However, if designers strive to diversify each product they create, then here it is worth talking about all kinds of variations. Pictures are selected according to the characteristics of differentiation listed below:

- Simplified bent or molded;
- It is the hemisphere that completely encompasses the head; It grows and shrinks with interlocking parts;
- It goes through the neck and returns to the head;
- It bends like a piece and takes the shape of a helmet;
- Up-down flexible and air-channeled; It is put on the head as if it were an umbrella;
- May be of medical nature, combined with glasses, or worn like spectacles;
- Hexagon sliced to gain a grid structure;
- It is supported by an air tank on



Picture 1: Special design masks: source: “<https://www.pinterest.ie/pin/514817801157196900/>”

The masks, the differences of which are mentioned above, only represent the difference in design. Of course, the design also considers breathing-facilitating qualities of the masks. More importantly, if the difference in design provides ease of use, it will serve its purpose.

Technology product masks

Technologically specific masks are objects developed by both designers and engineers. Here, the protective nature against epidemic is questioned. At the same time, the need to ensure comfortable breathing still remains. Examples:

- Special sections designed on both sides of the mask provide air inlet and outlet
- These special sections do not let in the virus; but it provides air intake;
- In this group, the mask can be worn over the entire head like a helmet; the entire face may be masked;
- While the mouth and nose are designed on the front, the air inlet and outlet are directed to the right and left.
- The inside of the mask has a special filter and is equipped with technical features;
- The mouth part is clearly on the front; as if it had a speech facilitating feature.



Picture 2: Technology Product Masks. source: “<https://tr.pinterest.com/pin/135600638752800709/>”

These types of masks are tested in production centers and laboratories, then mass produced. Their price may be more expensive. Designboom.com" launched a new multi-featured mask on August 31st. This Mask, " is transparent, highly tensile strength, contains anti-bacterial, anti-microbial nano silver (AgNPs) with transparent silk fiber, which absorbs moisture in the air, effective in destroying gram-negative and gram-positive bacterial species, made of an anti-fog, highly flexible polypropylene coded SEEUS95 material "(www.designboom.com/design/seeus95-mask)

Street observed masks

This group of masks was determined by the author in three separate times, by observing and interviewing people on streets, avenues:

- Some people use masks carefully without ever removing them,
- Some of them carry the masks on the chin, hand, ear, etc.
- Often people who say they can't breathe leave their nose or mouth open.
- This situation proves that some masks don't work well.
- In addition, the masks are seen being thrown on the sides of the dustbins or on the ground
- In fact, I had a long conversation with the woman in the orange braided mask. She was allergic to dust and pollen. She was knitting her masks herself. She was putting a little sanitary napkin in it, let it absorb the vapor of the breath. This solution coincides well with Corona virus.

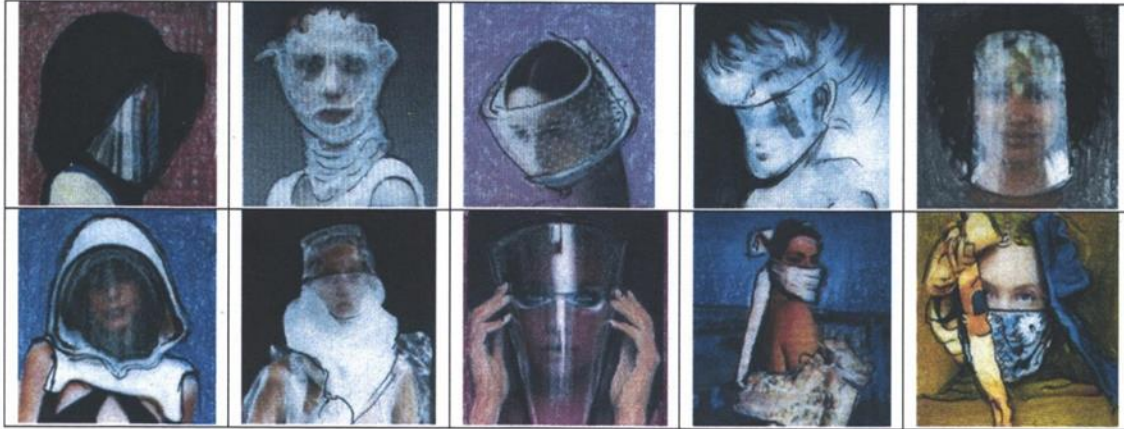


Picture 3: The masks seen outside (on the streets). Source: photos take by the author.

Fashion masks

A group of people who work in the field of fashion and beauty will have something to do in their field, even in the worst times. Here are some typical features of fashion masks:

- They complete the clothing. They look gilded, sparkly, extraordinary,
- They are made of decorative materials that attract attention
- They can be masks that are integrated with hair, dresses, ribbons and sometimes even theater masks.
- They retain their individuality, adapted to the fashion.



Picture 4 Fashion masks; <https://tr.pinterest.com/pinecrestfabric/face-mask-but-make-it-fashion/>

Fun masks

Masks may be also an entertainment. Especially when your aim is to make children wear them. The fun of the masks makes it easy to use. Fun masks:

- Can prevent thinking and feeling sad or even make you forget about epidemic for a while.
- It is easily used by the children and provides a different look,
- Clown, monster, favorite animal, love for cats can be defined,
- Presented as sending a kiss to someone, looking beautiful, making fun of it,
- You can add to the mask all kinds of fun qualities that you can imagine.



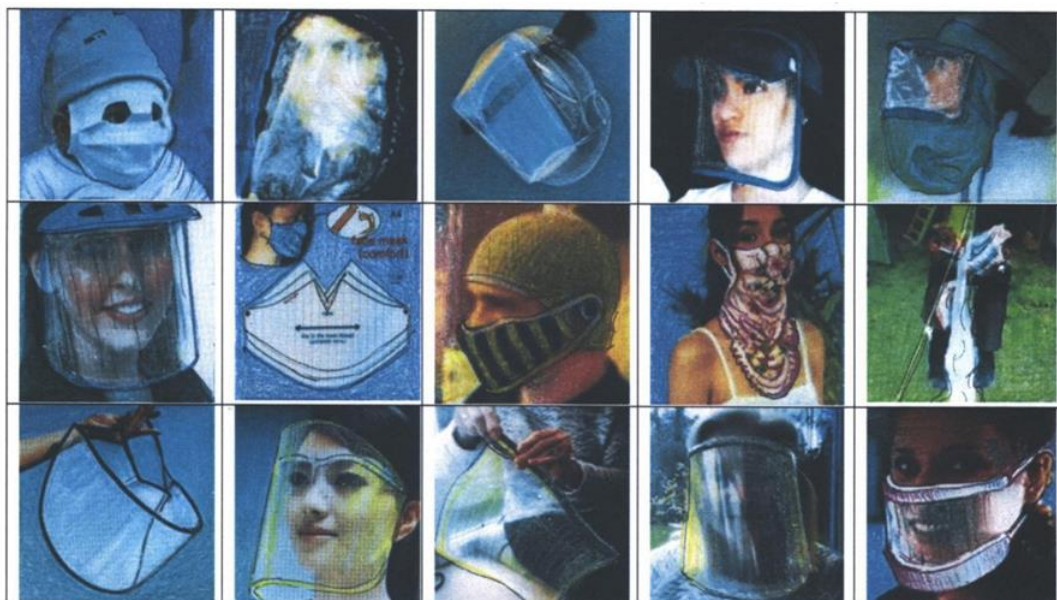
Picture 5:Fun masks. source: <https://tr.pinterest.com/pin/84020349286854834/>

Sudden emergence handmade masks

Urgent handmade masks are born from a real need. For making these masks people use available materials. The materials like paper, cloth, different fabrics, yarn, knitting, acetate, etc. are easily available materials. In this group:

- Paper is folded, elastic is passed around the edges, by opening the eye areas,
- Made by sewing on a thin acetate cap, or the mask with acetate material is integrated with the hat,

- Acetate of certain thickness, which is easily available in the market, is masked by being folded and intertwined,
- The shape is cut out according to the nose and mouth,, the fabric is sewn on it
- A knitted mask, sometimes integrated with a beret,
- A scarf or cheesecloth is folded and masked from the corner,
- Acetate is attached to glasses or becomes a mask that covers the whole face
- The most used acetate is attached to the soft banding from the top and bottom,
- The hair tape is snapped into the slot on the edge of the transparent A4 paper.



Picture 6: Emergence handmade masks. source: <https://tr.pinterest.com/pin/811844270321103912/> - <https://tr.pinterest.com/pin/706009679074050043/>

Masks made with waste or recycled materials

This group of masks are urgently made of the materials that were previously used for a different purpose. It is a modified version of recycled products that are transformed into masks. These masks also satisfy the need of its user:

- Made of water bottles with pet [Polyethylene Terephthalate] material, using the water bottle either from the top or the reverse.
- The mouth area is usually below, with small bottles on both sides, to make the breathing easy
- A mask is made by turning a polycarbonate bottle upside down.
- Masks are made by piercing pet bottles from the bottom or by cutting them vertically and joining the edges with the tape
- Coconut shell, orange peel, lettuce as natural materials can also serve a mask.
- Even a sanitary napkin may be transformed into a mask. What about the packets? It is very possible that they can also be masks.



Picture 7: Masks made from waste or recycled materials. source: <https://www.dezeen.com/>,
<https://tr.pinterest.com/pin/84020349286854834/>

Since the masks obtained from internet sources are the subject of getting permission, all the photos used here were modified by the hand of author, they have been also changed in color. Masks are divided into groups, each of which is analyzed and interpreted.

Conclusion

In our work, we have observed how diverse the masks can be. Developed by designers or engineers, when the topic comes to the fashion or entertainment, they make you forget about their intended purpose. However, they make you urgently think about solutions, make them yourself, and produce. People who really need masks have come up with unusual solutions, what is very important from the point of view of design. Seen in the context of sustainability, the concept of need, which goes hand in hand with nature, environment and life, is a prime importance for design. An unexpected epidemic such as COVID 19, made people think about urgent solutions.

Special design masks, high-tech mass-produced masks, street masks, fashion masks, fun masks, as well as “handmade quick masks”, “masks made from waste materials, all groups of masks show amazing results. Analysis and comments of each group are attached.

The longer the outbreak lasts, the less actively it is perceived by society. For this reason, in the COVID 19 era, masks will always be necessary.

Masks made with waste materials will always be popular since this group of masks requires a minimum of material and it can be produced with little requirements. Some products used for the second time satisfy the need. Considered healthy, orange peel, lettuce, coconut shells, etc. are valued as masks. An urgent need transforms people into creative individuals and helps them make solutions that meet their needs.

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COVID-19 HASTALARINA BAKIM VEREN HEMŞİRELERDE ÖZ-YETERLİLİK

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ÖZET

Dünya Sağlık Örgütü'nün pandemi olarak ilan ettiği COVID-19, tüm dünyayı etkileyen, yüksek mortalite oranlarına sahip çok önemli bir halk sağlığı sorunudur. Çalışmanın amacı; COVID-19 hastalarına bakım veren hemşirelerin öz-yeterlilik durumlarını ve bu süreci etkileyen faktörlerin belirlenmesidir. Araştırma nicel olarak tasarlanmıştır. Çalışma öncesi etik kurul izni alınmış, örneklem hesaplamasında $n = t^2 \times p \times q / d^2$ formülü kullanılmıştır, veriler dijital ortamda toplanmıştır. COVID-19 sürecinde görev alan hemşirelerde öz-yeterlilik düzeylerinin yüksek olduğu görülmektedir. Çalışmada katılımcıların yaş, cinsiyet, eğitim durumları, çalıştıkları kurumlarının öz yeterlilikleri üzerinde herhangi bir etkisinin olmadığı belirlendi. Yalnızca çalıştığı birimden memnun olan hemşireler arasında öz yeterlilik seviyesi yüksektir. Ayrıca kaygı düzeyi yüksek olanlar öz yeterlilik toplam ve alt boyut puanları yüksektir. Kaygı düzeyi yüksek olanların sürekli tetikte olduğu, hasta bakımı ve mesleki beceride daha dikkatli olduklarını söyleyebiliriz.

Hemşirelerin öz yeterliliğini artırmada çalışılan alandan memnuniyetin önemli olduğu görülmüş olup bunlara yönelik durumlarda iyileştirmeleri sağlanmalı ve memnuniyeti artırıcı düzenlemeler yapılarak hemşirelerin konforları sağlanmalıdır.

Anahtar Kelimeler: COVID-19, hemşire, öz yeterlilik, kaygı

ABSTRACT

COVID-19 is declared as a pandemic by the World Health Organization and is a very important public health problem affecting countries all over the world with high mortality rates. The aim of this study was to determine the self-efficacy status of the nurses who care for COVID-19 patients and the factors affecting this process. The study is based on a quantitative design. Ethics committee approval was obtained before the study, the formula $n = t^2 \times p \times q / d^2$ was used in the sample calculation, and data were collected in a digital environment. Self-efficacy levels are observed to be high in nurses involved in the COVID-19 process. It has been found that age, gender, educational background, affiliated institutions of participants does not affect self-efficacy. The self-efficacy level is high among nurses who are satisfied with the unit they work in. Besides, those with high levels of anxiety also have high self-efficacy total and subscale scores. It can be said that those with high anxiety are constantly on the alert and are more diligent in patient care and professional practice.

It has been observed that workplace satisfaction is important to increase the self-efficacy of nurses, and relevant improvements should be achieved to provide them comfort and increase their satisfaction.

Keywords: COVID-19, nurse, self-efficacy, anxiety

GİRİŞ

Aralık 2019'da Çin'in Hubei eyaleti Wuhan'da nedeni bilinmeyen pnömoni vakalarında ciddi bir artış meydana geldi. İlk çıkış yerinin, epidemiyolojik olarak Wuhan'daki bir deniz ürünleri toptancı pazarıyla bağlantılı olduğu tespit edildi (1). Hastaneye başvuran ilk 41 vakanın 27 tanesinin bu pazarla bağlantısı tespit edilmiştir (2). Şiddetli akut solunum sendromu (SARS) ve Orta Doğu Solunum Sendromuna (Middle East Respiratory Syndrome= MERS) neden olan virüs ailesine ait yeni bir koronavirüs örneğidir (3). Bu yeni koronavirüs enfeksiyonu (SARS-CoV-2), asemptomatik olabileceği gibi, hafif veya şiddetli semptomlarla seyredebilir (4). Dünya Sağlık Örgütü 31 Ocak 2020'de COVID-19 (Coronavirus disease 2019) salgınının uluslararası endişe ve acil durum gerektiren bir halk sağlığı sorunu olduğunu bildirdi (5). COVID-19 salgını artık tüm dünya için çok önemli bir küresel sağlık tehdididir. 22 Nisan 2020 itibarıyla dünya çapında, 2.628.894 vaka ve 182.992 ölüm teyit edilmiştir (6). Dünya hükümetleri virüsün yıkıcı etkileri engelleyebilmek ve karşı önlemler almak için hala çalışmalarını yürütmektedirler. Sağlık kuruluşları bilgi akışını koordine etmekte ve tehdidin etkisini en iyi şekilde azaltmak yönergeler yayınlamaktadır. Aynı zamanda, dünyanın dört bir yanındaki bilim adamları hastalığın bulaşma mekanizmaları, klinik spektrumu, yeni teşhisler, önleme ve tedavi stratejileri hakkında çalışarak hızlı bilgi geliştirmektedirler. Ancak hala virüs konakçı etkileşimi, salgının evrimi ve salgının zirveye ulaşacağı zamanlar hakkında tahmin yürütmeler bile birçok belirsizlik devam etmektedir (7). Salgının tüm dünyayı ekonomik, sosyal ve psikolojik açıdan olumsuz etkilere sebep olacağı belirtilmektedir (8, 9). Hemşirelik mesleği kökeni çok eski zamanlara dayanan, bilim ve sanattan oluşan uygulamalı bir disiplindir (10). Hastanelerde çalışan sağlık ekibinin en büyük ve iş yükü açısından en önemli bölümünü hemşireler oluşturur bu yüzden hemşirelik hizmetleri, sağlık sisteminin merkezinde yer almaktadır. Türkiye'de ilk vakanın açıklandığı 11 Mart'tan itibaren pandemi hastanelerinde görev yapmakta olan binlerce hemşire, enfekte olma ihtimallerine karşı ailelerine bulaştırmamak için evlerine dahi gidememekte, yurtlarda ve otellerde yaşamaktadırlar. Hemşireler, bu şartlarda çalışma ortamlarındaki bu iş yükü ve kötü şartlardan etkilenen en önemli sağlık çalışanları olarak öz-yeterlilikleri ne durumdadır?

Hemşirelik mesleğinde öz yeterlilik düzeyinin yüksek olması, diğer sağlık disiplinlerinde olduğu gibi çok önemlidir (11). Klinik ortamda hemşirelik bakımı yapabilme becerisinde öz-yeterlilik hemşirelerin başarılı olması için önemlidir, öz yeterlilik birinin belirli durumlarda veya bir görevi yerine getirirken kendi başarı ve yeteneğine olan inancıdır (12, 13). Öz yeterlilik düzeyi yüksek olan hemşire hastalarına daha iyi bakım verecek, uygulamada karşılaştığı sorunlarla rahatlıkla baş edebilecek, yaşadığı sorunlara karşı yeni stratejiler geliştirip en iyi sonucu bulmak için çaba gösterecektir. Ayrıca mesleğinin gelişimi için çaba sarf eder, açık fikirlidir, ileri görüşlüdür. Ekip çalışmasının önemini bilir ve edindiği bilgi ve donanımları ekip arkadaşlarıyla paylaşır ve kaliteli hasta bakımının öncülüğünü yapar. Öz yeterliliği düşük olan hemşire ise yaşadığı olumsuzluk karşısında hemen pes edecek, umutsuzluğa kapılacak ve mesleğinin gerekliliklerini yerine getiremeyecektir ve böylelikle hasta bakımının kalitesi düşecektir (14-16). Tüm dünyada olduğu gibi ülkemizde de şok etkisi yaratan COVID-19 pandemisi yüksek mortalite ve morbidite oranlarıyla sağlık sistemine ciddi bir yük getirmiştir. Çalışmamızın amacı COVID-19'lu hastalara bakım veren hemşirelerin öz-yeterlilik durumlarını ölçmektir.

GEREÇ VE YÖNTEM

Araştırmanın Türü

Araştırma nicel ve genel tarama modeline dayalı olup kesitsel tiptedir.

Araştırmanın Evreni ve Örnekleme

Araştırmanın evrenini 15-30 Nisan tarihleri arasında Türkiye'de pandemi hastanelerinin acil servis, COVID servis, COVID yoğun bakım servisinde görev alan hemşireler oluşturmaktadır. Araştırmada ölçme yöntemi olarak kullanılan ölçeğin geçerlilik güvenilirlik çalışmasının yeni yapılmış olması bu nedenle de literatürde bu çalışmanın ilk olması nedeniyle örneklem hesaplamasında İşçi ve Altuntaş'ın çalışması referans alınmıştır (17). Örneklem hesaplamasında $n = t^2 \times p \times q / d^2$ formülü kullanılmıştır. Bu bağlamda incelenen olayın görülüş sıklığı ($p = 15$) olarak, görülme sıklığı ($q = 85$) olarak alınmış incelenen olayın görülüş sıklığına göre kabul edilen örnekleme hatası ($d = 0.04$) alınmış ve $n = 306$ kişi olarak hesaplanmış veriler 307 kişiden toplanmıştır. Daha hızlı, daha kolay olmasının yanı

sıra uygulanan sokağa çıkma yasağı ve hastanenin araştırmacılar açısından risk oluşturması nedeniyle veriler; internet tabanlı dijital (Google anket) toplanmıştır. Araştırmaya katılımın gönüllü olması için anketin ilk seçeneğini gönüllü olma sekmesi oluşturmuş, böylelikle gönüllü olanların diğer sorulara erişimi sağlanmıştır.

Veri Toplama Araçları

Veri toplama araçları olarak; Bireysel Bilgi Formu ve Hemşirelik Mesleği Öz Yeterlik Ölçeği (HMÖYÖ) kullanılmıştır. Araştırmanın bağımsız değişkenlerini bireysel bilgi formunda yer alan sorular, bağımlı değişkenini ise Kullanılan ölçek ve ölçeğin alt boyut puanları oluşturmuştur.

- **Bireysel Bilgi Formu:** Bu form katılımcıların bazı özelliklerini belirlemeye yöneliktir (yaşı, cinsiyeti, eğitim düzeyi, kronik hastalık durumu, çalışmakta olduğu birim, birimden memnun olup olmama durumu, kendisinin ya da arkadaşlarının COVID-19 tanısı alıp almadığı, kaygı durumu, meslekte hizmet süresi, haftalık çalışma süresi, çalıştığı hastanenin özelliği vb)
- **Hemşirelik Mesleği Öz Yeterlik Ölçeği (HMÖYÖ):** Ölçek, hemşirelerin mesleki öz yeterliklerini değerlendirmek amacıyla Caruso ve arkadaşları tarafından geliştirilmiştir. Orijinal ölçek iki alt boyut ve 19 maddeden oluşmaktadır 5'li likert tipindedir (18). Türkçe geçerlik ve güvenilirlik analizleri 2019'da Kacaroglu Vicdan ve Taştekin tarafından yapılmış ölçeğin Türkçe formunun 16 maddeden oluşmasına karar verilmiştir. Soruların tümü olumlu özellikte olup, "kesinlikle katılıyorum 5, katılıyorum 4, karasızım 3, katılmıyorum 2, kesinlikle katılmıyorum 1" şeklinde puanlanmaktadır. Ölçeğin birinci alt boyutu Hasta Bakımın Niteliği (HBN: 1, 2, 3, 4, 5, 6, 7, 8, ve 9. maddeler), ikinci alt boyutu Mesleki Durumlarıdır (MD; 10, 11, 12, 13, 14, 15 ve 16. maddeler). Ölçekte puan artıca mesleki öz yeterlik artmaktadır. Cronbach Alpha değerleri HYÖYÖ için .87, HBN için .82, MD için .82 olarak bildirilmiştir(21).

Araştırmanın etik boyutu

Araştırma için Gümüşhane Üniversitesi Bilimsel Araştırma ve Yayın Etik Kurulu'ndan etik kurul izni alınmıştır. Orijinal ölçeğin sahiplerinden ve araştırmaya katılan hemşirelerden yazılı onam alınmıştır.

Verilerin Değerlendirilmesi

Araştırma sonucu elde edilen veriler SPSS-22 programı ile değerlendirilmiş hata kontrolleri, tabloları ve istatistiksel analizleri yapılmıştır. İstatistiksel değerlendirmelerde sayı ve yüzde, değerleri verilmiştir. Normallik analizleri öncesinde kayıp veri, uç değer ayıklamaları yapılmıştır. Sonrasında normal dağılıma uygunluk için histogram çizimleri yapılmış, skewness ve kurtosis değerlerine bakılmış ayrıca Kolmogorov-Smirnov analizleri yapılmıştır. Tüm basamaklar sonrasında normal dağılım göstermeyen HMÖYÖ ölçeğine logaritmik dönüşümler uygulanmış ancak yine normal dağılım koşullarının oluşmadığı tespit edilmiştir. Bu nedenle HMÖYÖ üzerinde bağımsız değişkenlerin fark oluşturup oluşturmadığını belirlemek için, Mann Whitney U (MWU) ve Kruskal Wallis (KW) testleri yapılmıştır. Ayrıca analizlerde Chi-square ve spearman korelasyon testleri yapılmış, $p < 0.05$ istatistiksel anlamlılık düzeyi olarak kabul edilmiştir.

BULGULAR

Bu araştırmadaki katılımcıların yaş ortalaması 29.64 ± 7.06 'dır (min-max:20-55), %85.3'ü kadın kalanları erkektir. Evli olanların oranı %41.0'dir, %56.7'si bekar, geriye kalanlar boşanmış olduğunu belirtmiştir. Katılımcıların %64.7'si eşlerinin de çalıştığını belirtmiştir. Eşi sürekli gündüz şeklinde çalışanların oranı %41.0, nöbet şeklinde çalışanların oranı %24.5, vardiya usulüyle çalışanların oranı ise %7.2 olup kalanlar eşlerinin çalışma şeklini bu üç durumun dışında olarak bildirmiştir. Çocuğu olmayanların oranı %77.8'dir. Katılımcılar çocuklarına bakanları anne baba beraber (%60.6), anne yada babadan herhangi biri (%25.0) ve kardeş (%14.4) olarak belirtmişlerdir. Katılımcıların eğitim düzeyi; meslek lisesi (%7.2), ön lisans (%10.7), lisans (%71.0) ve lisansüstü

(%11.1) olarak tespit edilmiştir. Katılımcıların %17.3'ünün kronik hastalığı bulunmaktadır. Mesleğine yeni başladığını belirtenlerin oranı %8.5'dir. Katılımcıların meslekte çalışma süresi ortalamalarının 8.16 ± 7.35 yıl (min: max: 0-36 yıl) olduğu tespit edilmiştir.

Araştırmadaki katılımcılardan mevcut durum nedeniyle yaşadıkları kaygı için 1-10 arasında puan vermeleri istenmiştir. Kaygı puanı ortalamasının 6.59 ± 2.38 (min-max:1-10) olduğu tespit edilmiştir.

Katılımcıların %78.2'sini devlet hastanelerinde çalışanlar, %15.0'ini üniversite hastanesinde çalışanlar, kalanlarını ise özel hastanelerde çalışanlar oluşturmuştur. Katılımcıların haftalık çalışma saati %6.8'inde 30 saat ve daha az, %39.7'sinde 31-40 saat arasında, %53.4'ünde 41 saat ve daha fazla olarak tespit edilmiştir.

Katılımcıların Covid-19'u ilgilendiren bazı durumlarına ilişkin özellikleri Tablo 1'de gösterilmiştir.

Bu araştırmadaki katılımcıların puan ortalamaları HMÖYÖ toplamı için 68.62 ± 5.64 (min-max:49-80), alt boyutlardan HBN için 40.00 ± 3.49 (min-max:28-45), MD için 28.62 ± 2.80 (min-max:21-35) şeklindedir.

Tablo 1. Katılımcıların Covid-19 Durumuna İlişkin Bazı Özellikleri (N=307)

Değişen	Özellik	n	%
Çalışılan birim	Covid servisi	138	45.0
	Covid yoğun bakım	102	33.2
	Acil servisi	67	21.8
Çalıştığı birimden memnun olma durumu	Hiç memnun değilim	28	9.1
	Memnun değilim	65	21.2
	Kararsızım	77	25.1
	Memnunum	127	41.4
	Çok Memnunum	10	3.2
Memnun olmama nedenleri (N=120)	Çalışma süresinin düzensizliği	13	10.8
	Hasta yoğunluğu	14	11.7
	Bulaş riskinin olması	54	45.0
	Ekip arkadaşlarıyla sorunlar	2	1.7
	İdarecilerin tutum ve davranışları	29	24.2
	Pek çok sebep	8	6.6
Covid tanısı alma durumu	Evet	12	3.9
	Hayır	270	87.9
	Şüpheli	25	8.2
Ekip arkadaşlarından Covid tanısı alan var mı?	Evet	112	36.5
	Hayır	172	56.0
	Şüpheli	23	7.5
Sağlığına ilişkin kaygı yaşama durumu?	Evet	183	59.6

	Hayır	22	7.2
	Bazen	102	33.2

Bu araştırmada HMÖYÖ ölçeği toplam puanı açısından bağımsız değişkenlerin fark oluşturup oluşturmadığına bakılmış ve sadece fark oluşturan durumlar Tablo 2’de gösterilmiştir. Tablo 2’de görüldüğü üzere; çalıştığı birimden memnun olma değişkeninin sıra ortalamalarının daha yüksek olduğu ve fark oluşturduğu ($p < 0.05$) tespit edilmiştir. Araştırmada HMÖYÖ ölçeği açısından; yaş aralığı (35 yaş ve altı olma ile 36 yaş ve üstü olma), cinsiyet, eğitim düzeyi, çalışılan birim, kendisinin covid tanısı alma durumu, arkadaşının covid tanısı alma durumu, çalıştığı hastane ve haftalık çalışma süresi değişkenlerinin fark oluşturmadığı ($p > 0.05$) tespit edilmiştir.

Tablo 2. Katılımcıların HMÖYÖ puanlarının çalıştığı birimden memnuniyetine göre dağılımı (N = 307)

Değişken	Özellik	HMÖYÖ	Test Değeri ve p
Çalıştığı birimden memnun olma durumu	Hiç memnun değilim	171.00 ^{a,b}	KW=18.201 P= 0.001
	Memnun değilim	128.72 ^{a,c,d}	
	Kararsızım	145.44 ^e	
	Memnunum	161.30 ^{c,f}	
	Çok Memnunum	243.95 ^{b,d,e,f}	

^{a,b,c,d,e,f} farklılığın kaynaklandığı grupları göstermektedir.

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ABSTRACT

The word Yoga has come from the root word “Yug” that which joins or connects. What is that which Yoga Joins? It joins or brings about integration of mind, body, soul. It integrates the individual to the supreme or individual consciousness to the cosmic consciousness. Arjuna on seeing his relatives in the battle of Kurushetra was grief-stricken, disillusioned, disintegrated. Arjuna who was the greatest of warrior an expert archer, physically strong too lost his way. It was in this difficult times Krishna gave the message of Bhagwat Gita and guided Arjuna. He filled him with knowledge, devotion, established him in self integration and guided him on the path of action. No doubt the Yoga is called Yoga Shastra. It was a message meant not only for Arjuna but the whole Universe. Swami Vivekananda has talked about various forms of Yoga as given in the Bhagwat Gita which included Karma (Action) Yoga, Bhakti (Devotion) Yoga, Gyan(Knowledge) Yoga, Dhyana Yoga

Keywords: Bhagwat Gita, Yoga, Swami Vivekananda, Karma Yoga

The Bhagwat Gita is a conversation that took place between Lord Krishna and Arjuna on the battle field of Kurushetra. It was a spiritual lesson or guidance provided by the lord to his devotee Arjuna. It is probably the only incident where powerful, elevating and evolved spiritual lessons were provided on the battlefield. The battle field in nothing but human life and instructions are meant not only for Arjuna but entire humanity.

The battle of Kurushetra took place between Pandavas (Who were representatives of truth and righteousness) and Kauravas (who represented evil) and Lord Krishna who drove the chariot of His devotee Arjuna. Arjuna treated him as merely his friend till Lord Krishna revealed his real self to Arjuna.

The Bhagwat Gita expounds on the philosophical concepts of Yoga in extremely simple manner. Yoga is not only a system but a way of life. The word Yoga has come from the root word Yug that which joins. What does Yoga joins? It brings about integrity of the mind, body and soul The Bhagwat Gita lays the importance of Yoga in human life. It is not Yoga as practiced in traditional manner. It does not focus too much on the ways of Yoga but its goals which are basically spiritual and self-development. The Bhagwat Gita can also form the basis of value based educational system. It talks about spiritual values which are integral to the development of a human being. Bhagavad Gita explains about Yoga beyond the postures and exercises. As per Bhagavad Gita, Yoga is to purify our actions, Yoga is to control the mind and senses and Yoga is to link oneself to Supreme with devotion (Muralikrishna).

The Bhagwat Gita gives us a deeper understanding of Yoga and different forms of Yoga like Karma Yoga, Bhakti Yoga, Gyan Yoga, Raja Yoga etc. Sri Aurobindo speaking on Gita has said -

“But it seems to me that the Gita’s teaching is not so crude and simple, not so local and temporal and narrow as all that. It is large, free, subtle and profound; it is for all time and for all men, not for a particular age and country. Especially, it is always breaking free from external forms, details, dogmatic notions and going back to principles and the great facts of our nature and our being. It is a work of large philosophic truth and spiritual practicality, not of constrained religious and

philosophical formulas and stereotyped dogmas.”

It is important to understand the context in which the Bhagwat Gita was given. Arjuna just before the war wanted to see all those people with whom he have to fight. And therefore He asked Krishna to place the chariot between the two armies. Arjuna was a great warrior but when he saw his close relatives, brothers, his preceptor, his uncle etc was filled with grief and sorrow. A great warrior like Arjuna was filled with depressive types symptoms and He decided he won't fight and communicated his decision to Lord Krishna. He gave all types of excuses like violence, dharma, killing of own relatives Krishna rebuked him strongly for this weak heartedness. Arjuna agrees that he was deluded, he had lost all his discrimination and prays Krishna for guidance. This is the time Krishna takes over. It is said the teacher arrives when the student is ready. And this is the brief context in which the Bhagwat Gita was provided.

Methodology

- The Objective of the study is to unravel concepts of Yoga in the Bhagwat Gita and also a comparative analysis with Yoga particularly Patanjali Yoga Sutra.
- To highlight close concepts between Yogic philosophy and Bhagwat Gita

Bhagwat Gita and various Streams of Yoga and key concepts.

The Concept of Soul in the Bhagwat Gita

Acchedyo yam adahyo yam akledyo sosya eva ca

Nitya sarva-gatah sthanur acalo yam sanatanah

The soul cannot be penetrated, burnt, dissolved or can be dried. It is everlasting, all pervading, unchangeable, immovable, timeless

2.24 (Bhagwat Gita)

The concept of soul is beautifully explained in the Bhagwat Gita by Lord Krishna in an extremely simple manner. The Bhagwat Gita clearly says the physical body is subjected to decay but not the soul. The soul is eternal, ancient, beyond birth and death, ageless, timeless, imperishable, indestructible, immeasurable, immovable, unchangeable, everlasting, invisible, inconceivable etc. It does not die even when the body dies. It changes body like we throw old clothes and take on new one. The Bhagwat Gita says it cannot be cut by weapons; it cannot be burnt by fire, moistened by water, dried by wind etc. It does not kill nor gets killed. Hence Krishna asks Arjuna to get up, give up his delusion and fight for it is only the physical body which dies and not the soul. In yoga too we have to move from the limitations of the body, the intricacies of the mind towards the beauty, clarity and the divine within all of us called soul. This is moving from avidya (ignorance) to vidya (knowledge), from temporary to permanent, from destructible to indestructible, from finite to infinite, from attachment to freedom.

Bhagwat Gita and Karma Yoga

Karma Yoga is nothing but the yoga of action. It is a unique concept the Bhagwat Gita provided 5000 years ago. Duty too can bind or it can open gates of freedom. Duty done with expectation with desire leads us into bondage. Duty done without expectation, desire creates freedom. This is also called Yagna or sacrifice. Such action is also called Niskam Karma. The Bhagwat Gita clearly says nobody can remain without doing any action for even a second. Again the feelings of doership should also be not in our actions. We should consider ourselves mere instruments in the divine scheme of things. Most of us are impelled into actions by material consideration or trigunas such action is binding. However duty done for the Supreme Being is what creates freedom. So long as desires and expectations are there it can never create freedom. Freedom is intrinsic to the concept of Yoga. It is attachment and desires which creates sorrow in life. In the Bhagwat Gita Lord Krishna tells Arjuna that even He continuously performs His duty for if He doesn't do His duty for even a minute the world will be in a problem. Lord Krishna also gives the concept of Swadharma, in today's context doing one's own duty or specific Job, in the case of Arjuna the job of a warrior. In this context Lord Krishna

tells Arjun to do his duty without thinking about the consequences, results, attachment, established in equanimity, self-control etc. This is what is called Yagna or supreme sacrifice. He also says that everyone should do his duty as without doing one's duty, even survival will become difficult. Have steady faith in the Atma; then dedicate all acts of yours to me: with no desire for the fruit thereof, no egoism and no sense of possession or pride, engage in battle. The Purpose of Karma Yoga is to bunt desires, expectations, attachments, ego etc. and move towards self-realization. Which is the goal of Yoga too? It removes one from the complexity of life and makes it simple and free.

Jnana Yoga

Na hi jnanena sadrsam pavitram iha vidyate

Tat swayam Yoga samsiddhah kalenatmani vindati

This is nothing purer than knowledge or Jyana Yoga . One who has become accomplished in this path enjoys this knowledge within

Jnana Yoga is the Yoga of wisdom. This wisdom or knowledge is different from information. There is no dearth of information today, infact, there is flood of it. But what is really lacking is wisdom and Bhagwat Gita shows us the way. Jnana Yoga allows us to differentiate between good and Bad, right and wrong, temporary and permanent, falsehood and truth, mortality and immortality etc. The Bhagwat Gita has given lot of emphasis on the immortality of soul and the temporary nature of material things. The Bhagwat Gita also states that the Jnani (One established in knowledge) is not swayed by the quality of life. He is rather established in equanimity, in balance and is called stithpragnya. He is established in awareness, pure consciousness. The Bhagwat Gita clearly states the self is its own enemy as well as friend. Consciousness is probably the difference between life and death. Jnana Man is not only flesh and blood but consciousness is integral part of human life. Yoga is looking beyond the veil of materialism and discovering the latent divinity in the whole universe and within ourselves. Swami Vivekananda used to say that every soul is divine and the goal of life is to discover that latent divinity. There are five enemies which are Kama (desires), Krodha (Anger), Lobha (Greed), Moha (Delusion), Matsarya (Jealousy) which keeps us from realizing the truth. The truth is always there but it is like the mirror which is covered with dust.

Krishana tells Arjuna that whatever doubts have arisen in your heart out of Ignorance should be slashed by the weapon of knowledge. Thus armed with Yoga Bharatha stand and fight

4.42 (Bhagwat Gita)

Bhakti Yoga

Purusah sa parah partha bhaktya labhyas tv anyanya

Yasyantah-sthani bhutani yena sarvam idam tatam

22.22

The supreme lord is attainable through unalloyed devotion. Although He resides in His abode but He is all pervading and everything is in Him and He is in everything.

Bhakti Yoga is the path of devotion, faith, surrender. Bhakthi is a word that is used only with reference to love as directed to the Lord. When this love flows towards the lord it creates bliss and we attain Sath-chit-ananda swaroopa (being, awareness , bliss) (Bhagwan,2002).

The Bhagwat Gita states that the Lord resides in the heart and has to be contemplated there and all actions are to be done for Him and surrendered to Him. The lord is considered to be the only refuge. Everyone has to be considered as an embodiment of the lord and served accordingly. Love and Seva are the only means by which we can serve the lord. Love which is unconditional, pure, free from attachment, desire etc. Faith and Patience are the keys in this path of devotion.

Niskama karma, devotion, wisdom, meditation etc. Anybody can take up the path depending upon his suitability. However the end result is same in all cases that is pure consciousness.

Persons who are learned in the vedas who utter syllabus Omkara and who are great sages in the renounced order enter into Brahman. Desirous of such perfection one practices celibacy .

Ananyaaschinthayantho maam

Ye janaah paryupaasathe

Theshaam nithyaabhiyukthaanaam

Yogakshemam vahaamyaham

The Lord also makes a declaration, a promise that He bears the responsibility of those who

Are steadfastly devoted to Him and have Him as His sole recourse.

Dhyana Yoga

The Bhagwat Gita gives lot of emphasis on the mind. The mind is the cause of freedom as well as Bondage. The mind as it is said is a good servant but a bad master. The mind can become a bundle of desires and attachments. But the same mind when disciplined, freed from desires and attachments experiences freedom and supreme happiness. The Bhagwat Gita says that none but one's own mind is his greatest friend as well as his greatest enemy. A person is said to be established in Yoga when he renounces the desire for sense gratification. He is same in all conditions, his mind is not agitated in any conditions, he is same in friends or enemies etc.

The Bhagwat Gita gives us a method of meditation too. Meditation should be done in secluded or peaceful place. He should lay a kusa grass mat on the ground and cover it with a deer skin. The seat should be neither too low nor too high. On this seat He should start meditating. It is extremely important to maintain the posture in meditation. The body head, neck should be aligned in a straight line. The attention should be fixed at the tip of the nose. He should then meditate on the lord sitting in the heart The Yogi must be disciplined and regulated in his habits of eating, sleeping, work etc. The mind of a yogi or one established in meditation should be fixed on the self. Whenever it wanders it should be brought back and established in the self. He sees the lord or divine in all beings and every being in Him. Arjuna however says that this Yoga is difficult for him due to the restlessness of the mind. Krishna agrees that the mind is restless and difficult to control but with detachment and practice it can be controlled.

Bhagwat Gita and Patanjali Yoga Sutra

The Bhagwat Gita is a sacred discourse on spirituality between the lord and His devotee Arjuna. However the Bhagwat Gita contains invaluable inputs on Yoga which include Karma Yoga, Bhakti Yoga, Gyana Yoga, Dhyana Yoga etc. The Patanjali Yoga sutra is book on the Astanga-Raja Yoga system of Maharishi Patanjali. The end objective of both are same which is spiritual upliftment .

The Bhagwat Gita describes various of types of Yoga which an individual can take up depending upon his liking. However the Patanjali Yoga sutra is the eight fold path of Yoga which involves a process, a evolution of the mind, body and spirit. The Patanjali Yoga Sutra talks about Yoga as a separate discipline. It does relate Yoga with action. It is about strict discipline, mind management, integration, concentration, overcoming the fluctuations of the mind, overcoming avidya or ignorance, overcoming our own weaknesses getting established in samadhi or consciousness. And the way or path is Eight fold path of Yoga. However, the Bhagwat Gita provides a lot on the menu which includes Karma Yoga is a unique concept in Bhagwat Gita. Karma Yoga is indulging in action without attaching oneself to the fruits of it. An individual knowingly or unknowingly practices to various degrees the yogas mentioned in the Bhagwat Gita but the Patanjali Yoga sutra requires application and practise as it involves a process. The Patanjali Yoga sutra is a pure text on Yoga and talks very little about the personal God, The Bhagwat Gita projects Krishna as a universal God. The Bhagwat Gita talks about devotion, meditation, surrender etc to the personal form of God. It talks about various types of Gunas, Universal form of God, Demonic (Asuric), Daivic (Divine) Qualities, Food and its nature etc. These are concepts integral to the concept of Yoga too. The Patanjali Yoga sutra talks about self-effort, a culture, a process, a discipline. Yoga in the contemporary sense is practised for fitness, health, well-being, prevention, health etc. However both Patanjali Yoga Sutra

have much in common. Both of them intend to impart the message of latent divinity in every human being. They show humanity the way. It is a journey within.

Conclusion

The Bhagwat Gita clearly gives us a hint. It is the message not only for Arjuna but the entire world. We have to come out of the temporary trappings of the world. Life on earth is temporary so are material pleasures. But the soul is permanent, all pervading, beyond birth and death and Life primary purpose is realization of the self. So the Gita clearly says give up attachment, desire work towards soul consciousness perform your duty (Niskama Karma) in the spirit of Yagna sacrifice, establish your mind in Jnana or wisdom and surrender all your actions to the almighty. It is said that it has the power of bringing back a dead man alive. And this is what happened to Arjuna who had totally lost the spirit of life. It was Krishna who through the message of Gita rekindled the spirit in Him, filled him with knowledge, reverence, awe, devotion and will to do his duty. Swami Vivekananda has said every man is potentially divine. Krishna awakened the divinity in Arjuna. It may be probably the first and last incident when a message of spirituality was delivered in the battle field. It has inspired people into greatness and the names include people like Mahatma Gandhi, Dr Abdul Kalam, Dr Sarvapalli Radhakrishnan, Shila Prabhupad, Swami Vivekananda, Rabindra Nath Tagore and they were all great karmayogis who were inspired by the Bhagwat Gita. Gandhi political fight for India's political freedom was deeply influenced by the Bhagwat Gita. Mahatma Gandhi inturn influenced many world leaders like Marthin Luther King, Dr. Nelsan Mandela etc He raged a non-violent war or fight against the British and he did it without any hatred or malice (Tiwari, et. al, 2019). Gandhiji said hate the sin not the sinner. Gandhiji interpreted the battle mentioned in the Bhagwat Gita as the battle between good and evil impulse going on in every individual. Gandhiji felt that the Gita must not be used as a rationale for initiating a violent armed conflict but can be used as a collective force in national self-defence once war has begun (Hutchins, 2017). The Gita was not only for Arjuna but the entire mankind. The Gita has power to integrate the human self, entity and hence it is rightly called Yoga Shastra. It inspires guides, motivates, corrects, cleanses. It has a message for everyone. It is journey into cosmic consciousness. It shows us the way to do our duty. The way is to of doing one's duty without expecting the rewards, ego etc rooted firmly in self in a spirit of devotion, discrimination, surrender. This is the way to freedom, to liberation and happiness too. The Bhagwat Gita also talks about the different types of food - their effect on our mind, body etc, the trigunas, the demonic (Asuric) and Divine (Daivik) Qualities. Both the Bhagwat Gita and Patanjali Yoga sutra offers two unique concepts and they are the Art of Living and The art of fighting - fighting life. They teach us how to conduct in our everyday life, how do we response to life, what is the correct attitude, how to discipline the mind, raging desires, deep rooted attachments which all create disharmony and grief in life. The Bhagwat covers the concept of Yama, Niyama, the concepts of mind management, disciplined life, Jyan Yoga, Dhyana Yoga, Avidya, various obstacles to Yoga, aids to Yoga, Dharana, Iswar Pranidhanaya, Abhyasa, Vairaagya etc as given in the Patanjali Yog sutra. However, we do not find specific Pranayams, Asanas, Shadkriyas (Cleansing techniques) which is quite natural the Bhagwat Gita being a spiritual text. However, it unravels the deeper concepts of Yoga and provides us insight into the spiritual, philosophical concepts of Yoga.

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PSYCHOLOGICAL TRACES OF THE CORONAVIRUS (COVID-19) OUTBREAK IN THE SOUTHEASTERN ANATOLIA REGION**Nilgun ULUTASDEMİR**Gümüşhane University, Faculty of Health Sciences
Orcid ID: 000-002-2231-5236**Sureyya YIGITALP RENCBER**Batman University, Faculty of Health Sciences
Orcid ID: 000-003-2812-7110**Ebru OZTURK COPUR**Kilis 7 Aralık University, Faculty of Health Sciences
Orcid ID: 000-003-1843-3499**ABSTRACT**

COVID-19 pandemic had a negative impact on the psychology of the people living in Turkey. Aim of this researching Coronavirus's outbreak to determine psychologic remains of people living in Turkey's Southeastern Anatolia Region and to present solution suggestions. Cross-sectional and descriptive type of the universe of the study has created 19 May to 19 July 2020, individuals living in the Southeastern Anatolia region of Turkey. Owing to pandemic has been achieved 811 people who accept attending to researching applying online survey method up to present. To conduct the research from University and T. C. Ministry of Health Ethics Boards has been obtained by approvals. Researching's data; consisted of questions sociodemographic characteristics including Coronavirus outbreak, health-social-psychological effects and Beck Anxiety Inventory (BAI) questions. 50.1% of the participants in the study are women and the iraverage age is 30.87 ± 11.34 1.0% of individuals stated that they suffered from coronavirus, 14.2% of them were affected by Coronavirus disease in their family or close environment, 2.8% of them were relatives who died of this disease, and 6.5% of them applied quarantine as a suspicious patient. 90.3% of the individuals stated that they stayed at home, but 88.5% stated that they had been on the streets for the last two weeks. 4.1% of the individuals stated that they had a psychological disorder. In the light of this data individuals who live in the Southeastern Anatolia region of Turkey has been determined high level of experiencing anxiety. Staying away from information pollution should visit web sites of T.C. Ministry of Health, Kızılay and HASUDER and get psychological support from expert.

Keywords: COVID-19, The Southeastern Anatolia Region, Turkey, Psychology**GİRİŞ**

Dünya tarihinde birçok salgın hastalık görülmüştür. Bu salgın hastalıklardan kara veba, kolera, tifo, grip öne çıkanlar arasındadır. Günümüzde ise özellikle son otuz yılda salgın hastalıklarda artış olduğu görülmektedir. Bunlar arasında 1981 yılında başlayan ve günümüzde devam eden HIV/AIDS, 2002-2003 yılında SARS, 2009-2010 yılında domuz gribi salgını, 2012 yılında görülen MERS, 2014-2016 yılında Ebola ve 2019 yılında ortaya çıkan ve günümüzde de devam eden Covid-19 salgını yer almaktadır (1,2,3).

Günümüzde devam eden Covid-19 salgını en son keşfedilen koronavirüsün neden olduğu bulaşıcı bir hastalıktır. İlk kez Aralık 2019 yılında Çin'in Wuhan kentinde ortaya çıkıp Dünya'yı etkileyen bir salgın hastalıktır. Genellikle grip belirtileriyle benzer olarak en yaygın semptomları arasında ateş, kuru öksürük ve yorgunluk bulunmaktadır. Genellikle damlacık yoluyla bulaşmaktadır ve çok hızlı bulaşabilmektedir (4). Ciddi akut solunum yolu sendromu olarak tanımlanan SARS-CoV-2 virüsünün neden olduğu bulaşıcı bir hastalık olup 11 Mart 2020'de DSÖ tarafından pandemi olarak ilan edilen

Covid-19, tüm dünyayı etkisi altına almıştır. Covid-19 Türkiye’de ilk olarak 11 Mart 2020 tarihinde görülmüştür ve yaşanan pandemi durumu nedeniyle belirli kısıtlamalar getirilmiştir (5,6).

Pandemiler önemli bir halk sağlığı sorunu olmanın yanında, toplumu da birçok yönden etkileyen ve bozulmalara neden olan sosyal bir olgu olarak karşımıza çıkmaktadır. Pandemiler bireylerde iki şekilde sağlık sorununa neden olmaktadır. Bunlardan ilki bireylere salgının bulaşması sonucu oluşturduğu fiziksel etkiler, diğeri ise salgının oluşturduğu etkiler nedeniyle hasta olmayan bireyleri de kapsayan anksiyete, stres, depresyon gibi oluşturduğu ruh sağlığı sorunlarıdır. Yaşanan pandemi nedeniyle getirilen kısıtlamalar ve değişen günlük yaşam bireylerin ruhsal yaşantısını etkilemeye başlamıştır. Aynı zamanda bu dönemde yaşanan ölümlerde kültürel ve dini ritüellerin gerçekleştirilememesi, yas sürecinin tamamlanamaması gibi trajik sonuçlarda bireylerin ruhsal sağlığını olumsuz yönde etkilemiştir. Pandeminin oluşturduğu tehdit algısının artması sonucu panik ve stres yaşayan bireyler normalden farklı davranışlar sergilemektedir. Pandemi dönemlerinde ortaya çıkan bu belirsizlikler ve kriz karşısında duygusal ve psikososyal etkilerinin nasıl yönetildiği, bunlarla nasıl başa çıkıldığı birey ve toplum açısından önemli bir yer tutmaktadır. Aynı zamanda pandemi döneminin barındırdığı risklerin potansiyel güçlerinden dolayı günümüzü etkilediği gibi geleceğe dair umut ve güven duygusunu da zedelemektedir. (5,7,8).

İnsanların pandemi döneminde verecekleri psikolojik tepkiler çeşitlilik göstermektedir. Kimi bireyler hiç kaygı duymayıp gerekli önlemleri almak konusunda isteksiz davranırken, kimi bireylerde ise bu durum aşırı kaygı ve buna bağlı mesleki ya da akademik olarak olumsuz etkilenme şeklinde kendini göstermektedir. Pandemi sürecinde bireyler özellikle kaygı ve duygu durum bozukluklarına yatkınlık gösterebilmektedir (9).

2019 yılında Çin’de ortaya çıkan ve günümüzde de hala devam eden Covid-19 pandemisi diğer pandemilerde de olduğu gibi toplumu psikolojik açıdan olumsuz etkilemiştir. Covid-19 hastalığına yakalanma riski bireylerde kişinin kendisi, ailesi ve yakın çevresinin hastalığa yakalanma tehlikesi ve özgürlüklerini ve günlük rutin yaşantısını sürdürmemesi nedeniyle psikolojiyi olumsuz etkilemekte ve bu durum davranış bozukluklarına dönüşmektedir. Covid-19 salgını kaynaklı duygu durum değişimleri bazı psikolojik hastalıkların görülme oranlarını da arttırmıştır. Covid-19 döneminde 20-50 yaş arası bireylerde depresyon, yorgunluk, panik atak, psikoz, mani, anksiyete bozukluğu gibi psikolojik hastalıkların görülme oranının arttığı saptanmıştır (10). Yapılan bir çalışmada Covid-19 tanısı almış bireylerin kalıcı kronik yorgunluk, davranış bozuklukları ve depresyon atakları olduğu bildirilmiştir. Aynı zamanda Covid-19 döneminde küresel anlamda da aile içi şiddet, tahammülsüzlük ve boşanmalarda yaşanan artışlarda koronavirüsün psikoloji üzerine etkisi önemli derecede ortaya koymaktadır (11). Bu anlamda yapılan bir çalışmada bireylerin Covid-19 salgını nedeniyle %25’i anksiyete belirtileri, %41’i depresif semptomlar göstermiştir. Kadınlarda, gençlerde ve ekonomik kaygı yaşayanlarda psikolojik etkilerin daha fazla olduğu bildirilmiştir (12). Yapılan başka bir çalışmada ise Covid-19 salgınında bireylerin %21’i depresif belirtiler gösterirken, %19’u anksiyete belirtileri göstermiş ve yine kadınların, gençlerin ve işsiz kalanların daha fazla psikolojik etki gösterdiği saptanmıştır (13).

Covid-19 salgını döneminde bireylerin psikoloji ve davranışları hastalığa verilen tepkiyi etkiler ve salgın esnasındaki davranışlar da salgının yayılmasında ve can kaybında rol oynamaktadır. Bu nedenle bireylerin psikolojisini ve davranışlarını bilmek, bunları doğru yönetmek, salgınla mücadele açısından büyük önem taşımaktadır (10).

Çalışmamız Türkiye’de Güneydoğu Anadolu bölgesinde yaşayan bireylerin salgın nedeniyle yaşadıkları psikolojik etkileri belirlemeyi ve bunlara çözüm önerileri sunmayı amaçlamaktadır.

GEREÇ VE YÖNTEM

Araştırma, Güneydoğu Anadolu bölgesindeki bireylerde Covid-19 salgınının Psikolojik etkilerini belirlemek amacıyla yapılmış kesitsel ve tanımlayıcı tipte bir çalışmadır. Araştırmanın evrenini Türkiye’nin Güneydoğu Anadolu bölgesinde yaşayan yetişkin bireyler oluşturmuştur. Pandemi nedeniyle online anket yöntemiyle uygulanan araştırmaya 19 Mayıs-19 Temmuz tarihleri arasında çalışmaya katılmaya kabul eden 811 birey katılmıştır. Araştırmada veri toplam yöntemi olarak online anket yöntemi kullanılmıştır. Araştırma öncesi Üniversite ve T.C. Sağlık Bakanlığı Etik Kurullarından izin alınmıştır. Araştırmanın verilerini; Sosyodemografik özellikleri, COVID-19 salgını ve sağlık-

sosyal-ekonomik-psikolojik etkilerini ve Beck Anksiyete Ölçeğini (BAÖ) içeren sorular oluşturmaktadır. Beck Anksiyete Ölçeği Beck ve arkadaşları tarafından geliştirilmiş Türkçe uyarlaması Ulusoy ve arkadaşları tarafından yapılmıştır. Ölçekte 21 soru bulunmaktadır. Ve her madde 0-3 arası puanlanan likert tipte bir kendini değerlendirme ölçeğidir. Toplam puan 0-63 arasında değişmektedir. Ölçekten alınabilecek en yüksek puan 63'tür. 8-15 puan 'hafif düzeyde anksiyeteyi', 16-25 puan 'orta düzeyde anksiyeteyi', 26-63 puan 'şiddetli düzeyde anksiyeteyi' ifade etmektedir. Puanlar yükseldikçe anksiyete şiddeti artmaktadır (14,15).

BULGULAR

Tablo-1. Araştırmadaki katılımcıların COVID-19'a yönelik değişkenlerin dağılımı

Değişkenler	Evet (%)	Hayır (%)
Covid-19 Yakalanma	%1	%99
Ailede ya da Yakın Çevrede Covid-19 Görülmesi	%14,2	%85,8
Covid-19 sebebiyle yakın çevrede ölüm	%2,8	%97,2
Covid-19 sebebiyle karantina uygulanması	%6,5	%93,5
Evde Kalan Kişi	%90,3	%9,7
Son iki haftadır sokağa çıkma	%88,5	%11,5

Araştırmaya katılan %50,1'i kadındır. Ve ortalama yaş $30,87 \pm 11,34$ 'dür. Bireylerin %1,0'ı koronavirüse yakalandığını, %14,2'si ailesinde veya yakın çevresinde Koronavirüs hastalığından etkilendiği, %2,8'inin ise bu hastalıktan ölen yakınlarının olduğu ve bunların %6,5'ine şüpheli hasta olarak karantina uygulandığı saptanmıştır. Araştırmadaki bireylerin %90,3'ünün evde kaldığını, %88,5'inin son iki haftadır sokaklarda olduğunu belirtilmiştir. Ayrıca bireylerin %4,1'inin psikolojik bir rahatsızlığı olduğunu ortaya çıkmıştır.

SONUÇ VE ÖNERİLER

Elde edilen bulgular sonucunda Türkiye'nin Güneydoğu Anadolu bölgesinde yaşayan bireylerin Koronavirüs salgınında yüksek düzeyde kaygı yaşadıkları tespit edilmiştir. Bu veriler ışığında anksiyete ve kaygı düzeyini azaltmak ve psikolojik etkiyi en az seviyeye indirmek için;

- Doğru bilgiler edinmek için T.C. Sağlık Bakanlığı, Kızılay ve HASUDER web siteleri ziyaret edilmeli,
- Yüksek kaygı yaşanması durumunda psikolojik destek alınması sağlanmalıdır.

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COVID-19 VE KAYIT DIŐI EKONOMİNİN ETKİLERİ ÜZERİNE BİR İNCELEME

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ÖZET

Kayıt dışılık, COVID-19 salgını ile başa çıkmanın zorluklarına katkıda bulunmaktadır. Kayıt dışılık gelişmekte olan pazarlarda ve gelişmekte olan ekonomilerde (EMDE'lerde) öne çıkmaktadır. EMDE ülkelerinde maliye politikalarının etkinliği, destekleyici önlemlerin verilmesini zorlaştırabilecek yüksek düzeyde kayıt dışılık olması nedeniyle engellenmektedir. EMDE ülkelerinde COVID-19 salgını da dahil olmak üzere artan biyolojik felaket sıklığı, sağlık hizmetlerine ve acil durumlara hazırlıklı olmanın kritik önemini vurgulamaktadır. Bu ülkelerdeki yaygın kayıt dışılık, daha kötü ekonomik ve mali sonuçlar, yetersiz sağlık ve sanitasyon sistemleri ve daha zayıf sosyal güvenlik ağları ile ilişkilidir. EMDE ülkelerindeki kayıt dışı işletmeler, krediye sınırlı erişim de dahil olmak üzere önemli finansman kısıtlamalarıyla karşı karşıyadır. COVID-19, önceki ciddi salgın hastalıklar tarafından örneklendiği gibi, muhtemelen küresel uzun vadeli büyümeyi azaltacaktır. Kayıt dışı ekonominin yoğunlukta olduğu ülkelerde dış yardım olmadan, kısıtlı mali kaynaklara sahip olan hükümetlerin salgına tepki verme yeteneğini de sınırlanmaktadır. Özellikle kayıt dışılığın yoğun olduğu bölgelerde salgınları kontrol altına alma ve mali destek sağlama zorlukları 2020 yılı sonu itibarıyla küresel ekonomik daralmayı derinleştirebilir. Hem de beklenen küresel ekonomik toparlanmayı önemli ölçüde geciktirebilir. Politika yapımcıların salgın kaynaklı bu kriz sırasında özellikle kayıt dışı katılımcılara azami erişim için çaba göstermeleri gerekmektedir.

Key words: COVID-19, Kayıt dışı Ekonomiler, EMDE Ülkeleri, GSYİH ve İstihdam

A STUDY ON THE EFFECTS OF COVID-19 OVER THE INFORMAL ECONOMIES**ABSTRACT**

Informal economy contributes to the challenges of dealing with the COVID-19 outbreak. Informal economy is prominent in emerging markets and emerging economies (EMDEs). The effectiveness of fiscal policies in EMDE countries is hampered by the high level of informal economy, which can make it difficult to take supportive measures. Increasing frequency of biological disasters, including the COVID-19 outbreak in EMDE countries, highlights the critical importance of being prepared for healthcare and emergencies. Widespread informal economy in these countries is associated with worse economic and financial consequences, inadequate health and sanitation systems, and weaker social safety nets. Informal businesses in EMDE countries face significant financing constraints, including limited access to credit. COVID-19 will likely reduce global long-term growth, as exemplified by previous serious epidemics. In countries where the informal economy is concentrated, the ability of governments with limited financial resources to respond to the epidemic is also limited without foreign aid. The difficulties in controlling outbreaks and providing financial support, especially in regions with high informal economies, may deepen the global economic contraction by the end of 2020. It can also significantly delay the expected global economic recovery. Policy makers need to strive for maximum access to informal economic participants, especially during this epidemic crisis.

Key words: COVID-19, Informal Economies, EMDE Countries, GDP and Informal Employment

Giriş

Kayıt dışılık gelişmekte olan pazarlarda ve gelişmekte olan ekonomilerde (EMDE'ler) ortalama olarak, gayri safi milli hasılanın yaklaşık üçte birini ve toplam istihdamın yaklaşık yüzde 70'ini oluşturmaktadır. (Dünya Bankası, 2019) Günümüzde kayıt dışı işletmeler dünyadaki her 10 şirketten 8'ini oluşturmaktadır. (ILO, 2020) Kayıt dışı ekonominin büyüklüğü bölgeler ve ülkeler arasında büyük farklılıklar göstermektedir. Gayri resmi çıktı payı en yüksek olan ülkeler Sahra altı Afrika, Avrupa, Orta Asya, Latin Amerika ve Pasifikte bulunmaktadır.

2010-2016 yılları arasında bu bölgelerdeki kayıt dışı ekonomi GSYİH'nın ortalama yüzde 40'ını oluşturmaktadır. Bu oran içinde serbest meslek payı, başka bir kayıt dışılık ölçüsü, Sahra altı Afrika, Güney Asya, Doğu Asya ve Pasifik'te yüzde 50 ile yüzde 62 oranı arasında değişmektedir. Kayıt dışılık bazı EMDE'lerde özellikle belirgindir. Örneğin, 2016 yılında kayıt dışı ekonomi Demokratik Kongo Cumhuriyeti ve Zimbabve'deki GSYİH'nın yüzde 60'dan fazlasını oluşturmuştur. Mali, Mozambik ve Fildişi Sahili gibi ülkelerde kayıt dışılık toplam istihdamın yüzde 90'ını oluşturmaktadır. Kenya ve Hindistan'da her 10 işçiden yaklaşık 8'i serbest meslek sahibi diyebiliriz. (Dünya Bankası, 2020)

COVID-19 ve Kayıt dışı İş Gücü

Kayıt dışı sektördeki çalışanlar, düşük vasıflı ve düşük ücretli olma eğilimindedir. Bu işçiler sosyal güvenlik ağlarına erişime sahip değildirler. (Dünya Bankası, 2019) Sık sık kalabalık koşullarda yaşayıp ve çalışan kayıt dışı iş gücü salgın hastalıkların yayılmasını sağlayan faktörler arasında bulunmaktadır. (Surico ve Galeotti 2020) Kayıt dışı çalışanların gelirleri ortalama olarak kayıtlı çalışanlardan yüzde 19 daha düşüktür ve sınırlı tasarruf girişlerine sahiptirler. (Dünya Bankası, 2019) En yaygın kayıt dışılık EMDE ülkelerinin üçte birinde bulunmaktadır. Bu kayıt dışı iş gücündekiler beklenmedik bir sağlık acil durumu için doğrudan cepten ödemeleri karşılamak zorunda kalırlarsa bu ülkelerde nüfusun yüzde 40'ı yoksulluğa sürüklenecektir. Kayıt dışı firmalar genelde emek yoğun ve hizmet sektöründe daha yaygın olma eğilimindedir. Kayıt dışı istihdam kayıt dışı sektördeki tüm çalışanları ve kayıt dışı sektör dışındaki kayıt dışı çalışanları kapsamaktadır. (Dünya Bankası, 2019)

Kayıt dışılık gelişmekte olan pazarlarda ve gelişmekte olan ekonomilerde (EMDE'ler) öne çıkmaktadır. Sahra Altı Afrika, Avrupa, Orta Asya ve Latin Amerika'da gayri resmi çıktılarının payı GSYİH'nın yaklaşık yüzde 40'ını oluşturmaktadır. Sahra altı Afrika, Güney Asya, Doğu Asya ve Pasifik'teki bir başka kayıt dışılık göstergesi olan serbest istihdamın payı, toplam istihdamın yüzde 50'sinden yüzde 60'ına kadar değişmektedir. Test eksikliğine rağmen, kayıt dışılığı olan ülkelerde COVID-19 vakaları hızla artmaktadır. (Dünya Bankası, 2020) EMDE ülkelerinde bulunan hizmet sektörlerinde, imalat sektörlerindeki yüzde 33'le karşılaştırıldığında, firmaların yaklaşık yüzde 72'si gayri resmidir. (Amin, Ohnsorge ve Okou, 2019). EMDE ülkelerinde tarımsal istihdam kabaca yüzde 90 oranında kayıt dışı bulunmaktadır. Salgın kontrol önlemleri, piyasalara ve girdilere erişimi engellemiş ve sonuç olarak küçük ölçekli çiftçilerin gıda güvenliğini tehdit eder hale gelmiştir. (ILO, 2018)

COVID-19 ve Kayıt dışı Ekonomisi

Daha büyük bir kayıt dışı ekonomi ile daha zayıf ekonomik durum arasında bir ilişki söz konusudur. Daha fazla kayıt dışılığı olan EMDE'lerde sağlık sistemleri göreceli olarak az gelişmiştir ve hükümetin salgınlara yönelik etkili bir politika tepkisi oluşturma kapasitesi sınırlı kalmaktadır. (Dünya Bankası, 2019) EMDE ülkelerinde maliye politikasının etkinliği, destekleyici önlemlerin verilmesini zorlaştırabilecek yüksek düzeyde kayıt dışılık olması nedeniyle engellenmektedir. Yaygın kayıt dışılık para politikasının etkinliğini de azaltabilmektedir. (Alberola-Ila ve Urrutia, 2019) En azından kriz süresince, yetkililer bilgi asimetrisini en aza indirmek için iyi düzenlenmiş kredi bilgileri düzenleme mekanizmaları uygulayabilirler. İyi yürürlüğe konan teminat yasaları, taşınır varlıkların teminat olarak kullanımı geliştirilerek böylece borç verenlerin riskleri azaltılabilir. (Dünya Bankası, 2020)

Hükümetler kriz döneminde, kredi ve kamu kalkınma garantileri gibi risk paylaşım önlemleri yoluyla kredileri ihtiyacı olan işletme ve kurumlara yönlendirmek için kredi verenleri (ticari ve yerel kalkınma bankaları ve dijital platformlar dahil) geçici olarak teşvik edebilirler. Buna ek olarak, hükümetler yüksek verimli firmaların piyasadan çıkmasını önlemek için geçici özsermaye enjeksiyonlarını

düşünebilirler. En azından kriz süresince, hükümet kamu kredilerini ihtiyacı olan işletme ve kurumlara (kayıt dışı dahil) yönlendirmenin yollarını düşünmelidir.

COVID-19, Kayıt dışılık ve Sağlık Hizmetleri

Her ne kadar en yaygın kayıt dışılığı olan EMDE popülasyonları genç olma eğiliminde olsa da, daha az sağlıklı olma eğilimindedirler. Bu ülkelerdeki gençler daha az sıhhi koşullara, zayıf halk sağlığı ve tıbbi sistemlere erişimleri yetersiz olmaktadır. En yaygın kayıt dışılığı olan EMDE'lerin üçte birinde, sağlık tesislerine nüfusun sadece yüzde 34'ü erişebilmektedir. (Dünya Bankası, 2020) Yine bu ülkelerde kayıt dışı nüfusun temiz içme suyuna ulaşma oranı sadece yüzde 55 seviyesinde bulunmaktadır. El yıkama gibi hijyenik alışkanlıklar kayıt dışı nüfusun sadece yüzde 40'ında mevcuttur. Örneğin, Malavi ve Kenya gibi ülkelerde binlerce insanın yalnızca bir veya iki yoğun bakım yatağına erişimi bulunmaktadır. (Murthy, Leligdowicz ve Adhikari 2015) En yaygın kayıt dışılığın olduğu EMDE'lerin üçte birinde nüfusun yüzde 5,3'ü 65 yaş ve üzerindedir. En az yaygın kayıt dışılığın olduğu EMDE'lerin üçte birinde ise bu oran yüzde 6,2'dir. (Dünya Bankası, 2020) Kayıt dışılığın yoğun olduğu bu EMDE ülkelerinde bulaşıcı hastalıklar ve doğum öncesi ve sonrası koşullarının neden olduğu ölümlerin oranı emsallerine göre iki kat daha yüksektir. (Amin, Ohnsorge ve Okou, 2019)

Ancak, bu ülkelerdeki yaygın kayıt dışılık, kısa ömür beklentisi, tıbbi kaynaklara erişim eksikliği, sınırlı sağlık tesisleri ve diğer sağlık sistemi eksiklikleri ile ilişkilidir. Kayıt dışılığın yüksek olduğu bu ülkelerde, hükümetler gelirlerini ve harcamalarını önemli ölçüde düşürmektedir. Ayrıca, bu ülkelerde yolsuzluk yüksek oranda seyretmektedir. (Dünya Bankası, 2020) Salgının sağlık sonuçlarının daha yaygın kayıt dışılığı olan EMDE'lerde daha olumsuz olması beklenmektedir. Bu ülkelerde, yeterli bir halk sağlığı sisteminin bulunmaması bulaşıcı hastalıkların bulaşmasını kötüleştirir. Temiz su ve el yıkama tesislerine erişim genellikle zor veya mümkün değildir. Yaşam alanları ve çalışma ortamları genellikle aşırı kalabalık ve temiz değildir. Kayıt dışılığın yaygın olduğu Sahra altı Afrika'da şehir sakinlerinin yüzde 70'i kalabalık gecekondu mahallelerinde yaşamaktadır. (Dünya Bankası 2019) Genel olarak daha az sağlıklı bir popülasyonda enfeksiyonların şiddetinin kötüleştirilmesi ve enfekte olanları tedavi etme yeteneğinin sınırlanması muhtemeldir. (Dahab ve ark., 2020). Sosyal güvenlik ağlarının olmaması, kayıt dışı piyasa katılımcılarının COVID-19 yayılımını yavaşlatmak için evde kalma ya da sosyal mesafe gerekliliklerine uyamayacakları anlamına gelmektedir. (Loayza ve Pennings, 2020)

COVID-19 ve Kayıt dışılığa Yönelik Hükümet Politikaları

Yaygın kayıt dışılığı olan ülkelerin, salgınlara etkili bir yanıt vermek için kurumsal ve mali kapasiteye sahip olma olasılıkları daha düşüktür. Kayıt dışı sektörde vergiden kaçınma yaygındır ve hükümetler için sınırlı mali kaynaklara yol açmaktadır. (Besley ve Persson 2014) Örneğin, EMDE'lerde en yaygın kayıt dışılığa sahip devlet gelirleri ve harcamaları, ortalama olarak en az yaygın kayıt dışılığa sahip olanların altında GDP'nin yüzde 5-10'udur. (Dünya Bankası, 2019) Ayrıca, hükümet politikaları daha az etkili ve yolsuzluk daha yaygındır. (Loayza, Oviedo ve Servén 2006)

Ayrıca, kayıt dışı firmaların dörtte birinden azı banka hesaplarını kullanmaktadır ve kayıt dışı küçük firmaların yaklaşık yarısı finansmana erişim eksikliğini faaliyetlerinin önündeki en büyük engel olarak tanımlamaktadır. (Buehn ve Karadağ, 2010) Yaygın kayıt dışılığı olan EMDE'lerde COVID-19'un etkisinin, hükümetlerin ekonomik politikalarının etkisini zayıflatırken, salgının olumsuz sağlık ve ekonomik sonuçlarını yoğunlaştırması beklenmektedir. Bu amaçla, birçok EMDE ülkelerinde koşulsuz destek programları tavsiye edilebilir. Sınırlı kaynakları göz önüne alındığında, düşük gelirli bu ülkelerde bu tür programların etkili bir şekilde uygulanması için uluslararası fonlara ihtiyaç duyulacaktır. (Dünya Bankası, 2020)

COVID-19 ile mücadelede kapatmalar, kayıt dışı firmaların ve istihdamın özellikle yaygın olduğu hizmet sektöründe kayıt dışı piyasa katılımcılarını zorlamıştır. (Panizza, 2020) Örneğin, Güney Asya'da, hali hazırda yoksulluk içinde yaşayan dört haneden biri, kapatma ve kesintilerden önemli ölçüde etkilenen hizmet ve inşaat sektörlerinde gayri resmi faaliyetlerde bulunmaktadır. (Dünya Bankası, 2020) Buna ek olarak, yaygın kayıt dışılığı olan EMDE ülkelerinde salgın sırasında yüksek risklere maruz kalan hizmet sektörlerinde kadınlar fazla temsil edilmektedir. Bu ülkelerde kadın işçilerin yüzde 42'si erkeklerin yüzde 32'sine kıyasla toptan ve perakende ticaret gibi sektörlerde

çalışmaktadır. (ILO, 2020) Ayrıca, kayıt dışı firmaların yaklaşık yüzde 80'i işletme sermayesini kayıt dışı kaynaklardan (tefeciler gibi) temin etmektedir. Bu da onları nakit akışlarının bozulması durumunda özellikle savunmasız hale getirmektedir. (Farazi 2014) Yaygın kayıt dışılığı olan EMDE ülkelerinde çalışanlar da sınırlama dönemi boyunca geçici gelir kayıplarını engellemek için sınırlı mali kaynaklara sahiptirler ve bu da onların yoksulluğa itilme olasılıklarını artırmaktadır. Sağlık krizi özellikle kayıt dışı firmalar için acil gelir kayıplarına neden olarak, işletmelerini geçici veya kalıcı olarak kapatmaya zorlamıştır. Bu kayıt dışılık işsizlikte de benzeri görülmemiş bir dalgalanmayı tetikleyebilir. Bu durum yaygın kayıt dışılığı olan EMDE ülkelerinde çalışanlar arasında gelir eşitsizliğinin daha da artmasına neden olabilir. (ILO, 2020) Bu durum ek olarak bu ülkelerdeki kayıt dışı ekonominin potansiyel genişlemesini sağlayabilir. (ILO, 2020)

Kayıt dışılık ve Sosyal Güvenlik Ağı

Yaygın kayıt dışılığı olan ülkelerde, hükümetler en çok ihtiyaç duyanlara etkili bir şekilde iyi hedeflenmiş yardım sağlamak için ne kaynaklara ne de idari yapılara sahip olabilirler. (Muralidharan, Niehaus ve Sukhtankari, 2016) Kayıt dışılık, salgın ile başa çıkmanın zorluklarına katkıda bulunmaktadır. Virüsü önlemek, kontrol altına almak ve tedavi etmek için halk sağlığı sistemini güçlendirmek ve salgın sırasında resmi olmayan katılımcıların (kayıt dışı olanların) geçim kaynaklarını desteklemek için mali kaynaklar kullanılmalıdır. Ücret sübvansiyonları ve vergi indirimi gibi geleneksel önlemler gayri resmi firmalara ve işçilere (kayıt dışı olanlara) ulaşamadığından, kayıt dışı olanlara gelir desteği sağlamak için yenilikçi acil durum önlemleri dikkate alınmalıdır. (Dünya Bankası, 2020) Politika yapımcıların kriz sırasında kayıt dışı katılımcılara azami erişim için çaba göstermeleri gerekmektedir. Daha sonra mali yükü en aza indirmek için geçici ve geri dönüşümlü önlemlere öncelik verilebilir. Bununla birlikte, COVID-19 krizi tam olarak ülkelerin doldurulması gereken sosyal güvenlik sistemindeki boşlukları ortaya çıkarmıştır. İlk müdahale hattı, mevcut sosyal güvenlik ağlarını genişletmek olacaktır. COVID-19 salgınından olumsuz etkilenen ailelere rahatlama sağlamak için mevcut sosyal koruma ve sosyal yardım programlarında reform yapılmasını içermektedir. (Özler, 2020) Kayıt dışı çalışanlara ulaşmak için esnek platformlardan ve teknolojilerden yararlanılabilir. (Haushofer ve Shapiro, 2016)

Sonuç

Yaygın kayıt dışılık ve işletmelerin finansman kısıtlamalarının getirdiği önemli zorluklar göz önüne alındığında, salgın kontrol önlemlerinin kriz tarafından yoksulluğa itilen hane halkları da dahil olmak üzere en savunmasız firmaların ve hanelerin gelirini destekleyen tedbirlerle tamamlanması gerekecektir. Yetkililer ayrıca temel sağlık ve beslenme hizmetlerine erişimi korumalıdır. Benzer şekilde, eğitime erişimi sürdürmek, uzun vadeli insan sermayesinde geri dönüşü olmayan kayıpları önlemek için kritik öneme sahiptir. Yeterli gelir dağılım sistemi bulunmayan ülkelerde, hedeflenmemiş nakit transferleri ve gıda yardımı gibi politikalar yardım sağlamadaki gecikmeleri en aza indirebilir. (Pazarbaşıoğlu, 2020). Uluslararası toplumun mali destek sistemi, gerekli mali kapasiteye sahip olmayan ülkelerde bu çabaların finanse edilmesinde kilit bir rol oynayabilir. (Dünya Bankası, 2020) Ayrıca, yükselen pazar ülkeleriyle gelişmekte olan ülkeleri içeren EMDE ülkeleri ekonomilerinin toplam büyüklüğü 2020 yılı sonunda yüzde 2,5 oranında küçülerek son 60 yıldan beri ilk kez küçülmüş olacaktırlar. (Dünya Bankası, 2020)

Sosyal uzaklaşma ve kendi kendine tecrit gibi salgın kontrol önlemlerinin, çoğu ülkedeki işçilerin çoğunluğunun kayıt dışı olması ve gıda gibi temel ihtiyaçları stoklamak için yetersiz gelirlere sahip olmaları nedeniyle, uygulanmasını zorlaştırmaktadır. (Dünya Bankası, 2019). Birçoğu için, kentsel nüfusun üçte ikisinden fazlası kalabalık gecekondu mahallelerinde yaşadığından ve su gibi ihtiyaçlara genellikle ortak noktalarda erişildiği için yaşam koşulları da bu önlemlere uygun değildir. (Dünya Bankası, 2020). Kayıt dışı ekonominin yoğunlukta olduğu ülkelerde dış yardım olmadan, kısıtlı mali kaynaklara sahip olan hükümetlerin salgına tepki verme yeteneğini de sınırlanmaktadır. Özellikle kayıt dışılığın yoğun olduğu bölgelerde salgınları kontrol altına alma ve mali destek sağlama zorlukları 2020 yılı sonu itibarıyla küresel ekonomik daralmayı derinleştirebilir. (Dünya Bankası, 2020) Hem de beklenen küresel ekonomik toparlanmayı önemli ölçüde geciktirebilir. Aynı zamanda, salgının bir sonucu olarak keskin bir şekilde yükselmesi beklenen yoksulluk ile ilişkili ekonomik baskılar virüsün yayılmasını yavaşlatma çabalarını baltalayabilir. (Loayza ve Pennings 2020). Kayıt dışı ekonomik

faaliyetlere daha yoğun şekilde katıldıkları için, etkinin kadınlar üzerinde özellikle ağır olması muhtemeldir.

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COVID-19 HASTALARINDA İNTERLÖKİN-6 RESEPTÖR ANTAGONİSTİ TOCİLİZUMAB**Öğr. Gör. Gülşah TOLLU**

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Aralık 2019'dan bu yana, koronavirüs hastalığı (COVID-19) olarak adlandırılan viral pnömoni dünyayı etkisi altına alarak pandemiye neden olmuştur. COVID-19 patogenezi belirsizliğini korumaktadır ve şu anda etkili terapötikler için kesin kanıt yoktur. Daha fazla klinik verinin derlenmesi ve yayınlanmasıyla, çok sayıda veri, ciddi hastalarda hafif veya şiddetli sitokin fırtınalarının olduğunu ve bunun da önemli bir ölüm nedeni olduğunu göstermektedir. Bu nedenle, sitokin fırtınasının tedavisi ciddi COVID-19 hastalarının kurtarılmasının önemli bir parçası haline gelmiştir. Sitokin salınım sendromunda ve akut inflamasyonda anahtar rol oynayan en önemli sitokinlerden biri interlökin-6 (IL-6)'dır. IL-6'nın COVID-19 ile ilişkili akut solunum sıkıntısı sendromunu (ARDS) tedavi etmek için potansiyel bir harekete geçirilebilir hedef sitokin olabileceği yönünde çalışmalar bulunmaktadır. Şiddetli COVID-19 için olası bir ilaç olarak önerilen IL-6 reseptör (IL-6R) antagonisti Tocilizumab, sitokin salınımını azaltarak orta ila şiddetli COVID-19 pnömonisini tedavi etmek için kullanılır. Bu, anti-IL-6 reseptör inhibitörü tedavisinin, COVID-19 olan hastaların akciğerlerinde sitokin fırtınasını azaltarak hastalık ilerleme riskini azaltabileceği yönünde çalışmalar bulunmaktadır. Tocilizumab romatoid artrit (RA), sepsis, Graft-versus-Host Hastalığı (GVHD), makrofaj aktivasyon sendromu (MAS) ve kimerik antijen reseptör (CAR) T hücre tedavisine bağlı gelişen sitokin salınım sendromunda kullanım onayı almış rekombinant IL-6R antikorudur. Bu ön veriler, ciddi ve kritik COVID-19 hastalarında klinik sonucu iyileştiren Tocilizumab'ın mortalitenin azalmasında ve COVID-19 tedavisinde kullanılması için etkili bir teröpatik ajan olduğunu göstermektedir. Daha fazla verinin derlenmesi ve sonuçların karşılaştırılması ile etkili tedavi yöntemlerinin geliştirilmesi COVID-19 tedavi süreci için acil bir ihtiyaçtır.

Anahtar kelimeler: COVID-19, Sitokin fırtınası sendromu, Tocilizumab, IL-6, IL-6R

INTERLOKIN-6 RECEPTOR ANTAGONIST TOCILIZUMAB IN COVID-19 PATIENTS**ABSTRACT**

Since December 2019, viral pneumonia called coronavirus disease (COVID-19) has caused the world to cause pandemics. The pathogenesis of COVID-19 remains uncertain and there is currently no definitive evidence for effective therapeutics. With the compilation and publication of more clinical data a large number of data suggest that severe patients have mild or severe cytokine storms which is an important cause of death. Therefore, treatment of cytokine storm has become an important part of rescuing serious COVID-19 patients. One of the most important cytokines that play a key role in cytokine release syndrome and acute inflammation is interleukin-6 (IL-6). There are studies that IL-6

may be a potential mobilizable target cytokine to treat acute respiratory distress syndrome (ARDS) associated with COVID-19. The recommended IL-6 receptor (IL-6R) antagonist Tocilizumab as a possible drug for severe COVID-19 is used to treat moderate to severe COVID-19 pneumonia by reducing cytokine release. There are studies that this anti-IL-6 receptor inhibitor therapy can reduce the risk of disease progression by reducing cytokine storm in the lungs of patients with COVID-19. Tocilizumab is a recombinant IL-6R antibody that has been approved for use in cytokine release syndrome due to rheumatoid arthritis (RA), sepsis, Graft-versus-Host Disease (GVHD), macrophage activation syndrome (MAS) and chimeric antigen receptor (CAR) T cell therapy. These preliminary data show that Tocilizumab, which immediately improves the clinical outcome in serious and critical COVID-19 patients, is an effective treatment for reducing mortality and using it in the treatment of COVID-19. The development of effective treatment methods by compiling more data and comparing the results is an urgent need for the COVID-19 treatment process.

Keywords: COVID-19, Cytokine storm syndrome, Tocilizumab, IL-6, IL-6R

1. GİRİŞ

Aralık 2019'dan bu yana COVID-19, ilk olarak Çin de başlayarak dünya genelinde hızla yayılmaya başlamıştır ve yayılmaya da devam etmektedir (Wu & McGoogan, 2020). Dünya çapında yoğun bakım ünitesi (YBÜ) kapasiteleri bu salgınla yüzleşmek için zorlanmaktadır (Phua, Weng, Ling, Egi, & Lim, 2020). Dünya genelinde çalışmalar süren henüz hiçbir tedavinin etkili olduğu kanıtlanmamıştır (Sanders, Monogue, Jodlowski, & Cutrel, 2020). Özellikle mortaliteyi ve kritik hasta sayısını azaltabilen tedavilere ilişkin verilere ihtiyaç vardır (Weiss & Murdoch, 2020). Hastalık, viral replikasyonun bir başlangıç fazı ile karakterize edilir ve bunu konakçı inflamatuvar yanıt tarafından yönlendirilen ikinci bir faz takip edebilir (Siddiqi & Mehra, 2020). COVID-19'un klinik görünümü, asemptomatikten şiddetli pnömoniye ve invazif mekanik ventilasyona veya ölüme yol açabilecek solunum yetmezliğine kadar oldukça heterojendir (Zhou, Yu, Du, & vd, 2020). Ölüm esas olarak akut solunum sıkıntısı sendromundan (ARDS) kaynaklanır (Xu Z. , Shi, Wang, Zhang, & Huang, 2020). C-reaktif-protein (CRP), ferritin ve interlökin-6 gibi inflamasyon belirteçleri, mortalite ile önemli ölçüde ilişkilidir (Henry, Oliveira, Benoit, & Pleban, 2020). COVID-19 ile ilişkili çoklu organ yetmezliği ve ARDS, esas olarak sitokin fırtınasından kaynaklanır (Ye, Wang, & Mao, 2020). Şiddetli akut solunum sendromu koronavirus 2 (SARS-CoV-2) enfeksiyonu, tipik radyolojik bulguların önerdiği gibi, akut solunum sıkıntısı sendromu ile ilişkili bir hiperimmün yanıtı neden olabilir (Huang, Wang, Li, & vd, 2020).-En kritik hastalar, uzun vadeli hasar ve akciğer dokusu fibrozu üreten birçok sitokin üretimini artmasıyla karakterize edilen sözde bir sitokin fırtınası geliştirebilir (Cao, Wang, Wen, & vd, 2020). COVID-19 pnömonisi için mevcut klinik yaklaşımlar, antiviral ilaçlar ve immünomodülatör ilaçların kombinasyonunu dikkate almaktadır. Antiviraller üzerinde klinik çalışmalar devam etmektedir. Yapılan çalışmalarda bir sitokin ligandının veya reseptörünün inhibisyonuna yol açan seçici sitokin inhibitörleri gibi immünomodülatör ilaçlar düşünülmektedir (Scott, 2017; Stebbing, Phelan, Griffin, & VD, 2020). Tocilizumab (TCZ), romatoid artrit tedavisinde kullanılan, interlökin-6 (IL-6) reseptörünün hem çözünür hem de zara bağlı formlarına yönelik olan IgG1 sınıfının rekombinant insanlaştırılmış bir monoklonal antikordur (Hennigan & Kavanaugh, 2008). TCZ, şiddetli romatoid artrit, sistemik juvenil idiyopatik artrit, dev hücreli arterit ve kimerik antijen reseptörü T hücresi tedavisinin neden olduğu yaşamı tehdit eden sitokin salım sendromunun tedavisi için önerilir (Norelli, Camisa, Barbiera, & vd, 2018; Stone, Tuckwell, Dimonaco, & vd, 2017). Birkaç argüman, şiddetli COVID-19 hastalarına uygulanan TCZ'nin mortaliteyi azaltmak için etkili bir tedavi olabileceğini göstermektedir. Bu molekül, sitokin salınım sendromunda (CRS) önemli bir inflamatuvar faktörü nötralize ederek, sistemik hiperinflamasyon aşamasında sitokin fırtınasını bloke edebilir ve hastalığın şiddetini azaltabileceği yönünde çalışmalar bulunmaktadır (Fu, Xu, & Wei, 2020). Fakat bildiğimiz kadarıyla, TCZ'nin ciddi COVID-19 vakalarını ve / veya ölüm oranını azaltma yeteneğine dair yeterince bir kanıt yoktur. TCZ ile tedavi edilen ve TCZ uygulanmayan COVID-19 hastaları arasında özellikle YBÜ yatışları ve / veya mortaliteyi, sonuçları karşılaştırılmalı ve bu yönde çalışma verileri daha fazla paylaşılmalıdır.

2. SİTOKİN SALIM SENDROMU

Sitokin salım sendromu, bazı ilaçlar ve diğer faktörlerin neden olabileceği, çok sayıda proinflamatuvar sitokin seviyesinde keskin bir artışla karakterize edilen sistemik bir inflamatuvar yanıttır (Shimabukuro-Vornhagen, Gödel, & Subklewe, 2018). Sitokin salım sendromu, bağışıklık sistemi ile ilgili hastalıklarda ve kimerik antijen reseptörü T hücresi (CAR-T) tedavisi, organ nakli sepsisi gibi immün sistemle ilişkili tedavilerde de yaygındır. Virüs doğuştan gelen ve uyarlanabilir bağışıklık sistemlerini aktive ederek IL-6 dahil çok sayıda sitokin salınmasına neden olur. Ek olarak, vasküler geçirgenlik bu proinflamatuvar faktörler tarafından artırılır, bu da büyük miktarda sıvı ve kan hücresinin alveollere girmesine neden olarak dispne ve hatta solunum yetmezliğine neden olur (Leiva-Juarez, Kolls, & Evans, 2018). Bir COVID-19 ölümünün ilk büyük muayene otopsi raporu, insizyondan sonra her iki akciğerde bronlaşmış bir görünüm ve büyük miktarda gri-beyaz viskoz sıvı taşması görülebildiğini bildirdi (Liu, ve diğerleri, 2020).

3. İNTERLÖKİN-6 RESEPTÖR ANTAGONİSTİ TOCİLİZUMAB

Klasik IL-6 sinyali, IL-6R'yi ifade eden ve düşük IL-6 seviyesinde lider bir rol oynayan hücrelerle (makrofajlar, nötrofiller, T hücreleri, vb.) sınırlıdır. IL-6 ve hücreyle ilişkili IL-6R'nin kombinasyonu, gp130 homolog dimerizasyonuna yol açar ve aşağı akış yollarını başlatır. Bununla birlikte, IL-6 seviyesi arttığında, IL-6 sinyali geniş çapta ifade edilir çünkü gp130 her yerde bulunur. Tocilizumabın hücreyle ilişkili IL-6R ve sIL-6R'ye bağlanması, klasik ve trans sinyalleri inhibe edebilir. Böylece CRS'yi inhibe edebilir. Tocilizumab spesifik olarak çözünür ve membrana bağlı IL-6 reseptörlerini (sIL-6R ve mIL-6R) bağlar ve sIL-6R- ve mIL-6R aracılı sinyal transdüksiyonunu inhibe eder. Tocilizumabın şiddetli KRS'li hastaların tedavisinde etkili olduğunu belirtmek gerekir (Grupp, Kalos, Barrett, Aplenc, & ve ark, 2018). Ciddi COVID-19 hastalarının tedavisinde tocilizumabın güvenliliği ile ilgili olarak, yakın zamanda yapılan bir çalışma, ortalama yaşı $56,8 \pm 16,5$ yıl olan (25-88 yaş aralığı) 21 hastayı içermektedir. Tokilizumab tedavisi ile ilişkili herhangi bir komplikasyon ve hastalık kötüleşmesi veya ölüm öyküsü yoktur. Genel olarak, tocilizumab ile ikincil enfeksiyon riski çok yüksek değildir. Çin'in Hastalık Kontrol ve Önleme Merkezlerinden alınan en büyük klinik veriler, dahil edilen 44.672 doğrulanmış vakadan 2683'ünde (% 12.8) hipertansiyon, 1102'de (% 5.3) diabetes mellitus ve 873'te (% 4.3) diğer kardiyovasküler hastalıklar olduğunu göstermektedir (Xu, ve diğerleri, 2020). Tokilizumabın kardiyovasküler hastalık riskini artırıp artırmadığı konusunda bazı tartışmalar vardır. Çeşitli randomize kontrollü denemelerden (RCT'ler) ve gerçek dünya kanıt (RWE) çalışmalarından elde edilen veriler yayınlanmıştır. Giles ve arkadaşları tarafından yapılan bir çalışma. Aktif romatoid artrit tanısını karşılayan, 1538'i tocilizumab ve 1542'si etanersept ile tedavi edilen, kardiyovasküler hastalık için birden fazla risk faktörü olan 50 yaş üstü 3080 hastayı içermektedir (Giles, Sattar, Gabriel, Ridker, & ve arkadaşları, 2020). Ortalama 3,2 yıllık takip süresinden sonra, tocilizumab grubunda (% 5,4) 83 majör advers kardiyovasküler olay (MACE'ler) meydana gelirken, etanersept grubunda (% 5,1) 78 MACE meydana geldi. Ortaya çıkan tehlike oranı (HR) 1.05 [% 95 güven aralığı (CI) 0.77-1.43] idi. Şu anda, Çin'de küçük bir örneklem büyüklüğüne sahip bir klinik çalışma tocilizumab'ın iyi etkililiğini göstermiştir (Xu, ve diğerleri, 2020). Son olarak, olası COVID-19 mekanizmasının analizinden ve küçük örneklem klinik verilerinden, tocilizumab iyi bir etkinliğe sahiptir. Farmakoeconomik bir bakış açısıyla, önemli derecede yüksek IL-6'ya sahip kritik derecede hasta COVID-19 hastalarında kullanılması gerektiğini öneriyoruz. Sonuç olarak KRS, önemli bir ölüm nedeni olan şiddetli COVID-19'u olan çok sayıda hastada ortaya çıkmaktadır. IL-6, CRS'nin anahtar molekülüdür, bu nedenle IL-6R antagonisti tocilizumab, hastaların hayatlarını kurtarmak için önemli bir ilaç olabilir.

4. TARTIŞMA VE SONUÇ

TCZ şu anda Gıda ve İlaç Dairesi (FDA) tarafından COVID-19 hastalarında kullanım için onaylanmamıştır. Bununla birlikte, TCZ, şiddetli veya hayatı tehdit eden KRS yaşayan, kimerik antijen reseptörü (CAR) T hücresi tedavisi alan 2 yaş ve üzerindeki pediatrik hastalar ve yetişkinler için FDA onaylıdır (Genentech, 2017). Sitokin salım sendromu, enfeksiyonlar gibi çok sayıda faktör tarafından tetiklenebilen sistemik bir inflamatuvar yanıttır (Shimabukuro-Vornhagen, Gödel, & Subklewe, 2018). Hafif vakalarda öksürük, takipne, SOB, hipoksemi ve göğüs röntgeni üzerinde

bilateral opasiteleri içeren akut solunum sıkıntısı sendromuna (ARDS) kadar değişen solunum semptomları yaygın olarak sitokin salım sendromu ile ilişkilidir. Bazı ARDS vakalarında mekanik ventilasyon gerekebilir. Benzer şekilde, COVID-19, Sitokin salım sendromu ile ilişkili solunum belirti ve semptomları ile aynı şekilde ilerleyebilir. Ayrıca, laktat dehidrojenaz, c-reaktif protein ve IL-6 gibi yüksek belirteçler sitokin salım sendromu ile ilişkilidir (Xu, Shi, & Wang, 2020). Luo ve arkadaşlarının, hastalarının yarısından fazlasının yükseldiğini ve ardından TCZ uygulamasının ardından IL-6 seviyelerinde kademeli düşüş olduğunu gördüklerini göz önünde bulundurarak, IL-6, TCZ tedavisinin bir COVID-19'da ne kadar iyi çalıştığına ilişkin trend için önemli bir biyobelirteç olabilir (Luo, Liu, Qiu, Liu, & Liu, 2020). TCZ tedavisini düşünen klinisyenler için önemli izleme parametreleri kullanılmalıdır. Ayrıca, hastalar TCZ'de nötropeni, trombositopeni, yüksek karaciğer enzimleri ve anormal lipid testleri açısından izlenmelidir. Gastrointestinal perforasyon riski yüksek olan hastalar, TCZ'de izlenmelidir. TCZ'de anafilaksi dahil aşırı duyarlılık reaksiyonları meydana gelebilir ve tedavinin kesilmesi gerekebilir. Hepatit B taraması, TCZ uygulamasından önce yapılmalıdır çünkü bu hastalar klinik çalışmalardan çıkarılmıştır (Genentech, 2017).

TCZ etkinliğinin, randomize tedavi tahsisi ile büyük klinik çalışmalarda doğrulanması gerekir. SARS-CoV-2 enfeksiyonunun dünya çapında dramatik yayılımı göz önüne alındığında, verilerimizin şiddetli COVID-19 pnömonisi ve solunum yetmezliği ile ilgilenen meslektaşlarımızın ilgisini hak edeceğini düşünüyoruz. Hiperinflamatuvar durumun zamanında belirlenmesi ve tedavisi, geri dönüşü olmayan akciğer hasarına ve ölüme yol açan kaskadın kesintiye uğramasında çok önemli olabilir. Bu durumlarda, Tocilizumab, diğer tedaviler başarısız olursa veya mevcut değilse kurtarma tedavisi olarak düşünülebilir.

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EVALUATION OF COVID-19 PANDEMIA IN TERMS OF BIOTERRORISM**Betül CAVLAN**

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ABSTRACT

For the first time in history, the use of biological weapons agents, which started with the use of toxins obtained from plants and animals from plants and animals, or by dipping arrows into feces or rotten meat, has been on the agenda every century. The other factor that is effective in producing similar results with the results after the use of biological weapons is epidemic diseases. The Antoninus Plague, which was described as the first pandemic in history between 165 and 180 B.C., caused the death of approximately 5 million people, while the factors of epidemic diseases such as cholera, influenza, yellow fever for centuries have been the cause of death of millions of people. Although the use of biological weapons has been banned by contracts, it has not lost its potential danger. It is evident with the Covid-19 pandemic that we are living, that epidemics continue to be a global threat. Theories about the action of biological armament, which is a potential danger for the cause of the Covid-19 pandemic, have also been put forward. In this study, it is evaluated whether Covid-19 pandemic occurs naturally or with a bioterrorist action.

Keywords: Biological weapon agent, Bioterrorism, Pandemic, Covid-19.

COVID-19 PANDEMİSİNİN BİYOTERÖRİZM AÇISINDAN DEĞERLENDİRİLMESİ**ÖZET**

Tarihte ilk kez Güney Amerika yerlileri tarafından bitkilerden ve hayvanlardan elde edilen toksinlerin mızrak ve okların uçlarına sürülmesi ya da okların dışkıya veya çürümüş ete batırılmasıyla başlayan biyolojik silah ajanı kullanımı her yüzyılda gündemde olmuştur. Biyolojik silah kullanımı sonrasında meydana gelen sonuçlar ile benzer sonuçların doğmasında etkili diğer faktör ise salgın hastalıklardır. Tarihte yaşanan ilk pandemi olarak nitelendirilen Antoninus Vebası, M.S. 165 ve 180 yılları arasında yaşanmış olup yaklaşık 5 milyon kişinin hayatını kaybetmesine neden olurken yüzyıllar boyunca veba hastalığı ile birlikte kolera, influenza, sarı humma gibi salgın hastalıkların etkenleri milyonlarca kişinin ölüm nedeni olmuştur. Biyolojik silah kullanımı, sözleşmeler ile yasaklanmasına rağmen potansiyel bir tehlike olma özelliğini yitirmiş değildir. Salgın hastalıkların da küresel bir tehdit olmaya devam ettiğini yaşamakta olduğumuz Covid-19 pandemisi ile kanıtlar niteliktedir. Covid-19 pandemisinin etkeni için de 21. yüzyılda da potansiyel bir tehlike olan biyolojik silahlanma yönünde bir eylem olduğu ile ilgili teorilerin öne sürülmesi söz konusu olmuştur. Bu çalışmada, Covid-19 pandemisinin doğal yolla mı yoksa biyoterörist bir eylemle mi gerçekleştiği değerlendirilmiştir.

Anahtar Kelimeler: Biyolojik silah ajanı, Biyoterörizm, Pandemi, Covid-19.

GİRİŞ

Biyolojik silahları cazip kılan, daha az maliyetle geniş kitlelerde hızla fizyolojik ve psikolojik bozukluklara neden olmasıdır. 20. yüzyılda ülkelerin biyolojik silah geliştirme çabaları doğrultusunda çok eski tarihlere dayanan biyolojik silah ajanı kullanımının son bulmayacağı öngörülebilir bir sonuçtur. Dünya tarihinde

yaşanan pandemilerde rol oynayan mikroorganizmaların hastalık yaparak hızla yayılması ve geniş kitleleri etkilemesi pandemiye sebep olan biyolojik ajanların biyoterörist eylemlerde de kullanılabileceği konusunu düşünmeye sevk etmektedir. Belirli bölgelerde endemik olarak görülen hastalıklara ait etkenlerin, biyolojik silah ajanı olarak kullanılması halinde bir belirsizliğin meydana gelmesi de söz konusu olabilir. En son yaşanan biyolojik ajan kullanımının 19 yıl önce olması ve tekrarının yaşanma olasılığının yanında gelişen teknoloji ile daha ağır sonuçları beraberinde getirecek olması değerlendirilmesi gereken bir konudur. Bu bağlamda yaşamakta olduğumuz Covid-19 pandemisi, her yönü ile araştırma yapılmasını gerektirmektedir.

Çalışmamızda biyolojik silahlanmanın küresel durumu ve biyolojik silah ajanlarının geçmişten günümüze süregelen salgınlarda rol oynamasından yola çıkarak, hala etkisini yitirmemiş Covid-19'un bir biyolojik silah ajanı olduğu yönünde ortaya koyulan teorilerin doğru olup olmadığı yönünde değerlendirmesi amaçlanmıştır.

Biyolojik Ajanlar

Biyolojik ajanlar insanlarda, hayvanlarda ve bitkilerde hastalık meydana getiren ya da malzemeye zarar veren bakteri, virüs, mantar ya da diğer mikroorganizmalar ve bunların toksinleridir. Doğal ortamda (su, toprak, bitki ve hayvanlarda) yaygın olarak bulunan bu mikroorganizmalar; insan sağlığını alerjik reaksiyonlardan ciddi tıbbi durumlara hatta ölüme kadar çeşitli boyutlarda olumsuz yönde etkileyebilme özelliğine sahiptir. Doğada kolayca bulunmaları, yaşamlarını sürdürebilmek için çok az kaynağa ihtiyaç duymaları ve hastalık yapabilme etkilerinin yanı sıra gerektiğinde çeşitli genetik değişiklikler yapılarak kullanılabilmesi kimyasal ajanlara kıyasla biyolojik ajanlar, silahlanma açısından daha fazla ilgi görmektedir (Dökmeci, 2018; Hüşan, 2010).

Canlılar için en ufak miktarı bile öldürücü olan biyolojik silahların varlıklarının duyularla anlaşılmasının imkansız olmasının yanında açık alanda belirlenmeleri zor ve zaman alıcıdır. Biyolojik silah amacıyla kullanılan ajanlar bakteriyel, viral, riketsiyal ajanlar ve biyolojik toksinler şeklinde sınıflamak mümkündür (Roffey ve diğ., 2002; Pavlin, 1999; WHO, 2004).

Tarih boyunca canlıları öldürme, hasta etme ve etkisiz hale getirme amacıyla pek çok biyolojik ajan kullanıldığı gözlemlenmiştir. Rapor edilmiş en büyük biyolojik savaş saldırısında 1346 yılında Kırım Savaşında Tatar ordusu, Cenevizlilerin Karadeniz'i kontrol etmek için kullandıkları Kaffa şehrinin (bugünkü Ukrayna'da Feodosia) surlarının içerisine veba ile enfekte olmuş ölü insan vücutlarını mancınıklar aracılığıyla atarak Cenevizlileri mağlup etmek için salgın oluşturmaya çalışmışlardır (Croddy, 2002; Frischknecht, 2008). "Kara Ölüm" olarak anılan vebanın Avrupa'ya yayılmasında, oluşturulmaya çalışılan salgından kaçan Kaffalılarının sebep olduğu tarihçiler tarafından öne sürülmektedir. Aynı zamanda 1348-1352 yılları arasında epidemi oluşturan vebanın, Tatarların salgın oluşturma çabası ile atıkları vebalı cesetlerdeki bakterilerin gemilerdeki fare vektörleri aracılığıyla Avrupa kıtasına taşınmasına sebebiyet vererek 25-30 milyon insanın ölümüne neden olduğu öne sürülmektedir (Wheelis, 2002). Bu bağlamda, bir biyolojik silah ajanının pandemiye rol oynaması söz konusu olmuştur. Tarihsel kayıtlarda geçen vebanın bir biyolojik silah ajanı olarak kullanılmasından sonra en çok kullanılan diğer bir biyolojik silah ajanı ise çiçek etkeni olmuştur. Çiçek hastalığı olan kişilerin eşyalarının hediye olarak verilmesi yöntemiyle, çiçek virüsünün biyolojik silah olarak muhtemelen ilk defa kullanılması 1754-1767 yılları arasındaki Fransa ve Hint Savaşı'na dayanmaktadır (Dökmeci, 2018; Henderson ve diğ.,1999).

20. yüzyıla gelindiğinde biyolojik silah üretimi ve kullanımı ülkelerin geliştirdiği biyolojik silah programları ile artarak devam etmiştir. Amerika Birleşik Devletleri'nde 11 Eylül 2001 tarihinde Dünya Ticaret Merkezi ve Pentagon'a yapılan terörist saldırılarının akabinde bazı senatörlere ve bilinen basın merkezlerine Amerikan posta sistemi kullanılarak *Bacillus anthracis* sporları ihtiva eden bu mektuplar gönderilmiştir. Yaşanan bu biyoterör saldırısı sonucunda biyoterörizm dünya genelinde dikkat çekici bir hal almıştır (Yenen ve Doğanay, 2008; Baysallar, 2007). Yüzyıllar boyunca devam eden biyolojik silah ajanı kullanımı bulunduğumuz yüzyıl içinde yadsınamaz bir gerçektir.

Pandemi (Salgın Hastalıklar) ve Biyoterörizm

Kısa süre içinde belirli bir popülasyondaki çok sayıda kişiye yayılan hastalıklar salgın olarak tanımlanmaktadır. Bu salgın, dünya çapında yayılım göstermesi sonucunda insan yaşamını tehdit eden boyutlara ulaştığında pandemi olarak nitelendirilmektedir. Mevsimsel olarak veya bölgenin coğrafi özelliklerine uymayan enfeksiyon vakalarının görülmesi doğal olarak gerçekleşmeyen bir salgının göstergesi olabilir. Tarih boyunca salgın hastalıklar insan yaşamı için bir tehdit unsuru olmuştur. Dünyanın dengesini etkileyen salgınların sonuçları, artan insan hayvan ilişkisi ve mutasyon geçirerek tedavinin zorlaşması ile

daha tehlikeli boyutlara ulaşmaktadır. Veba, kolera gibi geçmiş yüzyılların pandemik salgınlarının yerini 21. yüzyılda Ebola, SARS, MERS, yeni tip coronavirüs gibi küresel yaşamı etkileyen salgınlar almıştır (Yıldırım,2020).

Biyolojik silah ajanlarının konvansiyonel, nükleer yahut kimyasal silahlar gibi diğer Kitle İmha Silahları'na (KİS) oranla asker ya da güvenlik güçleri tarafından savaşlarda silah olarak veya yasa dışı terör amaçlı kullanılma konusunda daha çok tercih edildiği tarihsel kayıtlarda mevcut olduğu görülmektedir. Savaş ya da terör amaçlı insan ve diğer canlılarda zararlı etkiler ve ölüm meydana getirmek için kullanılan mikroorganizmalar ya da toksinlere biyolojik silah, biyolojik savaş zehirleriyle yapılan terörizm olaylarına ise biyoterörizm adı verilmektedir (Dökmeci, 2018). Biyolojik silah ajanlarının tercih edilmesinin en önemli etkeni çeşitliliğin diğer Kitle İmha Silahları (KİS)'na göre daha fazla olmasıdır. Diğer nedenler ise düşük miktarda yayılarak oldukça geniş kitleleri enfekte etmeleri, korku, panik ve kargaşa oluşmasına sebebiyet vermeleri, üretilmeleri açısından hızlı, kolay ve ucuz olmaları, insandan insana veya hayvandan hayvana bulaşmaların olabilmesi, aerosol haline getirilebilmeleri ve böylece daha etkili olmaları sağlanabilmesi, bazı biyolojik ajanların etkisi çabuk kaybolurken bazılarının ise çok uzun süre kalıcı olabilmesi, tanı, tedavi, ilaç stoku ve önlem alınması açısından ülkelerin kapasitelerinin yetersiz kalmasına sebep olmaları ve kullanılan ajanın sadece hayat kayıplarına neden olmakla kalmayıp birçok boyutta etkilerinin olmasıdır (Dökmeci, 2018; Leitenberg, 2001; Kortepeter ve Parker, 1999; Lubitz, 2005).

Biyoterörizm bir saldırı girişimi sonucunda popülasyondaki herkesin eş zamanlı olarak etkenle teması söz konusu olabilmektedir. Belirli bir bölgedeki popülasyona özgü akciğerde şarbon, veba veya tularemi gibi hastalıkların atipik klinik formlarının yüksek oranlarda gözlenmesi, bu bölge haricinde yaşayan popülasyonda ise hiç veya az miktarda vakalara rastlanması biyolojik saldırı lehine olan bir durumu meydana getirmektedir. Ani olarak başlayan bir salgının, birkaç noktada birden gözlenmesi de biyolojik saldırı gerçekleştiğinin göstergesi olabilecek nitelikte bir bulgudur (Pavlin, 1999; Spencer ve Lightfoot, 2001).

Covid-19 Pandemisinin Biyoterörizm Açısından Değerlendirilmesi

20. yüzyıla kadar biyolojik saldırılar, teknolojik gelişmelerden uzak daha çok enfekte hayvan ya da insan cesetleri ve eşyalarının kullanılması ile gerçekleşmesi sağlanmıştır. Düşmanların zehirleyerek zayıflatılması, savaşta kazanan taraf olmak için kuşatmalar ve savaşlar sırasında biyolojik silahların kullanılması suretiyle amaçlara ulaşılması hedeflenmiştir. Bu amaçlar doğrultusunda en çok kullanılan biyolojik silah ajanları, veba ve çiçek hastalığının etkenleri olmuştur (Hüşan, 2010; Frischknecht, 2003). Daha sonraki yüzyıllarda etkililiği anlaşılan biyolojik silahlar için ülkeler farklı programlar geliştirmiştir. Virüslerin genomları entegre edilerek mortaliteyi daha çok yükseltme çabalarını içeren ya da vektörler aracılığıyla salgın oluşturulması hedeflenmesi gibi farklı yöntemleri içeren ülkelerin biyolojik silahlanma programları durdurulması adına sözleşmeler imzalanmış fakat imzalanan sözleşmeler sonrasında tekrar tespit edilen biyolojik ajanlar sonucunda biyolojik silahlanmanın engellenemediği anlaşılmıştır (Leitenberg,2001; Bruwer,2001; Roffey ve diğ.,2002; Frischknecht,2008). Kaynağı henüz belli olmayan yaşamakta olduğumuz Covid-19 pandemisinin etkeni olan SARS-CoV-2'nin biyolojik silah ajanı olduğu ile ilgili görüşler mevcuttur. Geçmişte coronavirüslerin sebep olduğu salgınlar, SARS ve MERS pandemi boyutuna ulaşmamıştır. Covid-19'un pandemi boyutuna ulaşmış olması ve SARS-CoV-2'nin genom diziliminin yarasalarda bulunan virüsler ile benzerlik göstermesi fakat salgının başlangıç noktası olarak kabul edilen deniz ürünleri pazarında yasa bulunmadığının belirtilmesi, SARS-CoV-2'nin biyolojik silah olarak kullanılması ile ilgili sorgulamalara neden olmaktadır. Bu sebeple Covid-19 ile ilişkili bilgilerin, epidemiyolojik ve laboratuvar açısından biyolojik saldırı göstergelerine göre değerlendirmeler yapılmasını gerektirmektedir.

Laboratuvar açısından biyolojik saldırı göstergeleri arasında yer alan; farklı yerlerden farklı zamanlarda genetik benzerlik gösteren mikroorganizmaların tespit edilmesi ile ilgili göstergenin, Covid-19 pandemisi bakımından değerlendirildiğinde pandemide rol oynayan etkenin daha önceki coronavirüs salgınlarından SARS etkeni ile %79 oranında benzerlik göstermesi söz konusuysen MERS salgınının ise Arap Yarımadası'nda yaşanması ile coronavirüs ailesine ait başka bir etkenin geçmişte farklı bir bölgede salgına neden olması söz konusu olmuştur (Hasöksüz ve diğ.,2020; Ak,2020; Xu ve diğ.,2020).

Covid-19'un epidemiyolojik açıdan biyolojik saldırı göstergeleri incelendiğinde ise, Covid-19 bir zoonotik hastalık salgınıdır fakat salgına ait ilk vakanın bildirildiği bölgede ilk vaka ile birlikte bulunan kişilerde yüksek atak hızının saptanması söz konusu olmamıştır. Covid-19'dan kaynaklanan ölümlerin ileri yaş ve altta yatan bir hastalığa sahip olunması nedeniyle gerçekleştiği bilinmektedir. Covid-19 nedeniyle çok sayıda, ani ölümlerin meydana geldiğini gösteren herhangi bir kanıt yoktur. 2001 yılında gerçekleşen ve

bilinen en son biyoterörist saldırısında olduğu gibi biyolojik ajan yayılımına dair direkt kanıt niteliğindeki şüpheli mektup gibi nesnelere varlığı Covid-19 için söz konusu değildir (Bulut ve Kato,2020).

Tartışma ve Sonuç

SARS ve MERS salgınının da olduğu gibi Covid-19 etkeninin de bir RNA virüsü olduğu tespit edilmiştir. RNA virüslerinin genomları gereği sürekli mutasyona uğramakta ve yeni özellikler kazanmaktadır. Virüslerin zamanla çevreye adapte olarak gelişmesi ile birlikte zoonotik hastalıkların sebebi olan yeni suşların meydana gelmesi sonucunda insanlar ve hayvanlar arasındaki yakın temas yaşamı tehdit eden hastalıkların ortaya çıkmasına neden olmaktadır. Dolayısıyla RNA virüsleri için doğanın bir biyoterör etkeni nitelendirilmesi yapılabilmektedir. SARS-CoV-2'nin proteinlerinin insan hücrelerine bağlanmasında bu denli etkili olmasının ancak doğal seleksiyondan kaynaklandığı ile açıklanabilmektedir. Ek olarak, viral ajanların neden olduğu hastalıkların tedavisinin zor olmasının yanında aşılama gerektirmesinden dolayı küresel işbirliği ihtiyacı da doğmaktadır. Covid-19 salgınıyla verilen küresel mücadele, toplumların doğal ve insan yapımı biyolojik tehditlere karşı savunmasızlığını ortaya çıkarmıştır. Terör ya da savaş amaçlı hastalığa neden olan ajanların kasıtlı kullanımı sonucunda bu ajanları kullananlara da son derece etkili olabileceği küresel anlamda yaşadığımız Covid-19 salgını ile anlaşılmıştır. Biyolojik tehlikeler yalnızca sağlığımız için değil, aynı zamanda ekonomik, sosyal ve politik bir tehdittir ve daha ciddiye alınması ve daha iyi ele alınması gerekecektir. Yaşadığımız salgından çıkaracağımız dersler, bize gelecekte biyolojik silah saldırısıyla mücadele etmemize yardımcı olacaktır. Bunun için devletlerin olası bir saldırıya karşı eğitim ve tatbikatlar yapması hazırlık açısından büyük önem taşımaktadır.

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Koronavirüsler 21. Yüzyıla gelinceye kadar hafif bir soğuk algınlığına neden olan önemsiz patojenler olarak değerlendirilmişlerdi. Ancak dünyamız 21. Yüzyılın başlamasıyla birlikte koronavirüslerin yol açtığı endişe verici üç salgın ile karşılaştı. Ciddi akut solunum sendromu koronavirüs-2 (SARS-CoV-2) adı verilen virüsün neden olduğu son salgın ise etkisini hala sürdürmektedir. Aralık 2019'da, Çin'in Wuhan bölgesinde başlayan, Çin'in her yerine ve tüm dünyaya yayılan bu respiratuar sistem hastalığına Dünya Sağlık Örgütü (WHO) tarafından COVID-19 adı verildi.

Ülkemiz ve tüm dünya COVID-19 pandemisi nedeniyle çeşitli kısıtlamaların uygulandığı zor günlerden geçmektedir. Henüz kesin olarak tedavi edici etkin bir ilacı veya koruyucu bir aşısı olmayan bu hastalık yayılmaya da devam etmektedir. Bu zor günlerde bağışıklık sistemimizi kuvvetlendiren başta beslenme olmak üzere yaşam tarzı değişikliklerinin önemi artmıştır. Dengeli bir diyet ile beslenen bireylerin immün sistemleri daha iyi olacağından kronik hastalıklara ve enfeksiyonlara karşı daha dayanıklı olacaktırlar.

Bu virüsün insan vücuduna giriş yeri anjiyotensin dönüştürücü enzim-2 (ACE-2) reseptörüdür. Kandaki ACE seviyeleri gıda alımına karşı oldukça duyarlıdır. Diyet paternlerinin ACE seviyeleri üzerinde güçlü bir etkisi vardır. Lahana gibi sebzelerin ve onların fermente ürünleri olan turşuların ve yoğurt gibi fermente süt ürünlerinin tüketiminin COVID-19'da yararlı olduğu bildirilmiştir. Yoğurt gibi süt ürünleri doğal öldürücü hücrelerin aktivitesini artırabilir ve solunum yolu enfeksiyonu riskini azaltabilir, bu da bu besinlerin COVID-19 hastalığına karşı potansiyel bir yararı olabileceğini gösterir. Nitekim batılı araştırmacıların yaptığı bir çalışmada da ülkemizde COVID-19'dan ölüm oranının düşük olmasında çok fazla lahana ve fermente süt ürünleri tüketiminin rolü olduğu bildirilmiştir.

SARS-CoV-2 salgını baş etmek için uygulanan karantina ve kısıtlama önlemlerinin, sağlıksız beslenmeye ve fiziksel aktivitenin azalmasına yol açarak stres ve depresyon gelişmesine katkıda bulunur. Fizik egzersizler ve sağlıklı beslenme, beslenme biyokimyasını modüle ederek söz konusu bu problemlerle mücadelede yararlı olabilir.

Bağışıklık sistemimizi desteklemek SARS-CoV-2 salgını döneminde çok önemlidir. Beslenme biyokimyasında yediğimiz gıdaların yanında mikrobiyota da önemli rol oynamaktadır. Salgın dönemlerinde maske kullanma, fiziki mesafeye ve hijyene dikkat etmenin yanında bağışıklığımızı kuvvetlendirmemiz gerekiyor. Bunun için beslenme biyokimyasını olumsuz etkileyecek faktörlerden de sakınmamız gerekiyor. Sonuç olarak, bu pandemi döneminde dengeli beslenmek, bağırsak mikrobiyotasını korumak, düzenli egzersiz yapmak, stresten uzak kalmak ve güneşten yararlanmak gereklidir.

Anahtar Kelimeler: COVID-19, Beslenme Biyokimyası, Salgın

THE IMPORTANCE OF NUTRITIONAL BIOCHEMISTRY IN COVID-19 PATIENTS**ABSTRACT**

Coronaviruses were being considered as negligible pathogens that cause a mild flu until the 21st century. However, with the start of the 21st century, our world has faced three worrying outbreaks caused by coronaviruses. The last outbreak caused by a virus called severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) still maintains its effect. This respiratory system disease, which started in December 2019 in the Wuhan region of China and spread all over China and the world, was called COVID-19 by World Health Organization (WHO).

Our country and the world are having a hard time when various restrictions are applied due to the COVID-19 outbreak. This disease, which is not yet a definitive therapeutic drug or a protective vaccine, continues to spread. In these difficult days, the importance of lifestyle changes, especially nutrition, which strengthens our immune system, has increased. Individuals who are fed a balanced diet are likely to be more resistant to chronic diseases and infections, since their immune systems would be better.

The entry point of this virus to the human body is angiotensin converting enzyme-2 (ACE-2) receptor. ACE levels in the blood are very sensitive to food intake. Diet patterns have a strong effect on ACE levels. Consumption of vegetables such as cabbage and their fermented products such as pickles, and fermented milk products such as yogurt has been reported to be beneficial in COVID-19. Dairy products, such as yogurt, can increase the activity of natural killer cells and reduce the risk of respiratory infections, suggesting their potential benefit against to COVID-19 disease. As a matter of fact, in a study conducted by western researchers, it was reported that consumption of too many cabbage and fermented milk products has played a role in low mortality rate from COVID-19 in our country.

The quarantine and lockdown measures applied to cope with the COVID-19 outbreak, leading to unhealthy nutrition and reduced physical activity, can contribute to the development of stress and depression. Physical exercises and healthy nutrition can be useful in combating these mentioned problems by modulating nutritional biochemistry.

Supporting our immune system is very important during the SARS-CoV-2 outbreak period. In nutritional biochemistry, microbiota also plays an important role as well as the foods we eat. In outbreak periods, in addition to measures such as using masks, paying attention to physical distance and hygiene, we should strengthen our immunity. Therefore, we also need to avoid factors that can adversely affect nutritional biochemistry. In conclusion, it is required to have a balanced nutrition, protect gut microbiota, exercise regularly, stay away from stress and benefit from the sunlight during this pandemic period.

Keywords: COVID-19, Nutritional Biochemistry, Outbreak

GİRİŞ

Koronavirüsler 21. Yüzyıla gelinceye kadar hafif bir soğuk algınlığına neden olan önemsiz patojenler olarak değerlendirilmiş ve insanlarda hafif fenotipleri nedeniyle nispeten pek ilgi görmemişlerdir. Ancak, insanlık 21. Yüzyılın başlamasıyla birlikte koronavirüslerin yol açtığı endişe verici üç önemli salgınla karşılaştı. İlk olarak 2002 yılında Çin'de ciddi akut solunum sendromu koronavirüs (SARS-CoV) salgını görüldü. Onu 2012 yılında Arabistan'da görünen Ortadoğu solunum sendromu koronavirüs (MERS-CoV) salgını izledi. Son koronavirüs salgını ise Ciddi akut solunum sendromu koronavirüs-2 (SARS-CoV-2) adı verilen virüsün neden olduğu ve hala etkisini gösteren viral pnömoni salgınıydı. Aralık 2019'da, Çin'in Wuhan bölgesinde başlayan ve COVID-19 ismi verilen bu viral respiratuvar sistem hastalığı hızla Çin'in her yerine ve tüm dünyaya yayılarak bir pandemi oluşturdu (Mattiuzzi C and Lippi G, 2020).

Ülkemiz ve tüm dünya COVID-19 salgını nedeniyle çeşitli kısıtlamaların uygulandığı zor günlerden geçmektedir. Henüz kesin olarak tedavi edici etkin bir ilacı veya koruyucu bir aşısı olmayan bu hastalık yayılmaya da devam etmektedir. Bu zor günlerde bağışıklık sistemimizi kuvvetlendiren başta beslenme olmak üzere yaşam tarzı değişikliklerinin önemi artmıştır. Dünyayı tahrip eden bu salgına karşı beslenme desteğinin de sağlanması gereklidir (Laviano et al., 2020). Dengeli bir diyet ile beslenen bireylerin immün sistemleri daha iyi olacağından kronik hastalıklara ve enfeksiyonlara karşı daha dayanıklı olacaklardır. Sağlıklı beslenme alışkanlıklarının kazanılması, bireylerin fiziksel ve zihinsel sağlığının korunmasına da yardımcıdır (Aman and Masood, 2020).

COVID-19'un klinik belirtilerinde, inflamatuvar yanıt önemli bir rol oynar. Vücuda SARS-CoV-2 girişinden sonra sitokin fırtınası gelişirse pulmoner doku hasarına, fonksiyonel bozukluğa ve akciğer kapasitesinin azalması gibi ciddi hasarlara yol açabilir. Özellikle bilgisayarlı toraks grafisinde buzlu cam görünümü tipiktir (Şekil 1). Sitokin fırtınası sonucu pulmoner interstisyel arteriyolar duvarlara verilen hasar, virüsün patojenik etkisine rağmen, inflamatuvar bir yanıtın hastalık boyunca önemli bir rol oynadığını göstermektedir (Zabetakis et al., 2020).

Akciğerler SARS-CoV-2'nin ana hedef organı olarak kabul edilmesine rağmen, virüs çeşitli mekanizmalar yoluyla kalp, kan damarları, böbrekler, bağırsaklar ve beyin de dahil olmak üzere diğer birçok organı da etkilemektedir. Nitekim, SARS-CoV-2 ile enfekte olanlarda solunum sistemi enfeksiyonu belirtileri olmasa bile kardiyak tutulum görülebileceği bildirilmiştir (Inciardi et al., 2020). Myokardit, fokal veya global miyokart enfeksiyonu, nekroz ve nihayetinde ventriküler disfonksiyonla sonuçlanabilir. İnfluenza benzeri sendromlardan sonra göğüs ağrısı ile başvuran hastalarda, fokal miyokardit te ayırıcı tanıda akla gelmelidir (Inciardi et al., 2020). Virüsün kalp ve birçok organı kritik olarak etkileme yollarından birisi de yoğun bir inflamatuvar reaksiyondur, diğer mekanizmalar henüz aydınlatılmamıştır. SARS-CoV-2'nin aşırı inflamasyon, yaygın intravasküler koagülasyon ve hipoksiye bağlı olarak arteriyel ve venöz toboembolizmlere yatkın oluşturduğu anlaşılmıştır (Zabetakis et al., 2020).

BESLENMENİN ÖNEMİ

Transmembran anjiyotensin dönüştürücü enzim-2 (ACE-2) reseptörüne bağlanarak insan vücuduna giren akut endotelial hasara neden olan SARS-CoV-2, pro-enflamatuvar sitokinlerin fırtınasını, endotel aktivasyonunu ve koagülasyonun kademeli aktivasyonunu destekleyen, ARDS veya hatta çoklu organ yetmezliğine yol açan adezyon moleküllerinin ekspresyonunu artırır. Bu sitokin salım sendromuna çok benzer bir bağışıklık hiper aktivasyonu fenomenini temsil eder (Mattioli et al., 2020).

Bilindiği bu virüsün insan vücuduna giriş yeri ACE-2 reseptörüdür. Kandaki ACE seviyeleri gıda alımına karşı oldukça duyarlıdır. Diyet paternlerinin ACE seviyeleri üzerinde güçlü bir etkisi vardır. Yüksek doymuş yağlı diyet ACE'yi artırır. Ancak, ACE'yi inhibe edici aktiviteye sahip gıdalarda vardır. Antioksidan aktiviteleri olan ve ACE inhibisyonu yapan birçok gıda mevcuttur (Bousquet et al., 2020). Bundan dolayı bu salgınla mücadelede beslenmenin de önemli rolü vardır.

Bazı gıdalar özellikle de fermente olanlar, nöroaktif bileşikler ve onların triptofan gibi öncüllerini içerirler. Bazı mikroorganizmalar da fermentasyon yoluyla nöroaktif bileşikler sentezleyebilir. Fermentasyon sayesinde gıdaların kalitesini arttıran çok kaliteli özellikler eklenir ve sindirimi de kolaylaştırır (Yılmaz and Gökmen, 2020). Bu nöroaktif bileşiklerin insan sağlığını ve ruh halini etkilemesi muhtemeldir. Lahana gibi sebzelerin ve onların fermente ürünleri olan turşuların ve yoğurt gibi fermente süt ürünlerinin tüketiminin COVID-19'da yararlı olduğu bildirilmiştir (Fonseca et al., 2020). Yoğurt gibi süt ürünleri doğal öldürücü hücrelerin aktivitesini artırabilir ve solunum yolu enfeksiyonu riskini azaltabilir, bu da bu gıdaların COVID-19 hastalığına karşı potansiyel bir yararı olabileceğini gösterir (Mattioli et al., 2020). Zerdeçal da tıpkı tümör nekroz faktörü blokerleri gibi bir anti-enflamatuvar ajan olarak işlev görür (Singh, 2020).

Çiğ veya konserve halinde tüketilen lahana gibi sebzeler, güçlü antioksidan veya anti ACE aktivitesine sahip gıdalardır. Bazı Avrupa ülkelerinde, Kore ve Tayvan'da bu gıdalar çok tüketilmektedir. Bundan dolayı bu ülkelerde COVID-19'den ölenlerin az olduğu bildirilmiştir (Bousquet et al., 2020). Batılı araştırmacıların yaptığı bir çalışmada da ülkemizde COVID-19'den ölüm oranının düşük olmasında çok fazla lahana, turşu ve fermente süt ürünleri tüketiminin rolü olduğu belirtilmiştir (Bousquet et al., 2020).

COVID-19 olan hastaların çoğunda şiddetli anoreksi, inflamasyon ve yetersiz beslenmeyi ifade eden belirtiler olduğu gözlenmiştir. Bunlar, solunum yetmezliği riskini artırarak invaziv olmayan ventilasyonu gerektirebilir (Zabetakis et al., 2020). Bundan dolayı bağışıklık sistemini kuvvetlendiren Akdeniz mutfağının SARS-CoV-2 dahil viral enfeksiyonların riskini azaltmada katkısının olabileceğini düşünüyoruz. Temel besin unsurları zeytinyağı, taze sebze ve meyve, balık, protein bakımından zengin baklagiller olan Akdeniz diyetinde kırmızı et az miktardadır. Balıklar ve trombin, kollajen ve adenosin difosfat dahil protrombotik yollara karşı güçlü antitrombotik etkiler gösteren diğer gıdalar polar lipitleri içerir. Balıklardaki peptitler gibi diğer biyoaktif bileşikler, trombozu, reaktif oksijen türlerinin oluşumunu ve hipertansiyonu minimize edebilir (Zabetakis et al., 2020).

Karantina döneminde gelişen stres gıda alınımını arttırır ve uyku bozukluklarına yol açabilir. Bundan dolayı akşam yemeklerinde serotonin ve melatonin sentezini teşvik eden veya içeren gıdalarla beslenmek önemlidir. Süt ve süt ürünleri gibi protein içeren gıdalar, uykuya neden olan triptofan denilen esansiyel amino asidin ana kaynağıdır. Ayrıca, yoğurt gibi fermente süt ürünleri doğal öldürücü hücre aktivitesini de arttırarak solunum yolları enfeksiyonlarının riskini azaltabilir (Muscogiuri et al., 2020).

Yaşlılarda, hipertansiyon ve diyabet gibi eşlik eden kardiyovasküler sistem hastalığı olanlarda ve yetersiz beslenenlerde (albümin düzeyi düşük olanlarda) COVID-19'un gidişatı olumsuz sonuçlarla ilişkilidir. COVID-19 tanısı alan kritik hastalarda beslenme ile ilgili henüz cevaplanmamış bir başka soru, inflamatuvar reaksiyonun spesifik lipit emülsiyonları ile modülasyonunun kortikosteroid ve anti-interlökin-6 uygulamalarına herhangi bir ek fayda sağlayıp sağlayamayacağıdır (Laviano et al., 2020). Bu da beslenme biyokimyasının önemli araştırma konularından biri olmuştur.

D VİTAMİNİNİN ÖNEMİ

Yaşlıların salgın döneminde evde kalmaları nedeniyle güneş ışığından yeterli olarak yararlanmaları mümkün olmamıştır. Yaşlanmayla ciltte 7-dehidrokolesterol düzeyleri azaldığından yaşlılarda vitamin D düzeyleri düşmektedir. Ayrıca, yaşlılarda artan kronik hastalıklar nedeniyle kullanılan bazı ilaçlarda (antihipertansifler, antiinflamatuvar ajanlar, bitkisel ilaçlar gibi) pregnane-X reseptörünü aktive ederek serum D vitamini konsantrasyonlarını azaltabilir (Grant et al., 2020). Yaşlanma, bağışıklık sisteminin düzensizliği ile ilişkili olduğundan yaşlılar artan oksidatif stres ve inflamasyona da yatkın hale gelir (Zabetakis et al., 2020).

D vitamininin solunum epitel hücrelerinin ve makrofajların, solunum virüsleri de dahil olmak üzere çeşitli patojenlere karşı inflamatuvar sitokin yanıtının düzenlenmesinde ve bastırılmasında önemli olduğunu gösteren önemli deneysel veriler vardır (Greiller and Martineau, 2015). Dolayısıyla, Bu kısıtlama günlerinde D vitamini eksikliğinden kaçınmak gereklidir.

Yüksek dozlarda D vitamini, B12 vitamini ve C vitamini uygulanmasının viral hastalığın yol açtığı inflamasyonun azalmasına ve dispnenin gerilemesine yardımcı olabileceği bildirilmiştir (Muslu and, Ersü, 2020). D vitamini bilfiil, viral replikasyona müdahale ederek ve immünomodülatör ve anti-inflamatuvar özellikleri yoluyla antiviral etkiler sergileyebilir. Sonuç olarak, artan D vitamini düzeylerinin SARS-CoV-2 enfeksiyonuna karşı fayda sağlayabileceği varsayılmaktadır. İsviçre'de yapılan bir çalışmada SARS-CoV-2 PCR pozitif hastalarda D vitamini seviyesinin, SARS-CoV-2 PCR negatif hastalara göre önemli ölçüde düşük olduğu bildirilmiştir (D'Avolio et al., 2020). PCR pozitif gruptaki önemli ölçüde daha düşük D vitamini konsantrasyonları, SARS-CoV-2 enfeksiyonunun D vitamini konsantrasyonu ile güçlü bir ilişkiye sahip olduğunu ima etmektedir (D'Avolio et al., 2020).

COVID-19 enfeksiyonuna cevapta vitamin D'nin rolü iki yönlü olabilir. İlk olarak, vitamin D, solunum yolları epitelinde antimikrobiyal peptitlerin üretimini destekleyerek viral hastalığın semptomlarının gelişmesini daha az olanaklı kılar. İkincisi, vitamin D, COVID-19 gelişmesine karşı inflamatuvar cevabı azaltmaya yardımcı olabilir (Mattioli et al., 2020). D vitamini ayrıca kısmen doğal bağışıklık sisteminin neden olduğu sitokin fırtınasını azaltarak hücrel bağışıklığı olumlu etkiler. Doğuştan gelen bağışıklık sistemi, COVID-19 hastalarında gözlemlendiği gibi viral ve bakteriyel enfeksiyonlara yanıt olarak hem pro-enflamatuvar hem de anti-enflamatuvar sitokinler üretir. D vitamini, tümör nekroz faktör alfa ve interferon gama gibi pro-enflamatuvar Th1 sitokinlerinin üretimini azaltabilir. D vitamini uygulamak, pro-enflamatuvar sitokinlerin ekspresyonunu azaltır ve anti-enflamatuvar sitokinlerin makrofaj tarafından ekspresyonunu arttırır (Grant et al., 2020).

İnsan akciğer hücreleri inaktif vitamin D formunu (25(OH)D) aktif vitamin D formuna (1,25(OH)2D) dönüştürebilir. Aktif vitamin D formu ise proinflatuar sitokinleri azaltır ve peptitleri (antimikrobiyal peptit katelisinidin) ise artırır. Birçok virüse etki yapan katelisinidin COVID-19 gibi zarflı virüslere de doğrudan antiviral aktivite göstermesi olasıdır. Ayrıca, vitamin D anjiyotensinojeni baskılar ve ekspresyonunu düzenler (Kara et al., 2020).

Vitamin D solunum yollarını ve sıkı kavşakları korur, katelisinidin ve defensinlerin indüksiyonuyla zarflı virüsleri öldürür ve doğuştan gelen immün sistem tarafından proinflatuar sitokinlerin üretimini azaltır; böylece pnömoniye yol açan sitokin fırtınası riskini azaltır (Muscoigiuri et al., 2020). Katesilidin, gram pozitif ve gram negatif bakteriler, zarflı ve zarfsız virüsler ve mantarlar dahil olmak üzere belirli bir mikrop spektrumuna karşı doğrudan antimikrobiyal aktiviteler sergiler. Bu konakçıdan türetilen peptitler, istilacı patojenleri hücre zarlarını bozarak öldürür ve endotoksinlerin biyolojik aktivitelerini nötralize edebilir (Grant et al., 2020).

Magnezyum, kemiklerin büyümesini ve korunmasını etkilemek için kalsiyum ve fosfat homeostazını düzenlemeye yardımcı olan D vitamini aktive etmeye yardımcı olur. D vitamini metabolize eden tüm enzimler, karaciğer ve böbreklerdeki enzimatik reaksiyonlarda bir kofaktör görevi gören magnezyum gerektirir (Uwitonze and Razzaque.,2018). Bundan dolayı beslenmemizde endüstriyel tarım ürünleri yerine doğal tarım ürünlerini tercih etmemiz önemlidir.

FİZİKSEL AKTİVİTENİN ÖNEMİ

Düzenli fiziksel aktivite inflamasyonu ve oksidatif stresi azaltır ve normal kiloyu korumaya ve visseral yağ birikimini azaltmaya yardımcı olur (Mattioli et al., 2020). Güneş ışığından gelen doğal UV'nin SARS-CoV-2'yi öldürecek kadar güçlü olmasa da, antimikrobiyal etkinliğinin olması dolayısıyla grip ve tüberküloz gibi hava yoluyla yayılan enfeksiyonların bulaşmasını önlediği gösterilmiştir (Welch et al., 2018). Bundan dolayı fiziksel aktivitelerin açık havada güneş ışığı altında yapılması daha da yararlı olacaktır. SARS-CoV-2 salgınına baş etmek için uygulanan karantina ve kısıtlama önlemlerinin, sağlıksız beslenmeye ve fiziksel aktivitenin azalmasına yol açarak stres ve depresyon gelişmesine katkıda bulunduğu bildirilmiştir (Mattioli et al., 2020). Fizik egzersizlerin ve sağlıklı beslenmenin, beslenme biyokimyasını modüle ederek söz konusu bu problemlerle mücadelede yararlı olması muhtemeldir.

PROBİYOTİKLERİN VE MİKROBİYOTANIN ÖNEMİ

Koronavirüslerin akciğer epitel hücrelerine zarar vermesinin ve pnömoniyi kolaylaştırmasının bir yolu da, viral enfeksiyonlara karşı doğuştan gelen bağışıklık yanıtının bir parçası olarak sitokin fırtınasına yol açan Th1 tipi sitokinlerin artan üretimidir. Bir laboratuvar hücre çalışması, SARS-CoV patolojisinin geç evresinde akut akciğer hasarından interferon gamanın sorumlu olduğunu bildirilmiştir (Grant et al., 2020). Probiyotiklerin ve polifenollerin, bulunduğu gıdaların uygun antiviral ilaçlarla birlikte alınması halinde sitokin fırtınasının söndürülmesine katkıda bulunabileceği bildirilmiştir. (Romano et al., 2020). Kontrolsüz akut inflamasyon ve sitokin fırtınası COVID-19'da çoklu organ disfonksiyonuna götüren muhtemel etkenlerdir. Hastalık tablosu geliştikçe kızarıklık, koku ve tat alma duyularında bozukluk, hatta inme gibi semptomlarda ortaya çıkabilir (Zabetakis et al., 2020).

Vücudumuzda başta gastrointestinal sistem olmak üzere deride, genitoüriner sistemde ve solunum sisteminde kolonize olan 10^{14} mikroorganizma vardır (Tekin et al., 2018). Bu kolonize mikroorganizmalardan barsak mikrobiyotasını oluşturanların zararlı mikroorganizmaların vücudumuza girişine engel olması veya onlara karşı toksin salgılaması gibi ümmün sistem işlevlerinde önemli görevleri vardır (Özalp et al., 2020). Canlı mikroorganizmalar olan probiyotikler yeterli miktarlarda tüketildiğinde insanlara yararlı olmaktadır. Barsak mikrobiyotası hem doğuştan gelen hem adaptif immüniteyi, nöroimmüniteyi ve inflamasyonu etkiler. Barsak mikrobiyotası antibiyotikler, stres, hastalıklar ve diyet gibi birçok faktörden etkilenir. Probiyotikler ruh halini de düzeltebilir (Yılmaz and Gökmen, 2020). Bu nedenle probiyotikler stresten sakınmada da önemlidir.

Obezlerde IL-6, C reaktif protein ve TNF-alfa seviyelerinin artması obezitenin düşük seviyede bir kronik inflamatuvar durum olduğuna işaret etmektedir (Özalp et al., 2020). Obezite barsak mikrobiyota kompozisyonunu da olumsuz etkiler. Obezlerin bağırsaklarında artan gram negatif bakteriler lipopolisakkaritlerin üretimini arttırarak metabolik endotoksemi yol açması nedeniyle inflamasyon

gelişmesine neden olabilir (Özalp et al., 2020, Tekin et al., 2018). Obezlerde kalbin hem metabolik hem mekanik iş yükü arttığından, oksijen tüketimi de artarak reaktif oksijen türlerinde artışa yol açar. Bu da oksidatif strese neden olur (Özalp et al., 2020).

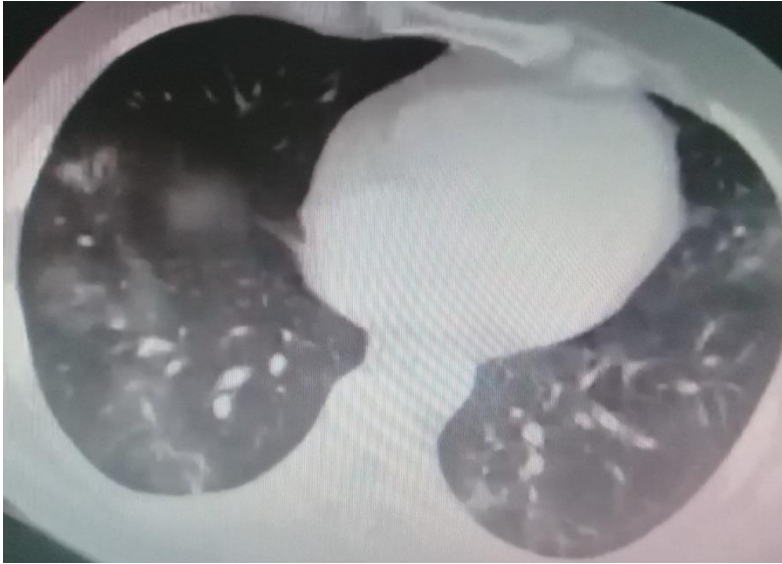
Obezlerde barsak mikrobiyotasında değişiklikler hem zararlı mikroorganizmaların artmasına hem inflamasyonu tetiklemesi sonucu bağışıklık yanıtında azalmaya yol açabileceği düşünülmektedir (Tekin et al., 2018). Dolayısıyla mikrobiyotadaki değişimlerin hem COVID-19'a yakalanmayı hem hastalığın daha ciddi seyretmesine neden olması muhtemeldir.

Antibiyotikler safra asitlerinin metabolizmasını etkileyerek, eikozanoid ve steroid hormon sentezini değiştirdiğinden mikrobiyota kapsamını önemli ölçüde değiştirir (Bengmark, 2013). Antibiyotik tedavisi sonucu barsak mikrobiyotasında değişiklik nedeniyle vejetaryenlerde B12 vitamini eksikliği gelişebilir. Bu da bağırsak mikrobiyotasının beslenme biyokimyasının önemli bir ögesi olduğunu gösterir.

SONUÇ

COVID-19 olup iyileşen hastalarda yapılan kardiyak magnetik rezonans tetkikinde hastaların %60'ında devam eden miyokardiyal inflamasyon saptanmıştır (Puntmann et al., 2020). Bundan dolayı, COVID-19 vakalarında, hastalık düzelmiş olsa bile kalıcı kardiyovasküler komplikasyonlar görülebileceğinden bu viral hastalığa karşı profilaktik tedbirlerin alınması çok önem taşımaktadır.

Profilaktik önlemlerin yanında bağışıklık sistemimizi desteklemek de COVID-19 salgınında çok önemlidir. Beslenme biyokimyasında yediğimiz gıdaların yanında mikrobiyota da önemli rol oynamaktadır. Bundan dolayı salgın dönemlerinde maske kullanma, fiziki mesafeye, el ve vücut temizliğine dikkat etmenin yanında bağışıklığımızı da kuvvetlendirmemiz gerekiyor. Bunun için beslenme biyokimyasını olumsuz etkileyecek faktörlerden de sakınmamız gerekiyor. Sonuç olarak, dengeli beslenmek, barsak mikrobiyotamızı korumak, düzenli egzersiz yapmak, stresten uzak kalmak ve güneşten yararlanmak çok önemlidir. Şüphesiz, fiziki mesafe uymaya, yüz maskeleri takmaya, yüzeyleri temiz tutmaya ve sık sık el yıkamaya da devam edip, pencerelerimizi açıp hem güneşten hem de taze hava akımından yararlanmaya devam etmemizde bu pandemi döneminde çok önemlidir.



Şekil 1. Bilgisayarlı akciğer tomografisinde sağ ve sol akciğerde tipik buzlu cam görünümü.

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**TEMMUZ AYI COVID-19 GÜNLÜK DURUM RAPORLARI VERİLERİNE GÖRE
TÜRKİYE'DEKİ DURUM****Dr. Öğr. Üyesi Muhammet BAYRAKTAR**

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ÖZET

Herhangi bir sağlık sorununun zamanla değişiminin incelenmesi epidemiyolojinin kullanım alanlarından biridir. Toplumdaki bir sağlık sorununun kişi, yer ve zaman özelliklerinin incelenmesi de tanımlayıcı epidemiyolojik araştırmaların konusudur. Bu kapsamdaki araştırmaların faydalı sonuçlar vermesi için güncel ve doğru bilginin kullanılması önemlidir.

Türkiye Cumhuriyeti Sağlık Bakanlığı Sağlık Bilgi Sistemleri Genel Müdürlüğü'nün sitesi üzerinden "Covid-19 Türkiye durum raporu" başlığı altında, 29.06.2020 tarihinden itibaren halka açık günlük ve haftalık durum raporları yayınlamaktadır. Yayımlanan günlük durum raporları; ait oldukları gün için saat 00:00 ile 23:59 saatleri arasındaki yeni laboratuvar test sayısı, İBBS-1'e göre laboratuvar onaylı yeni Covid-19 vaka sayısı, yeni vaka sayılarının cinsiyete ve yaş gruplarına göre dağılımı, İBBS-1'e göre Covid-19 nedeniyle yeni hastane yatışları ve hastaneden yeni taburcu edilenlerin sayılarına ilişkin bilgiler içermektedir. Anılan raporlardaki veriler kullanılarak yapılan tanımlayıcı analizlere göre Temmuz ayında günlük yapılan yeni test sayısının ortalaması 45782.65 ± 3738.98 ve yeni tanı konulan kişi sayısının ortalaması 997.32 ± 92.38 iken yeni tanı konulardan 506.48 ± 53.90 'ı erkek, 490.68 ± 41.68 'i kadındır. Yine Covid-19 nedeniyle bir günde hastaneye yatırılanların sayısının ortancası 544 (448- 1032) ve hastanede yatarak tedavi görenlerden taburcu olanların günlük sayısının ortancası 528 (411- 2305) olarak bulunmuştur.

Güncellenen Covid-19 evde takip algoritması ile komplike olmayan hastaların veya hafif-orta pnömonisi olanların hastaneye yatışlarının yapılmadan takip ve tedavilerinin yürütülmeye başlanmasının, özellikle hastaneye yatış ve hastaneden taburcu olma sayılarını değiştireceği düşünülmektedir. Hastalığın Türkiye'deki durumuna ilişkin değerlendirmeler yapılırken, tanı ve tedavi rehberlerindeki ve algoritmalarındaki güncellemeler ve değişiklikler göz önünde bulundurulmalıdır.

Anahtar kelimeler: Covid-19, Günlük Durum Raporu, Tedavi Rehberi, Algoritma

**THE SITUATION IN TURKEY ACCORDING TO JULY COVID-19 DAILY SITUATION
REPORTS' DATA****ABSTRACT**

Examining the evolution of any health problem over time is one of the uses of epidemiology. Examining the person, place, and time characteristics of a health problem in the society is also the subject of descriptive epidemiological studies. It is important to use up-to-date and accurate information for research in this context to yield useful results.

Through the site of the General Directorate of Health Information Systems, the Republic Of Turkey Ministry of Health is publishing daily and weekly reports that are open to public under the "Covid-19 Situation Report Turkey" title since June 29th 2020. Published daily situation reports include information from 00:00 to 23:59 for the day they belong about the number of new laboratory tests, the number of new laboratory-approved Covid-19 cases according to NUTS-1, the distribution of the number of new cases by gender and age groups, the number of new hospital admissions due to Covid-

19 and new hospital discharges according to NUTS-1, Turkey. According to the descriptive analysis made using the data in the aforementioned reports, in July the average of the number of new tests performed daily was 45782.65 ± 3738.98 and the average number of newly diagnosed patients was 997.32 ± 92.38 , while 506.48 ± 53.90 of the newly diagnosed were men and 490.68 ± 41.68 were women. The median of the number of hospitalizations in one day due to Covid-19 was found to be 544 (448-1032), and the median of the number of discharges from inpatients in one day was 528 (411-2305).

With the updated Covid-19 home follow-up algorithm, it is thought that the follow-up and treatment of uncomplicated patients or those with mild-moderate pneumonia without hospitalization will change the number of hospitalizations and discharges from the hospital. Updates and changes in diagnosis and treatment guidelines and algorithms should be considered during making assessments on the status of the disease in Turkey.

Keywords: Covid-19, Daily Situation Report, Treatment Guide, Algorithm

GİRİŞ

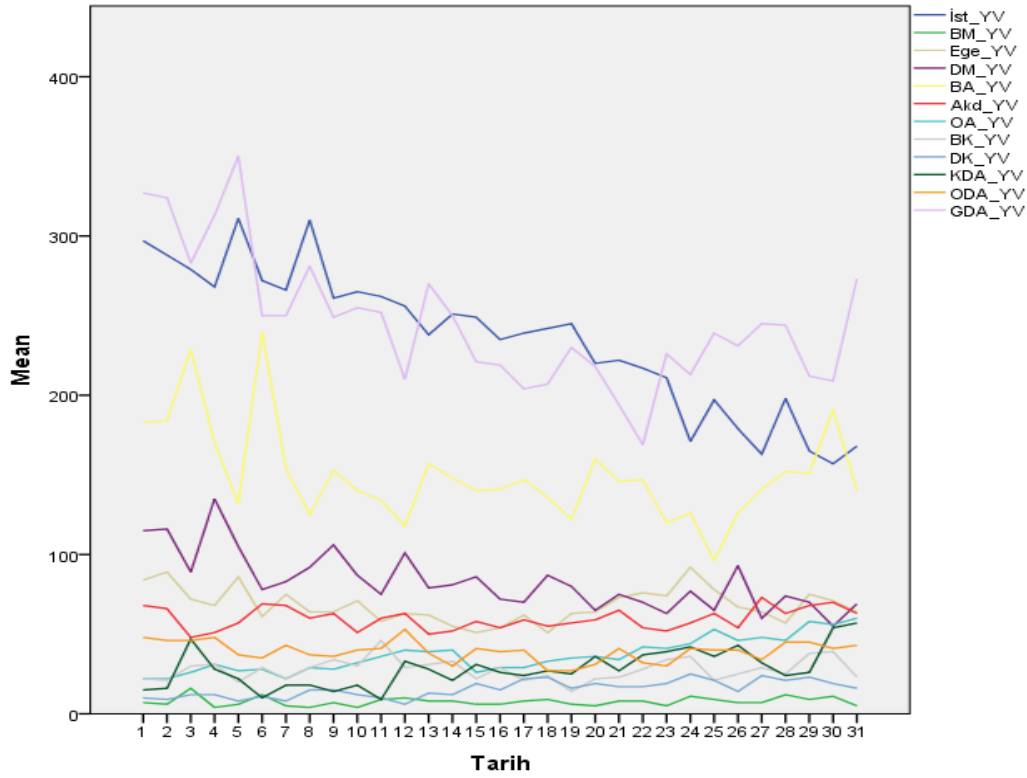
Epidemiyolojik yöntemler herhangi bir sağlık sorununun zamanla değişiminin incelenmesine yönelik çalışmalarda önemli bir yer tutar. Tanımlayıcı epidemiyolojik araştırmalarla toplumda ortaya çıkan bir sağlık sorununun kişi, yer ve zaman özelliklerinin tespit edilmesi mümkündür (Tezcan, 2012). Bu kapsamdaki araştırmaların faydalı sonuçlar vermesi için güncel ve doğru bilginin kullanılması önemlidir.

Dünya üzerindeki bütün ülkelerde yaşayan toplumların yaşam şekillerini değiştiren yeni koronavirüs salgını; ilk defa 2019 yılı sonunda akut solunum yetmezliğine yol açan bilinmeyen bir hastalığın duyurulmasıyla, Çin Halk Cumhuriyeti'nin Wuhan şehrinde ortaya çıkmıştır (Guan et al., 2020; Güner et al., 2020). Bu çalışmada Türkiye Cumhuriyeti Sağlık Bakanlığı Sağlık Bilgi Sistemleri Genel Müdürlüğü tarafından halkı bilgilendirmeye yönelik olarak yayınlanan günlük durum raporları üzerinden yeni koronavirüs hastalığının Türkiye'deki durumunun incelenmesi amaçlanmıştır.

BULGULAR

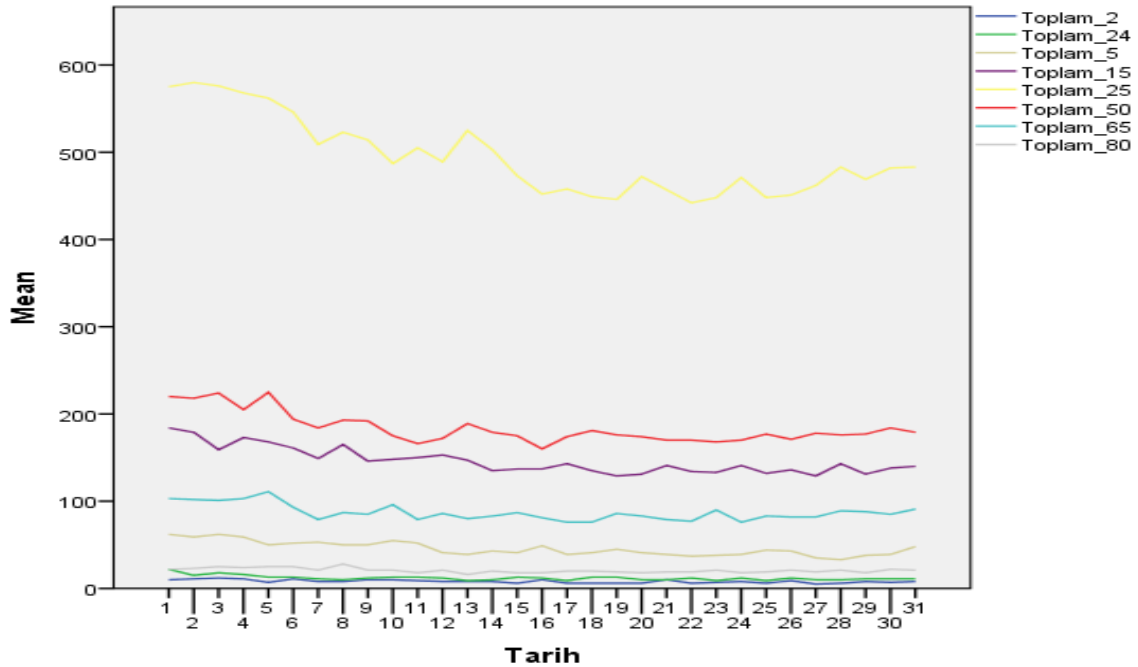
Sağlık Bakanlığı Sağlık Bilgi Sistemleri Genel Müdürlüğü'nün sitesi üzerinden "Covid-19 Türkiye durum raporu" başlığı altında, 29.06.2020 tarihinden itibaren halka açık günlük ve haftalık durum raporları yayınlamaktadır (T.C. Sağlık Bakanlığı, 2020a). Yayımlanan günlük durum raporları; ait oldukları gün için saat 00:00 ile 23:59 saatleri arasındaki yeni laboratuvar test sayısı, istatistiki bölge birimleri sınıflandırması düzey 1 (İBBS-1)'e göre laboratuvar onaylı yeni Covid-19 vaka sayısı, yeni vaka sayılarının cinsiyete ve yaş gruplarına göre dağılımı, İBBS-1'e göre Covid-19 nedeniyle yeni hastane yatışları ve hastaneden yeni taburcu edilenlerin sayılarına ilişkin bilgiler içermektedir.

Anılan raporlarda yer alan bilgiler kullanılarak yapılan tanımlayıcı analizlere göre yeni tanı konulan kişi sayısının ortalaması 997.32 ± 92.38 iken Şekil 1'de İBBS-1'e göre günlük yeni vaka sayısının değişimi görülmektedir. Buna göre İstanbul bölgesinde görülen günlük yeni vaka sayısı azalış gösterirken, Güneydoğu Anadolu ve Batı Anadolu bölgelerinde ay sonuna doğru artış gözlenmektedir ve diğer bölgelerde ay içerisinde dikkat çekici bir değişiklik yoktur.



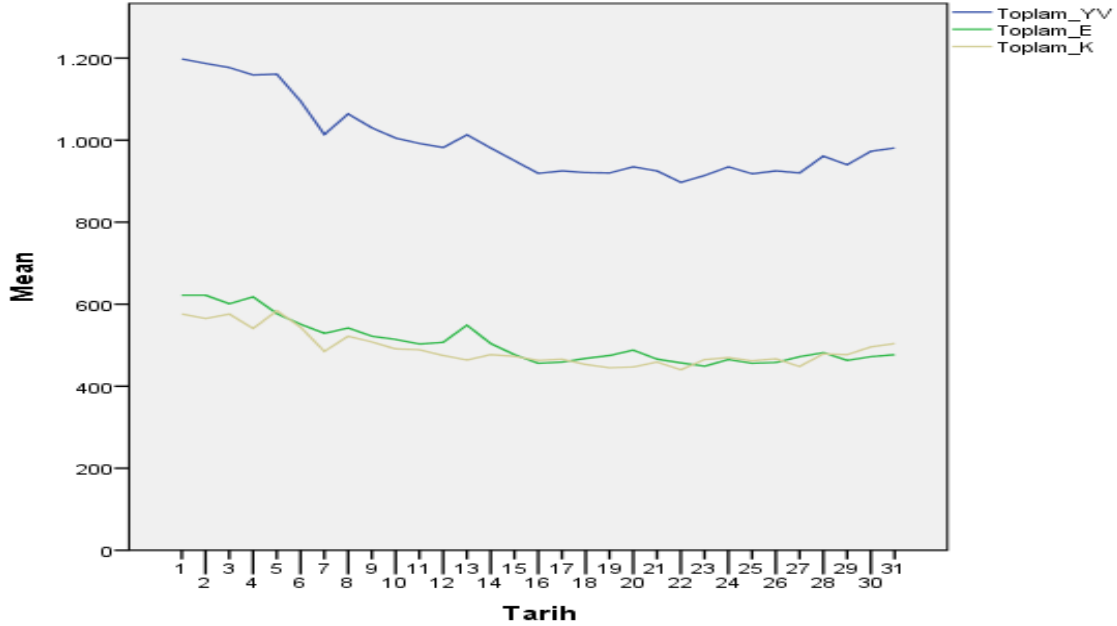
Şekil 1. İBBS-1'e göre günlük yeni vaka sayısının Temmuz 2020'deki değişimi

Yeni vakaların yaş gruplarına göre dağılımının ay boyunca değişimi Şekil 'de gösterilmiştir. Buna göre en fazla 25-49 yaş gurubunda yeni vaka tespit edilirken, bunu 50-64 ve 15-24 yaş grupları takip etmektedir.



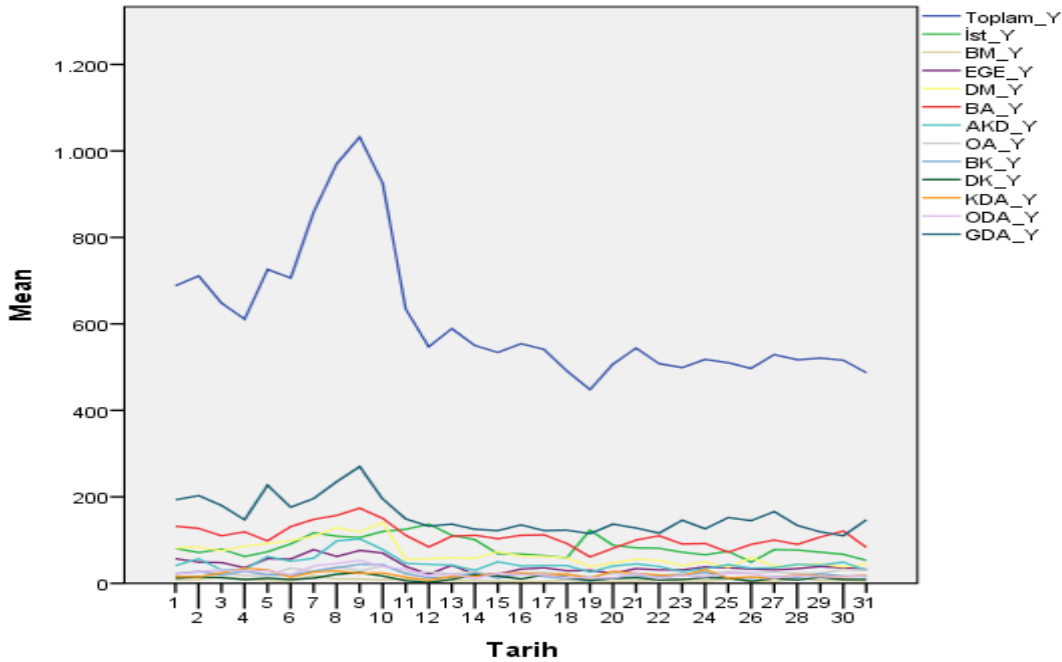
Şekil 2. Yeni vakaların yaş gruplarına dağılımının Temmuz 2020 ayı içindeki değişimi

Temmuz ayında günlük yeni tanı konulanlardan 506.48 ± 53.90 'ı erkek, 490.68 ± 41.68 'i kadındır. Şekil 3'te günlük tespit edilen yeni vakaların cinsiyete göre dağılımı gösterilmiştir.



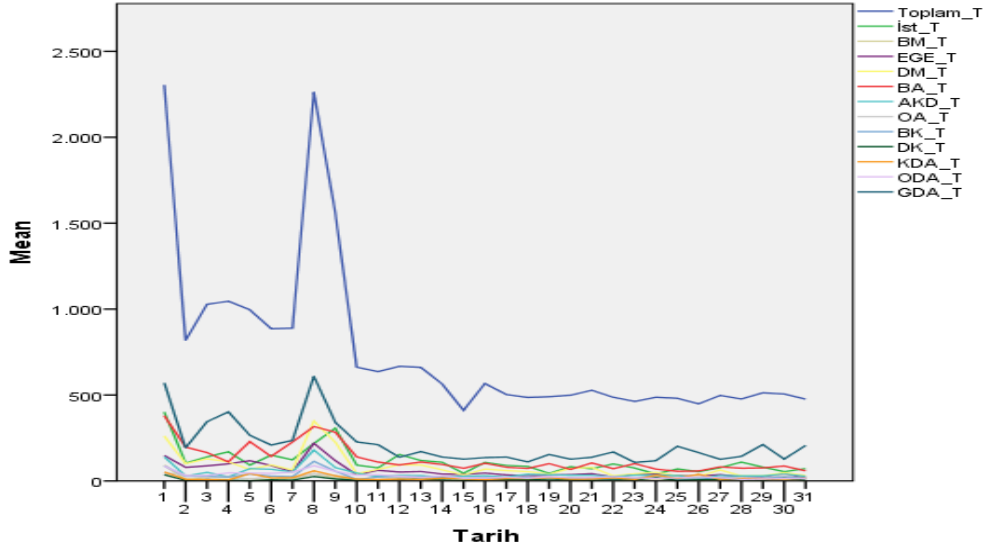
Şekil 3. Temmuz 2020 ayı içerisinde tespit edilen günlük yeni vakaların cinsiyete göre dağılımı

Covid-19 nedeniyle Temmuz ayında bir günde hastaneye yatırılanların sayısının ortancası 544 (448-1032)'dür. Hastaneye yatışların günlük değişiminin bölgelere göre dağılımı Şekil 4'den görülebilmektedir.



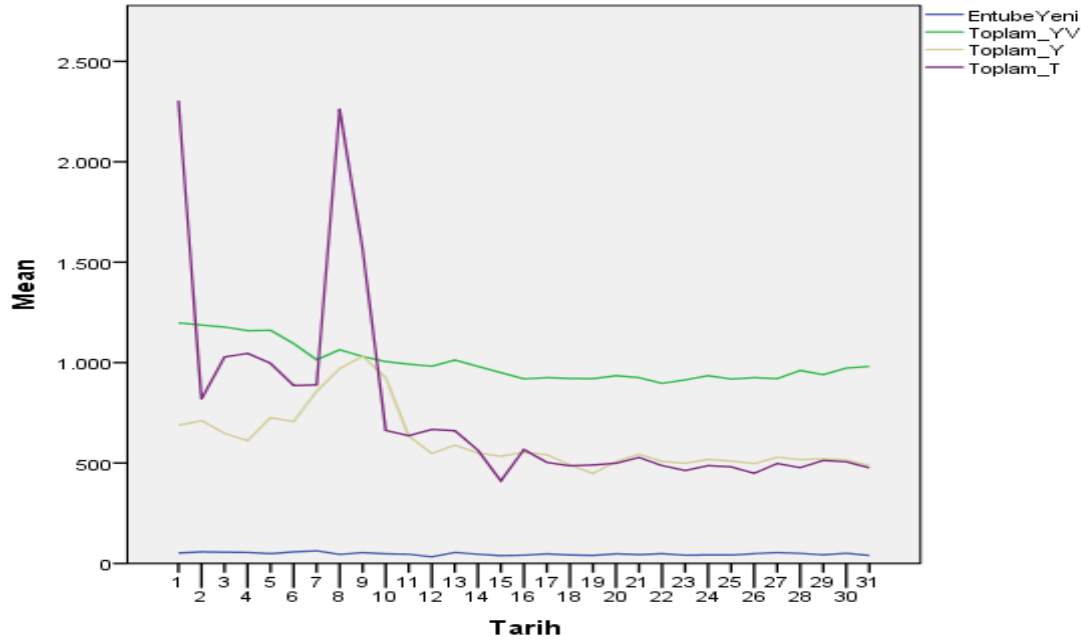
Şekil 4. Hastaneye yatış sayısının İBBS-1'e göre Temmuz 2020'deki günlük değişimi

Temmuz ayı içerisinde Covid-19 nedeniyle hastanede yatarak tedavi görenlerden taburcu olanların günlük sayısının ortancası 528 (411- 2305) olarak bulunmuştur. Şekil 5'ten hastaneden taburcu olanların sayısının İBBS-1'e göre günlük değişimi görülebilir.



Şekil 5. Hastaneden taburcu olanların sayısının İBBS-1'e göre Temmuz 2020'deki günlük değişimi

Entübe hasta sayısı, günlük tespit edilen yeni vaka sayısı, hastaneye yatan ve hastaneden taburcu olanların sayısının ay içerisindeki değişimi Şekil 6'da gösterilmiştir.



Şekil 6. Yeni vaka, hastaneye yatış, hastaneden taburcu ve entübe hasta sayısının Temmuz 2020'deki günlük değişimi.

TARTIŞMA VE SONUÇ

Temmuz ayı içerisinde bölgelerde tespit edilen yeni vaka sayısındaki değişikliklerin yaz tatilinin başlaması ve şehirlerarası seyahat yasaklarının kalkması ile birlikte ortaya çıktığı düşünülebilir. Aynı zaman dilimi içerisinde yaş grupları için sokağa çıkma kısıtlamaları ve çeşitli işletmelerin kapatılması ile ilgili önlemlerin uygulanması da sonlandırılmıştır.

Covid-19 nedeniyle hastaneye yatışların ve hastanede tedavi gören hastalardan taburcu olanların toplam sayısındaki değişiklik trendinin Temmuz ayı içerisinde Güneydoğu Anadolu bölgesinde izlenen yatış ve taburcu işlemleriyle uyumlu olduğu grafiklerden görülmektedir. Bununla birlikte; hastalığın Türkiye'deki durumuna ilişkin değerlendirmeler yapılırken, tanı ve tedavi rehberlerindeki ve

algoritmalarındaki güncellemeler ve deęişiklikler göz önünde bulundurulmalıdır (T.C. Sağlık Bakanlığı, 2020b, 2020c).

Güncellenen Covid-19 evde takip algoritması ile komplike olmayan hastaların veya hafif-orta pnömonisi olanların hastaneye yatışlarının yapılmadan takip ve tedavilerinin yürütülmeye başlanması (T.C. Sağlık Bakanlığı, 2020c), özellikle hastaneye yatış ve hastaneden taburcu olma sayılarını deęiştireceęi düşünülmektedir.

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L'ASIE CENTRALE ET LE GRAND JEU 2.0: NOUVEAUX DEFIS ET ENJEUX

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ABSTRACT

Within the framework of the problems caused and generated by the pandemic, which constitute the obligatory basis of the conference topic, the article provides a brief overview of geopolitical issues related to the region of Central Asia and Kazakhstan. These questions are part of an upcoming research project centered on a comparative study of the classic "Great Game" and the modern "Great Game 2.0", with different approaches and new realities. This approach will allow us to see more clearly the deadlock situations in which our countries find themselves and the ways to resolve them.

Keywords: Pandemic, Central Asia, Great Game (2.0), Security, Regional integration, China, Russia, USA.

Introduction. La question de la pandémie et sa relation aux sujets traités dans notre présentation/article permet une certaine digression pour éclairer en grands traits les problèmes du pays qui ont, malgré leurs traits communs, leurs spécificités. Les grandes lignes de ce sujet ont été décrites dans notre présentation à la conférence. Ce sujet complexe nous permet de s'arrêter brièvement sur la question de la pandémie et les problèmes posés par ce mal au Kazakhstan et, par extension, dans la région de l'Asie Centrale qui ont beaucoup de similarités avec les autres pays du monde. La pandémie de COVID 19 pose des questions existentielles pour l'humanité et impacte toutes les sphères de son activité tant sur le plan local et régional que mondial. Les ravages de la pandémie ont mis en lumière toutes les divisions et fractures qui menacent d'empirer encore plus. Il reste à espérer que l'humanité saura surmonter une fois de plus ce mal du siècle tant sur le plan médical que politique, économique et social et que la pandémie ne saurait pas s'imposer. Les effets de ce mal se font sentir pleinement dans la région de l'Asie Centrale en s'ajoutant aux problèmes politiques, économiques et sociaux préexistants (Schwab, Malleret, 2020).

Méthodes théoriques. La présente étude est basée sur l'analyse des différentes conceptions géopolitiques qui reflétaient les visions et les analyses des chercheurs des grandes puissances coloniales : anglais, américains, allemands, russes etc, reflétant aussi les spectres politiques du passé et du présent. L'histoire se répète aussi de ce point de vue car les visions du passé sont réactualisées. Autre approche théorique est l'étude comparative de l'histoire des anciennes colonies (africaines et asiatiques) et leurs relations avec les grandes puissances. L'impact du colonialisme sur les politiques intérieures des métropoles coloniales qui reste toujours une partie importante de leurs narratives et discours. Et les approches quantitatives et qualitatives pour l'analyse des données économiques.

Résultats et discussion. La situation est aggravée dans les pays de l'Asie Centrale et au Kazakhstan par le manque des moyens médicaux, notamment, des médicaments (vaccins efficaces), équipements de ventilation des poumons et de protection (vêtements, masques etc.). D'autre part, le manque du personnel qualifiés dû aux carences du système médical en general et de l'enseignement secondaire et supérieur du personnel. Il est à noter que ces problèmes existent dans presque tous les pays du monde touchés par ce fléau où les taux de contagion et mortalité fixés par les statistiques officielles défient les imaginations habituelles. Le taux de contagion aux USA a dépassé 6 millions et la pandémie fait rage en Amérique Latine surtout au Brésil.

La pandémie a posé le problème de la fiabilité des méthodes statistiques et des statistiques en general. Ce problème de la politisation et manipulation des statistiques était connu en ex-URSS. Les nouveaux pays aux régimes autoritaires ont hérité ces traditions comme beaucoup d'autres. Les statistiques ne sont pas souvent fiables dans les pays aux régimes autocratiques. Mais la pandémie a forcé ces habitudes car les taux de contagion et nombres des morts sont souvent catastrophiques.

Le problème se pose, entre autres, comment s'organiser et trouver une solution à l'équation de la quarantaine et l'activité économique.

Au Kazakhstan du fait de la spécificité de son économie où prédominent largement les grandes entreprises minières (hydrocarbures, uranium et métaux) ce problème s'avère difficile en pratique car il s'agit des exportations qui sont la principale source du budget. Ce type de l'économie des ressources naturelles et d'exportation est connu dans l'histoire passée et présente des pays de l'Afrique, de l'Asie, de l'Amérique latine, du Proche Orient qui ont connu et beaucoup parmi eux connaissent des problèmes de retard économique et d'instabilité politique, des régimes corrompus et de pauvreté, des guerres et des coups d'Etat.

Il s'agit en gros, dans le cas du Kazakhstan, des sociétés étrangères ou mixtes qui jouissent des faveurs de l'Etat dont l'activité et les résultats sont opaques. La concentration et la promiscuité des employés, ouvriers et techniciens, provoquent inmanquablement de nouveaux cas de contamination en chaîne et l'éclosion de nouveaux foyers épidémiques. Les PME (petites et moyennes entreprises) /PMI (petites et moyennes industries), placées en quarantaine pendant 4-5 mois sont mises en général aussi devant un problème de survie faute de financement. Les institutions financières, banques et companies financières, sont très réticentes de donner des crédits aux PME/PMI car le marché reste stagnant à quelques exceptions près.

Les experts se tournent vers le passé en quête des réponses, le Moyen Age (la peste) et la grippe espagnole de 1918-1920 qui ont emporté des millions de gens (Barry, 2004). A part les effets dévastateurs généraux de la pandémie, il faut souligner son impact particulier sur les pays et populations pauvres, les anciennes colonies. C'est le cas des pays de l'Asie Centrale et surtout du Kazakhstan. La Grande Famine/Golodomor des années 20 et 30, les répressions politiques ont emporté entre 50% et 70% de la population kazakhe. Les conséquences de ces catastrophes se font sentir aujourd'hui.

Donc, pour être laconique, on reste dans cet article sur deux facteurs généralement analysés, facteur pandémie et facteurs préexistants. Cette analyse reste très précaire et éventuelle pour des raisons de l'imprévisibilité des deux. Le seul moyen qui reste est le monitoring au jour le jour, une sorte de photo qui risque de dater rapidement.

La pandémie n'a pas amené à la coordination des efforts des pays pour combattre ce mal. Au contraire, ceci est devenu un champs des spéculations de tous genres, une arène de plus des batailles politiques, commerciales et la source de fake news. On constate que la pandémie n'a pas amené non plus à la baisse des tensions sur l'arène internationale.

Au contraire, on voit leur aggravation dans toutes les régions du monde. Cela n'est plus la somme des conflits disparates dans différents coins du monde mais les composantes du même processus des turbulences géopolitiques des compétitions entre les grandes puissances dont les principaux acteurs sont les Etats-Unis et la Chine (Shambaugh, 2012). Cette concurrence pour le leadership entre les Etats-Unis, puissance globale établie après la fin de la Deuxième Guerre Mondiale (WW II), et la Chine, puissance montante et challenger de la place des Etats-Unis, embrasse à différents degrés de tension toutes les régions du monde, allant des sources naturelles aux nouvelles technologies civiles et militaires.

Les historiens et politologues ont fait des parallèles historiques à ce phénomène dont un exemple décrit est connu comme le piège/la trappe de Thucydide (Thucydides's Trap). (Allison, 2018). Cet exemple est pris de l'histoire des guerres du Péloponnèse (5 siècle av. J.-C.) entre Sparte, puissance terrestre, et Athènes, puissance maritime montante. Sparte a mené une attaque preventive contre Athènes. Graham Allison, auteur du livre (Graham Allison. *Destined for War: Can America and China escape Thucydides's Trap*) se réfère sur les exemples plus récents et pacifique du 20^{ème} siècle: Grande-Bretagne vs USA et préconise la même voie pour la concurrence entre les Etats-Unis et la Chine (Allison, 2018). Cela crée un cadre historique et théorique mais en pratique les relations entre ces puissances ne font qu'empirer. Cela augmente les risques des conflits militaires et de la guerre.

Le plan global est très important dans le cas des pays de l'Asie Centrale qui est devenu une arène des batailles géopolitiques entre les grandes puissances dont deux, la Russie et la Chine, sont des voisins

immédiats de la région de l'Asie Centrale ayant des frontières prolongées avec les pays de la région (Friedman, 2018). Ce facteur géographique/géopolitique joue un grand rôle pas seulement dans les constructions théoriques de H. Mackinder mais aussi dans la concurrence géopolitique des puissances pour le contrôle de la région (Global Geostrategy, 2005).

La région de l'Asie Centrale comprend principalement les cinq pays, anciennes républiques de l'URSS. On ne prend pas en considération pour différentes raisons la version de la Grande Asie Centrale comprenant l'Afghanistan, le Pakistan et le Turkestan Oriental/ Xinjiang. Ces pays de l'Asie Centrale ont tous des régimes autoritaires personnifiés et oppressifs. On peut citer plusieurs cas des atrocités et tueries dans ces pays. Craig Murray, ancien ambassadeur britannique en poste en Ouzbékistan, a décrit le régime et les tueries à Andijan du temps de Karimov (Murray, 2017).

Ce type de régime est propre pas seulement aux pays de l'Asie Centrale. La Russie et le Belarus donnent aujourd'hui l'exemple du même type de régime comme un héritage commun du passé. Cela complique pas seulement une coopération et intégration des pays de l'Asie Centrale mais représente une menace pour leur intégrité territoriale.

Il est aussi à noter un grand potentiel des "conflits gelés" qui risquent de dégénérer ce qui était le cas après la chute de l'URSS.

L'Asie Centrale a attiré l'attention des grandes puissances dès la chute de l'URSS et l'apparition de nouveaux Etats, par les richesses des sous-sols, dont les hydrocarbures, et l'importance géostratégique pour chacune des puissances opposées, notamment la Russie, la Chine d'une part, et les Etats-Unis, d'autre part. Les enjeux des batailles géopolitiques ne se limitent pas aux hydrocarbures malgré leur importance comme le montrent les guerres au Proche-Orient et ailleurs, mais il s'agit du leadership mondial et le rôle des Etats-Unis et, si l'on prend plus large, de l'Occident qui sont mis aujourd'hui en question.

Cela rappelle les affrontements et collisions entre les empires, la Grande Bretagne et la Russie, qui ont embrassé le 19^{ème} et le premier tiers du 20^{ème} siècle, connus sous le nom du "Grand Jeu". Actuellement, la deuxième édition appelée "Le Grand Jeu 2.0", avec de nouveaux enjeux et acteurs, est en train de se développer. L'histoire du passé et du présent du Kazakhstan, représentative à ce sujet, sert d'un point d'approche pour un article proposé à votre attention.

Pourquoi on a choisi « Le Grand Jeu » comme une sorte de grille de lecture et analyse du Présent qui tant diffère du Passé ? Il y a eu plusieurs raisons de ce choix. D'abord, parce que « Le Grand Jeu », histoire des affrontements entre la Grande Bretagne et la Russie, les grandes puissances coloniales, ne se limitaient pas à l'Afghanistan et l'Asie Centrale tout au long du 19^{ème} et le premier tiers du 20^{ème} siècle. C'était une concurrence permanente qui embrassait d'autres parties du monde que l'Asie Centrale : la Chine, la Crimée, la Russie du temps de la Guerre Civile. Et encore une fois la région l'Asie Centrale qui faisait partie de la Russie Soviétique pendant la Guerre Civile (Les Basmatches) etc.

Il est à noter que les batailles géopolitiques n'étaient pas qu'entre ces deux protagonistes du « Grand Jeu ». Du côté britannique étaient la France (la guerre de Crimée) et les Etats-Unis (la Chine). Le changement du régime en Russie après le coup d'Etat bolchevik d'octobre du 1917 n'ont pas marqué le changement de la politique extérieure russe d'expansion territoriale et les guerres qui n'ont pas arrêté depuis les années 30 jusqu'à nos jours sur presque tous les continents. Cela ne diffère pas beaucoup du "Grand Jeu 1.0" dont les enjeux ne se décidaient pas qu'en Asie Centrale.

La Russie a annexé militairement les territoires des anciennes républiques: Moldova (Transnistrie), Géorgie (Abkhazie, Ossétie du Sud), Ukraine (Crimée et une partie de Donbass où la guerre continue). Cette question ne fait pas stricto sensu partie de notre thème du "Grand Jeu" mais cela montre que la Russie considère ces nouveaux pays comme ses ennemis potentiels et alliés de ses ennemis. Le pourtour de ses frontières est devenu un autre champs des batailles géopolitiques en plus des ennemis déclarés, l'Occident, en general, et, plus précisément, les Etats-Unis et l'OTAN.

La Russie de Poutine essaie de reconquérir son influence dans les anciennes républiques en annexant leurs territoires. Cette menace pèse sur tous les nouveaux pays, ex-républiques soviétiques, malgré les traités et accords signés comme le Traité de Budapest de 1994 où la Russie avec les Etats-Unis et la

Grande Bretagne ont garanti la souveraineté et l'intégrité territoriale de l'Ukraine en échange du transfert des armes nucléaires ukrainiennes à la Russie. Le Kazakhstan a signé un traité similaire. Les politiciens russes, députés et experts profèrent des critiques et menaces contre le Kazakhstan.

A l'époque des tsars et au début du pouvoir soviétique, la région de l'Asie Centrale du côté russe était une mosaïque des khanats et régions administratives. Les nouvelles entités administratives créées par le pouvoir soviétique sous forme des républiques ont jeté sans le vouloir ni anticiper les bases de nouveaux Etats. La courte histoire de ces nouveaux Etats a montré plusieurs réalités tant sur le plan intérieur qu'extérieur.

Le plan intérieur est très important pour les anciennes républiques soviétiques qui devaient déterminer leurs priorités politiques et économiques et définir leurs politiques extérieures en fonction. Cette nouvelle situation géopolitique en Asie Centrale s'est caractérisé par les nouvelles tensions avec les acteurs différents avec a peu près les mêmes enjeux de domination et leadership qu'avant. Les nouveaux acteurs sont de deux côtés. Les Etats-Unis et ses alliés, de l'OTAN et autres, d'une part, la Russie et la Chine, d'autre part.

La Russie, ancienne métropole, reste très présente politiquement, militairement et économiquement dans la région via les réseaux des relations bilatérales et multilatérales. Son poids économique baisse du fait de l'affaiblissement de la Russie dont l'économie repose surtout sur l'exportation des matières premières, les hydrocarbures, les métaux, les armements. La baisse de la demande sur les hydrocarbures et les effets des sanctions américaines et européennes ont créé des problèmes pour le budget russe qui dépend de ces ventes. La pandémie a créé des problèmes en plus des problèmes existants..

D'autre part, le budget militaire augmente car la force militaire et la course aux armements restent toujours prioritaires pour la politique extérieure de la Russie. La militarisation de la vie reste aussi parmi les priorités du régime.

L'Asie Centrale et le Kazakhstan ont une grande importance pour la Chine, pour la réalisation de son mega projet BRI/ Ceinture Route Initiative pour relier la Chine à l'Europe et Moyen Orient. Même avant la pandémie l'économie chinoise avait déjà des problèmes dus à plusieurs facteurs. A part les problèmes de la baisse de la demande et dettes, la situation est compliquée par la guerre commerciale avec les Etats-Unis qui représentent un très grand marché pour les produits chinois et la principale source de nouvelles technologies acquises par différentes voies, achetées, volées, piratées par les Chinois.

La Chine remplace de plus en plus la Russie en Asie Centrale du fait de son poids économique et de ses investissements dans ses pays. La Chine occupe la troisième place parmi les producteurs du pétrole et gaz au Kazakhstan. Sa présence économique est devenue très importante et mène à la hausse de son influence politique. Les pays de région ont des moyens et sources économiques différents. Le Kazakhstan et l'Ouzbekistan ont plus de sources de paiement des crédits chinois. Le Tadjikistan a dû céder à la Chine une partie de son territoire à titre des paiements de ses dettes. La Chine utilise les même méthodes en Afrique et Asie. Pour cette raison, ces pays refuse les nouveaux contrats avec les Chinois et demande la révision des contrats en cours.

Un autre problème devient très important pour les relations du Kazakhstan et la Kirghizie avec la Chine c'est celui de la répression des ethnies turques en Chine : Ouïgours, Kazakhs, Kirghiz. La construction des camps d'internement au Xinjiang. Ces pratiques renforcent les sentiments antichinois qui existaient déjà dans la mémoire historique.

Ces pratiques ont été condamné par l'ONU et par toutes les organisations internationales et la plupart des pays sauf la Russie. Le Kazakhstan reste très réticent à ce sujet.

La Chine a changé les méthodes de sa politique. Sous Xi Jinping la politique extérieure de la Chine est devenue agressive et menaçante. L'Asie Centrale et le Kazakhstan doivent s'assurer de la sécurité de leurs frontières et d'éviter une colonisation rampante à l'intérieur du pays comme cela se passent dans d'autres pays.

Il est noter que l'Asie Centrale et le Kazakhstan représentent la voie terrestre du projet Chinois BRI, en quelque sorte une doublure de BRI maritime, en cas des problèmes des passages des détroits. L'importance de ce BRI terrestre est plutôt géopolitique. La Russie reste jalouse de la présence chinoise en Asie Centrale. Beaucoup d'intérêts rapprochent la Russie et la Chine, surtout des intérêts géopolitiques qui ont des aspects extérieurs et intérieurs différents et convergents à la fois. Les ennemis extérieurs en commençant par les Etats-Unis et l'OTAN servent à mobiliser et contrôler les sociétés respectives et couvrir les carences de gestion souvent criminelle.

Il est difficile de prédire jusqu'à où ira leur alliance mais beaucoup de choses les séparent aussi. (Schoen, Kaylan, 2014).

D'abord, les différences dans les poids économiques. Le PIB de la Chine est de 12.01 trillions de dollars (taux d'échange officiel, les données de 2017) et le PIB de la Russie sur la même période est 1.578 trillions de dollars (CIA, 2020). La Russie, du fait des pertes des marchés des hydrocarbures dues aux sanctions et à la baisse de la demande causée par le ralentissement des économies mondiales, devient de plus en plus dépendante de la demande chinoise dans le cadre du projet « La Force de la Sibérie » dont la réalisation et les prix d'achat sur le long terme restent aléatoires. Si on prend en compte le prix de revient du gaz russe et les coûts de transport, la concurrence des autres fournisseurs, arabes, iraniens et autres, ce projet russe devient risqué.

La Chine n'a plus besoin des armes et technologies militaires russes, y compris dans les domaines des hautes technologies et espace.

D'autre part, la Chine réalise une occupation rampante des territoires et des branches de l'économie russe suivant le même schéma qu'en Afrique, Asie via des crédits massifs et dont la contrepartie est l'achat des gisements ou autres avantages, y compris politiques. En ce sens, on peut citer l'exemple de l'Australie qui, malgré sa situation géographique, appartient au monde occidental. L'Australie est très préoccupée par l'afflux des Chinois qui commencent à faire des pressions sur les décisions politiques du pays et font du chantage économique (Hamilton, 2018).

La voie maritime est beaucoup plus importante pour le trafic des marchandises chinoises. Mais aussi beaucoup plus problématique avec les conflits de la Chine avec les pays riverains. Les Etats-Unis s'impliquent de plus en plus dans ces conflits ce qui n'est pas le cas pour le moment en Asie Centrale. Les Etats-Unis, qui sont à la deuxième place après l'EU comme investisseur dans le secteur des hydrocarbures et un des principaux acheteurs du pétrole kazakh (Forbes.kz, 2019).

Les Etats-Unis étaient moins actifs dans la région pendant quelque temps qu'au début des années 2000. La visite du Secrétaire d'Etat américain M. Pompeo dans la région de l'Asie Centrale en début de cette année (2020) avait pour but de marquer la présence américaine, de donner une nouvelle impulsion aux relations avec les pays et de remettre à jour l'ordre géopolitique du jour. Lors de ses rencontres avec le président Kazakh et les autres responsables, M. Pompeo a mis en garde contre l'expansion économique et politique de la Chine des dangers que cela représente pour la souveraineté des pays de la région et leur développement économique. Il a, d'autre part, exprimé la volonté des Etats-Unis de développer la coopération économique avec le Kazakhstan (Voice of America, 2020).

M. Pompeo a rencontré les représentants des familles kazakhes, originaires de Xinjiang (Chine) dont les proches sont incarcérés dans les camps chinois. Il a appelé les pays de la région de donner asile aux gens qui ont su fuir de la Chine. Ces deux messages ont trouvé un terrain propice dans la société kazakhe.

L'étape suivante de la visite de M. Pompeo était Tachkent, capitale de l'Ouzbékistan, où M. Pompeo a rencontré les ministres des affaires étrangères des 5 pays de l'Asie Centrale: Kazakhstan, Ouzbékistan, Kirghizistan, Tadjikistan et Turkménie dans le cadre de la formule "5 + 1". Cette formule, initiée par l'administration de B. Obama, a été reformulée dans la Nouvelle Stratégie des Etats-Unis en Asie Centrale.

Les principaux sujets de cette nouvelle stratégie sont formulés en 6 points : Support et renforcement de la souveraineté et indépendance des Etats de l'Asie Centrale, de chacun et de toute la région; Réduction des dangers extrémistes et terroristes et de leurs idéologies ; Les efforts communs pour la stabilisation de la situation en Afghanistan ; Les efforts pour les liens avec l'Afghanistan; Promotion des réformes du Droit

et le respect des Droits de l'Homme; La promotion des investissements américains et le développement de l'Asie Centrale (United States Strategy, 2020). La question se pose si l'administration de Trump garderait le même intérêt s'il est élu en novembre prochain où la nouvelle administration mettrait en pratique le projet initié par B. Obama.

Conclusion. Les intérêts et les politiques des principales puissances, la Russie, la Chine et les Etats-Unis, dans la région de l'Asie Centrale comme dans d'autres région divergent. Et les pays de la région sont pris en quelque sorte en étau entre différents alliés et partenaires. On a brièvement relaté les intérêts de principaux acteurs géopolitiques en Asie Centrale. Les pays de l'Asie Centrale font face à différents défis et enjeux, y compris des pressions des grandes puissances aux intérêts contradictoires sur l'ensemble de la région de l'Asie Centrale. La Russie et la Chine, alliés de circonstance, imposent par les moyens politiques et militaires (la Russie), économiques (la Chine) et autres, leurs dominations dans la région, y compris par voie d'intégration dans les organisations regionales a dominante russe (Union économique eurasiatique – UEEA) et chinoise (Organisation de Coopération de Shanghai - OCS/SCO) qui sert à la réalisation des projets chinois dont « La Nouvelle Route de la Soie ou la Ceinture et la Route (BRI). Cela pose pour les pays de l'Asie Centrale des problèmes de dépendance économique et politique. La présence de plusieurs acteurs crée une certaine balance et permet une certaine marge de manoeuvre au Kazakhstan et les autres pays de l'Asie Centrale.

On n'a pas analysé les rôles des autres acteurs comme, par exemple, les pays de l'EU, le plus importants investisseurs au Kazakhstan, et la Turquie de Erdogan qui essaie de renouer avec la politique de l'Empire Ottoman.

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CORONA VIRUS DETECTION USING IMAGE SEGMENTATION TECHNIQUES**Ashwan A. ABDULMUNEM****Maryam Haider METIB****Marwa Faris ABDULHUSSIEN**

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ABSTRACT

Corona virus COVID19 is currently spread globally through most of countries of the world. That has a vital effect on all life aspects, education, health, business, and commercial affairs. Therefore, all researcher in different fields work hard to control this virus. As computer scientist many efforts has been made to deal with this issue. In this research we suggest using image processing techniques to detect the virus in its earliest stages. We propose to use thresholding techniques applied on X-ray images of the patients. This method detects the affected area in the lungs. This discovery of Corona virus will benefit hospitals and health centers. A suggestion application of three methods has been applied to a group of pictures of COVID19 patients. Processing of X-ray images is a little complicated due to the complex nature of the image and the nature of the colors as well. The Threshold method was used by inserting the image from the type of X-ray image, then the value of the Threshold is calculated through a specific function that was used to extract the healthy part of the lung about the last part Eating from the disease and after that the image was converted after the diagnosis to white and black so that the white color is the healthy lung. The binary picture will include all the important details on the location and shape of the points of interest (preliminary details). The advantage of obtaining a binary image first is that it reduces the complexity of the data and simplifies the reconnaissance and classification process.

Keywords: Coronavirus, X-ray images, image segmentation, Covid-19.

INTRODUCTION

Generally, the virus is a parasite of a very small size that cannot be seen with the naked eye entering the human body and is concentrated in the area that it feeds on and slowly eliminates the human body without feeling it unless it is diagnosed early by the examination and treatment, but either Here we will talk about a virus that is currently common not only in our country, but also in most countries of the world is also a virus of a very small size that enters the human body through contact and handshaking is permanently centered in the lungs and controlled in this research three methods were used to diagnose this Virus and detection of the uninfected lung, which is the remaining part of the benign lung of the infected person.

In order to clarify the work, three methods were used to treat the affected person's lung ,we using thresholding method segmentation for segmented the lung in this type segmentation and all methods we using must the input image from type grayscale image not rgb image. We are using Matlab image processing toolbox to get the value of thresholding, then the initial threshold value is set by getting the mean of the maximum pixel size of the image and the minimum pixel size of the image. So an image is segmented using the technique of adaptive thresholding (Holambe, Shinde and Choudhari, 2016). For the input image then convert to black and white image the result to segment the affected lung.

Secondly, we are using the optimal method it's the mask segmentation by using one of the morphology operation it's the Erosion operation by converted the original image to single image and filling the converted image by using certain function then definitions the structuring elements for the gray image and using erosion operation to giving the not effected part pf lung in the output of segmentation.

Finally, we are using the purposed method for this very important segmentation is the canny edge detection. This is the new method to get the edge of lung by converted the original image to the black and white image then getting the edge of the lung by using function for canny detection to get it. This is the best way to get the edge

we are using it and the all methods we are discussing below in clearly way. In the section 3 we are discussing the related work while section 4 we are discussing the proposed methods and finally the section 5 discussion on results will be raised.

Related work

In processing of the images. Edges in the photos are places of clear differences in intensity – a Intensity jump from one pixel to the next. the best edge detector is also known as the Canny edge detection algorithm. It's Canny The several edge detectors in the picture were meant to be enhanced. The first criteria should be of low error rate and unnecessary filter out Data thus retaining valuable details. The second requirement is to keep the smaller difference between the two as possible Original image, and image processed. The canny edge detector smoothest the image first to remove these parameters Loud noise. It then finds the image gradient to highlight high-spatial regions Derivatives: Derivatives. The algorithm then tracks those regions and deletes every pixel That's not using non-linear repression to the limit. Hysteresis now further reduces the gradient array in order to remove streaking and thinning of the edges(Singh *et al.*, 2012). The Canny edge detector: This is probably the most commonly used Computer Vision edge detector. Canny has shown that the Gaussian first derivative approximates closely The operator optimizing the signal-to - noise ratio and localization element (Nagaraju, 2017).

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The image Segmentation: Segmentation subdivides a picture into the regions or objects that make up it. The degree of detail to which the separation is carried depends on the problem being solved. In computer vision and image processing, image segmentation is a basic and challenging issue. In particular, it is an important method for many applications such as object recognition, target detection, content-based image retrieval and medical image processing, etc (N and S, 2016).

Canny scale edge detection method: With the aid of scaling, image is resized in the proposed Canny scale edge detection approach. Scaling is a trivial process that involves a trade-off between efficacy, softness, and sharpness. Scaling is typical of two styles and is automatic. The threshold has been manually determined in norm. Where it has been decided as in the automatic threshold, depending on the factors that influence the image. The standard threshold for effective edge detection with scale down process using Canny edge detection method has been used as a parameter in the proposed method. The Canny edge detection and scaling of pixels is used at first, and then edge linking is performed with the logical operations, consisting of the steps below(Sivakumar and Muruges, 2015). An Edge detection(Canny, 1986)(Dollár and Zitnick, 2015), particularly phase edge detection, is an effective technique for extracting structural information and significantly reduces the quantity of data to process. In 1986, John F. Canny developed a Canny Edge detector(Canny, 1986), also known as an optimal detector, and the Canny Edge Detector aims to detect the salient edge of object. Edge detection is important in several applications include object recognition, active contour

Thresholding: First of all, the picture taken is transformed to grayscale if it is colored. Then thresholding on gray image is applied. This is the simplest sort of segmentation of images. This distinguishes regions of an image which corresponds to objects that we want to examine. This distinction is based on the difference in intensity between the pixels of the target and the pixels in the background. A comparison of each pixel intensity value with respect to a threshold, known as the threshold value, is performed to separate the pixels. The threshold value is calculated by the grayscale picture strength (Singh and James, 2012).

Thresholding: is classified into two Global Thresholding and Local Thresholding, Global thresholding is divided into Traditional, Iterative, Multistage. Global Thresholding: Global (single) thresholding method is employed when the distribution of intensity between the foreground and background objects is very distinct.

Traditional Thresholding (Otsu's Method): Segmentation in image processing is also the first step in pre-processing images in order to isolate items of interest for further study. The techniques of segmentation can generally be divided into two structure methods, edge-based and region-based. Iterative Thresholding (A New Iterative Triclass Thresholding Technique): A modern iterative approach based on Otsu's process but varying in a major way from the approach's normal implementation. Multistage Thresholding (Quadratic Ratio Technique for Handwritten Character. The QIR technique was found superior in handwriting images with thresholds under which the following strict criteria must be met: All handwriting specifics are to be preserved. The papers used can contain strong background colors or patterns. A wide range of writing tools, such as a fountain pen, ballpoint pen, or pencil, will write the handwriting.

QIR is a global two-stage thresholding technique. The algorithm's first stage divides an image into three sub-images: foreground, background and a blurry sub-image in which it is difficult to decide whether a pixel truly belongs to the foreground or background. 2. Local Thresholding: A threshold for each pixel is determined in local adaptive technique, based on certain local statistics such as neighborhood pixel size, variance or surface-fitting parameters. This can be approached in a number of ways, such as context subtraction, water flow model, pixel value mean and norm derivation, and local image contrast (Mart, 2012).

Clustering Thresholding: Within this group we will fit in the Otsu method (Hoang, 2018), one of the most cited thresholding methods in the literature. Otsu method is based on choosing a threshold for dividing the image into two classes to minimize the variance within each class. The distributions can't be modified for obvious reasons, but the selection of a threshold value affects the range of the two parts of the distribution. The goal is to select a threshold that minimizes the combined spread (Chadha and Satam, 2013).

Thresholding Gray-Scale Images: Binary images can be obtained by thresholding operations from grayscale images. Some of the pixels are chosen as the foreground pixels that make up the objects of interest and the rest as background pixels by a threshold process. Given the distribution of gray tones Binary gradient masking: In viewing a grayscale image, the objects to be observed differ greatly from their surroundings.

By comparison, variations can typically be identified by specific operators measuring the gradient of an image. The gradient of that thresholding image value is first calculated during measurement and then applied in subsequent steps to construct a binary gradient mask (BGM). To obtain the correct BGM image containing the segmented objects the threshold value will be modified for second use under another variation of the same operator (Singh and James, 2012). In a given image, it is possible to select certain gray-tone values as threshold values which separate the pixels into groups (Nguyen *et al.*, 2017). Binary Image Morphology: The word morphology refers to the form and structure; it can be used to refer to the form of a region in computer vision. Initially defined as set operations, the operations of mathematical morphology were shown to be useful for processing 2D point sets.

Some Applications of Binary Morphology : Closures and openings are useful in imaging applications where thresholding, or some other initial process, produces a binary image with tiny holes in the connected components or a pair of components which should be joined separately by a thin region of foreground pixels. Sternberg defined several special purpose structuring components to process the watch gear images, whose shapes and sizes were extracted from the physical properties of the watch gear (Nguyen *et al.*, 2017).

In the following sections, the suggested methods will explain, and the results will be discussed.

Methodology of the proposed work:

In this section, the input image must be grayscale image. The three proposed methods will be introduced to explain the main steps of each one just for grayscale images image. The three methods namely are: thresholding, mask segmentation, and canny edge detection presented in figure (1). In the following section the methods will explain in detail.

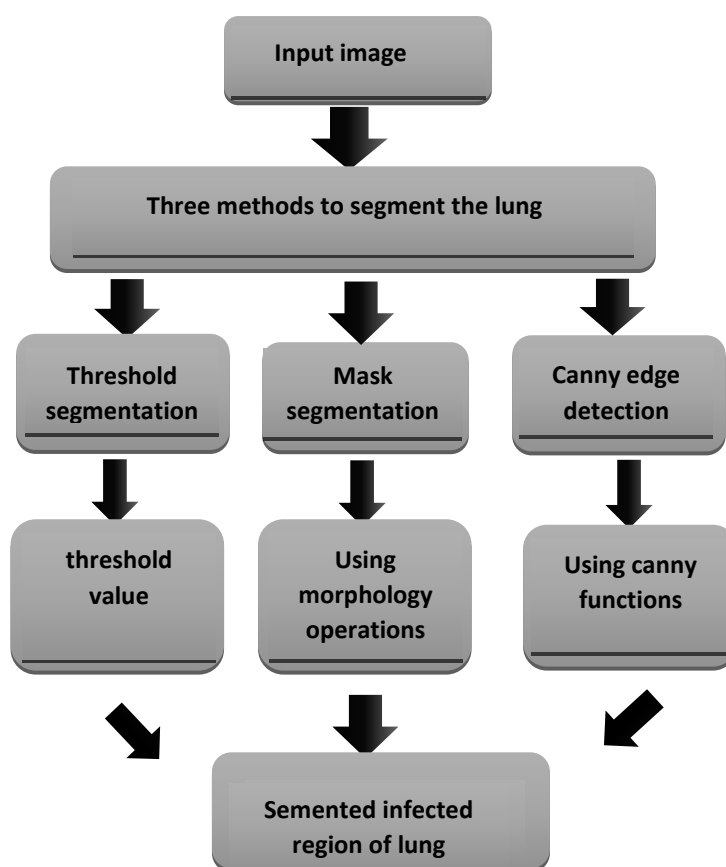


Figure 1: The three suggested methods for lung segmentation

Thresholding segmentation:

The process of treating this type of image from the type of x-ray is a little complicated due to the complex nature of the image and the nature of the colors as well, but we are at the present time and because of the spread of this type of virus, which posed a great risk to the human lung because when it enters the body it infects and controls the lung. Immediately, we helped, diagnose, and research by discovering the benign part of the lung using several methods and techniques, which are capable of developing in the future. The method of using the Threshold method was used by inserting the image from the type of X-ray image. Then the value of the Threshold is calculated through a specific function that was used to extract the healthy part of the lung. About the last part, eating from the disease and after that the image was converted after the diagnosis to white and black so that the white color is the healthy lung, while the rest is the rest of the image from the rays in this form the image has been treated. This may be considered as a rudimentary result but the best in use is capable of development. Threshold is one of the widely used methods for segmentation of images. It is useful when discriminating from the background to the foreground. The gray level image can be transformed to binary image by choosing a suitable threshold value T . The binary picture will include all the important details on the location and shape of the points of interest (preliminary details). The advantage of obtaining a binary image first is that it reduces the complexity of the data and simplifies the reconnaissance and classification process. The most common method of converting a gray-level image to a binary image is by selecting a single threshold (T). All the gray level values below this T are then marked as black (0), and the ones above T are white (1) (Nguyen *et al.*, 2017).

In their analysis, the image is divided into multiple windows or sub-sets of the original image with the locality property. Those windows are selected using bimodal histograms, and a threshold is determined. Thresholds are interpolated from different windows to determine a threshold for the entire image.

We will note the results below the explanation and how this method was adopted and used. As shown in figure 1 below.

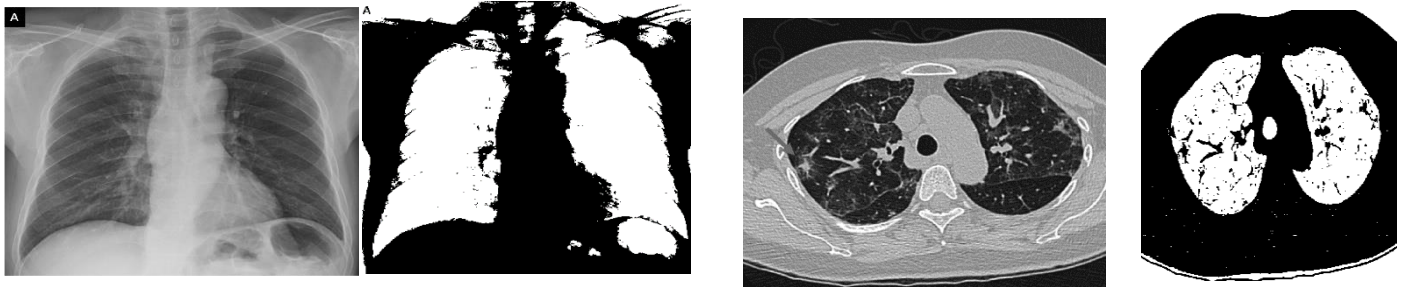


Figure1: Thresholding segmentation for corona lung of x-ray image

Mask segmentation:

This method is considered one of the best methods that were used in this research in order to discover or extract the healthy part of the lung in the body of people who have Corona virus, because the lung was discovered clearly and without any problems through the images that were treated for many patients with the virus. This method started Using the morphological processes, which is one of the efficient antiquities that are currently used to solve many problems, the original image was read, then the original image of the patient's lung was converted to zero and one to be treated better and easier in the matlab, after that only the second color of the image was taken That is, the second channel of the image's colors as defined in the Matlab program, after that a specific function is used that converts the image to a single matrix, after which the image is converted to white and black also using a specific function, and after that we work to delete the edges after that and the most important was used A specific function in morphology, which is a matlab function with the use of image-specific inputs. After that, the image is printed after processing. This is the best method of treatment. It has reached a perfect ideal solution for extracting a benign lung in an infected person's body shown in figure2 below.

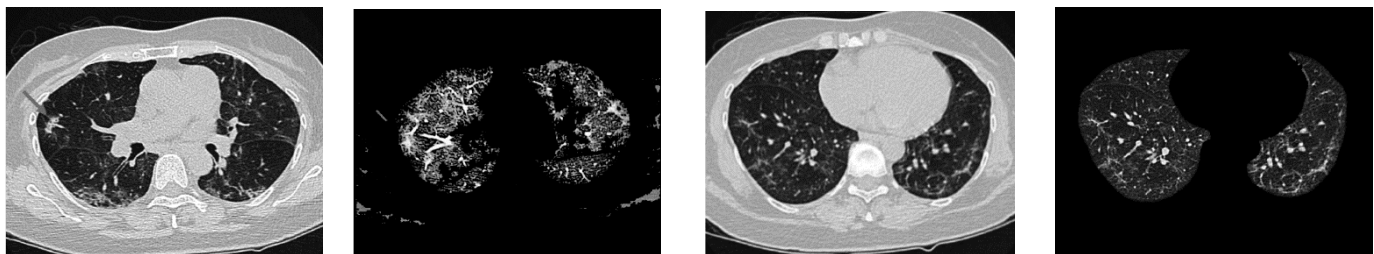


Figure2: masked segmentation image for lung of coronavirus

1.3- Canny edge detection:

At the beginning of the treatment, here in this type, treatment is very important for the lung. It is the knowledge of the boundaries of the lung. This is the best method in terms of determining the edges of the object in the image being processed. The original image of the type of x-ray image was used. Then the image is converted to white and Black and adding a certain value to the image for the purpose of processing it properly and then uses the canny function to extract the edges of the lung. This method of treatment is working well, efficient and very advanced method in the field of image processing and its use is not very complicated, and the images will be displayed at the bottom to see the required result of the lung for a person with coronavirus infection. The results of edge shown below in figure 3.

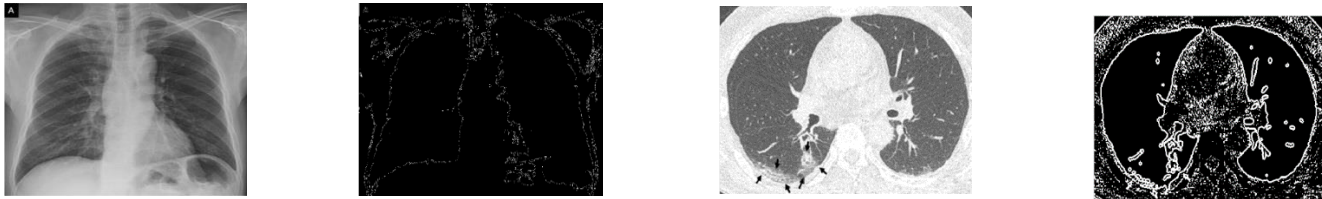
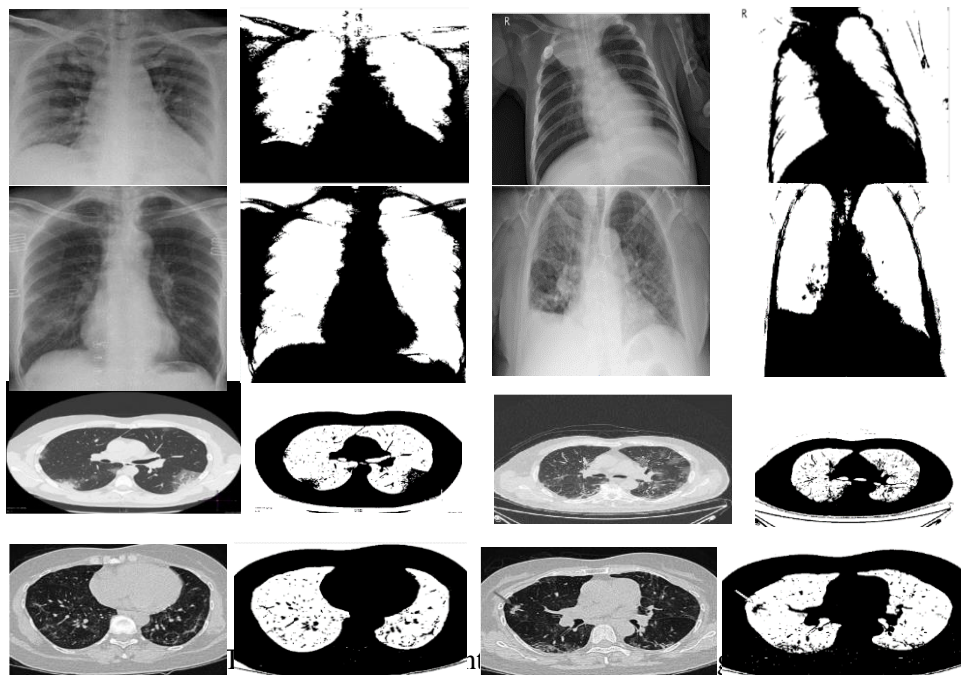


Figure3: images shown canny detection for lung

Results for grayscale disease images

This part explains the main results of the first method we are used. This large amount of data is used to discover the benign lung and by using many methods to treat it, we will show them in the resulting images below

In the figure4 we present the first method that has been used to segment COVID x-ray image for coronavirus lung. In the first image this is the original image for X-ray image the result of segmentation in the second image of segmentation is the thresholding image shown below.



While the sec Original nethc Threshold image Original re5: Threshold image

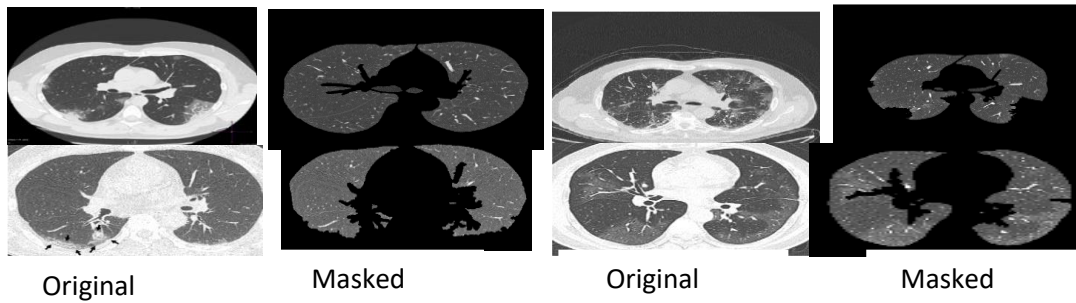


Figure 5: Mask segmentation for lung of coronavirus

The second proposed method is more accurate and efficient comparing to the first one because it is simple and give more reliable segmentation results to detect the interest area Its the lung for best segmentation. In the first column in the result above is the original image for x-ray image of the lung. The second column shown the rest of the lung which has shown in very clear observation. Finally, the last method we used to detect the boundary of lung is the canny edge detection. This is the best method we using to extract the boundary of lung by using canny function to segment the lung we can show all result for lung in the figure6 below.

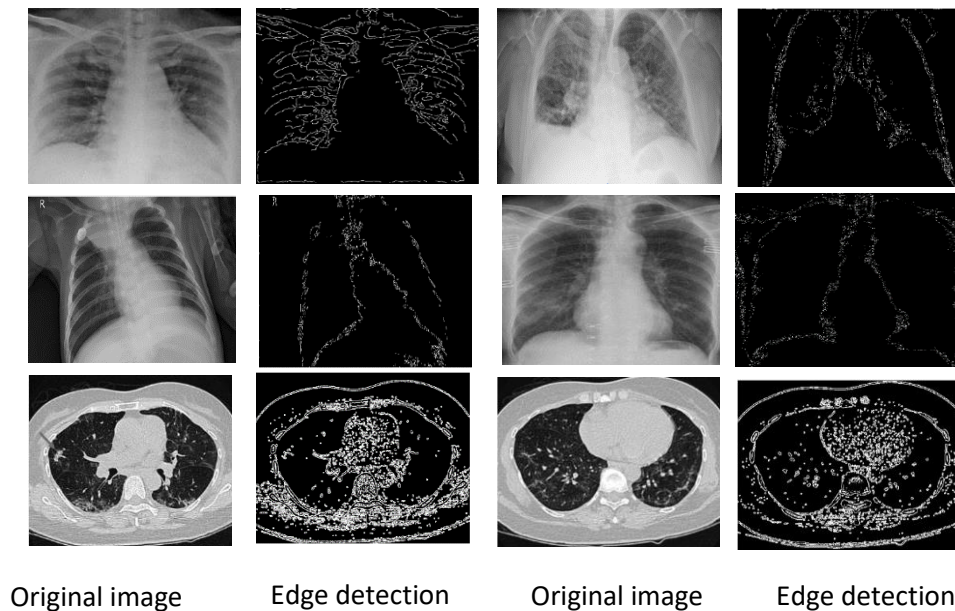


Figure 6: Edge lung segmentation

Conclusion and Discussion:

The results of this research depend on using multiple methods of image segmentation. The best results have been obtained using thresholding, mask segmentation. This work is working on detecting the infected areas in the patient's lungs to help people who work in health sector to achieve quickly the right action towards the disease. Most researches working to discover this dangerous disease that is currently controlling the entire world and has caused the death of many people leading to their death. With this research, we contribute to the development of the world and the medical world, because this thing helps the medical world to discover this

disease, and it can also be developed and benefit from its future by using new and developed technologies that are good and accurate to give good and wonderful results .

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EFFECTIVENESS OF MODERN TECHNOLOGY IN REDUCING THE CONTAGIOUS CLOUD OF COVID-19**Dr. Mohd. Iqbal SHEIKH**

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ABSTRACT

COVID-19 is a transmissible ailment activated through a new-fangled exposed corona virus by origin Wuhan china. The finest method to sluggish down the communication of this ailment is, to aware the people about the diseases without being in contact and detect the person who has the infection, without contacting. The advanced information technology plays a vital role in awareness, diagnosis, and medical facilities to slow down the transmission of this disease. This paper signifies the role of information technology in slow down the transmission of this disease.

Keywords: Covid19, Technology, Transmission and ailment

INTRODUCTION

Covid19 is a transmissible ailment triggered through a new exposed corona virus. Utmost individuals infested through the COVID-19 disease spirit involvement slight to reasonable breathing ailment and convalesce short of needful distinct handling. Elder persons besides those with fundamental medicinal snags similar cardiovascular ailment, diabetes, chronic respiratory disease, and cancer are most expected to progress grave ailment. The finest method to stop and sluggish downcast communication well-versed about this disease, the ailment how it causes and how it spreads. Protect everyone from infection by washing your hands or by means of an alcohol centered rub regularly and not stirring your face. This disease virus spread primarily through drops of dribble or release from the nose when an infected person coughs or sneezes, so it's imperative that you also practice respiratory etiquette (for example, by coughing into a flexed elbow) [1]. People of all ages can be infected by the new coronavirus (COVID-19). □ the risk of becoming severely ill with the virus appears to increase if you are 60+. People with pre-existing non-communicable diseases (NCDs) also appear to be more vulnerable to becoming severely ill with the virus. These NCDs include: o Cardiovascular disease (e.g. hypertension, persons who have had, or are at risk for, a heart attack or stroke) o Chronic respiratory disease (e.g. COPD) of Diabetes or Cancer. Risk factors and conditions that make people more vulnerable to becoming severely ill with COVID-19: Chain-smokers are expected to be more susceptible to this disease as the act of smoking fingers (and probably tainted roll-ups) are in connection with the lips, upsurges the probability of spread of virus from hand to mouth. [2].smokers may already have lung disease or abridged lung capability which would significantly upsurge danger of grave infection. Smoldering goods e.g. Water pipes often include the involvement of mouth pieces and hoses, which might enable the spread of covid19 in communal and social settings. Conditions that increases oxygen needs or reduces the ability of the body to use it properly will put patients at higher risk of the consequences of bilateral viral pneumonia. Quit smoking and avoid using coping strategies involving alcohol or drugs 6. Safeguard your mental health, during the intensive care management of COVID-19, regulate which medications must be sustained and which must be clogged provisionally. Lead into proactively with patients and families deliver sustenance and predictive material. Realize the patient's morals and likings about life-sustaining intercessions.

REVIEW OF LITERATURE

In 2011, [Jon Crowcroft](#) and [Eiko Yoneki](#), scientists at Cambridge University [3], created an app that tracks the spread of influenza. This tool, known as Flu Phone, established design principles later used in the development of new apps that have helped China, Singapore, and South Korea successfully tackle the COVID-19 pandemic.

One way to prevent a global pandemic is contention, which requires the isolation of early cases. These apps try to identify everyone an infected person has been in contact with and isolate all “compromised” individuals.[4] This strategy requires good testing tools (which must be developed for each virus at full speed once identified) and a mobile or wearable app that tracks contacts automatically by proximity of devices. With big data tools of this sort, all compromised individuals can be tracked or isolated.

This is a dystopian approach, to be sure. For threats of this magnitude, however, we need to think outside the box. We need to apply deep-learning algorithms to big data in order to identify and stop virus propagation before is too late.

Complex ethical dilemmas abound. Who can we trust with all these data? Does giving away our privacy erode our hard-won freedom and independence?

We are sure that there are ways to limit this. We need strong, trustworthy governments that eschew populism and defend the basic principles of our society while protecting our health from new aggressions generated by our own civilization. Technology is here to help. As we see many global initiatives collecting and sharing COVID-19 related data, the road is paved for data and computer scientists to develop new algorithms. AI can have a major impact on the fight against COVID-19 in multiple ways; it can help limiting the spread of the disease, increasing disease prognosis, speeding up diagnosis and aid drug development. Profound knowledge is good at forecasting generic manners, but it is not very good at inducing that to a crisis situation when nearly all that occurs is creative,” cautions Leo Karkkainen, a professor at the department of Electrical engineering and automation in Aalto University, Helsinki and a fellow with Nokias Bell labs. ‘If people react in new ways, then AI can predict it. Until you have seen it, you cannot learn from it.[5].

Regardless of this warning, Karkkainen speaks vigorous AI-based mathematical models stand in performance and significant character in serving representatives comprehend in what way COVID-19 is dissemination and when the rate of contagions is set to top. “Through picture on statistics as of the arena, such as the figure of expiries, AI prototypes can aid to sense how many contagions are in the shady,” he enhances, mentioning to unnoticed cases that are still contagious. That data can then be used to inform the establishment of seclusion areas and other societal isolation procedures.[6]

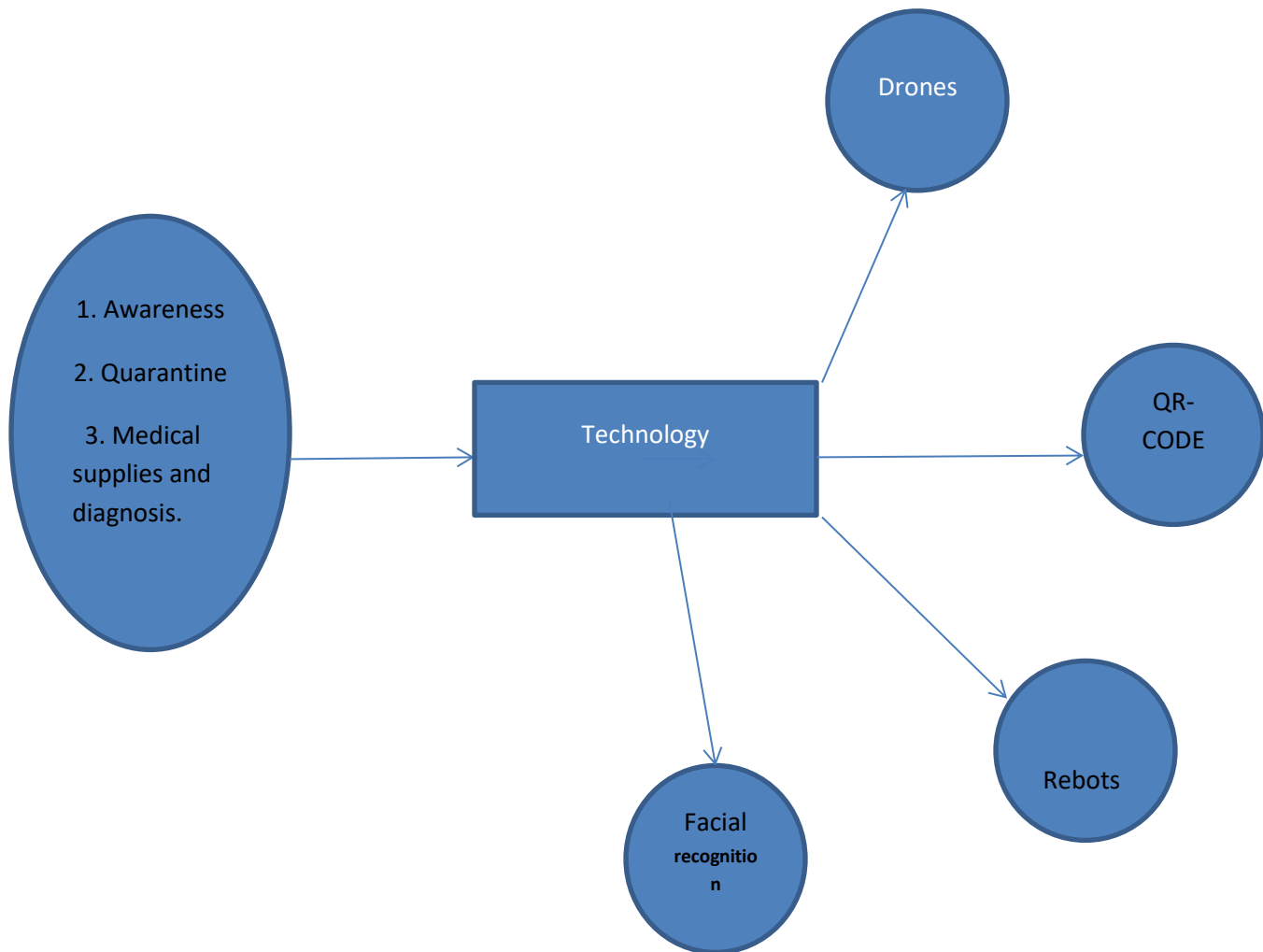
It is also the case that AI-based diagnostics that are being practical in connected parts can rapidly be re-purposed for detecting COVID-19 contagions. Behold,ai, which has an procedure for inevitably discovering together lung cancer and collapsed lungs from X-rays, testified on Monday that algorithm can swiftly classify chest X-rays from COVID-19 patients as ‘abnormal’. This immediate triage might possibly haste up verdict and safeguard, assets are apportioned appropriately. [7]

METHODOLOGY

There are three important steps where information technology plays a vital role in slowing down down the transmission of this disease.

- A. Awareness
- B. Quarantine
- C. Medical supplies and Diagnostics

Figure 1: Use of Technology in Covid-19

**A: Awareness:**

Tips for people living with or affected by NCDs, Continue to take your medication and follow medical advice, Secure a one month supply of your medication or longer if possible. Keep a distance of at least one meter from people with a cough, cold or flu ,Wash your hands often with soap and water. These are the valuable precautions put forward by W.H.O a, but on ground it is very difficult to execute these cares when the virus has already gain its speed in the form of transmission ,whether in the form of contact, or any other shape. Throughout intensive care management of COVID-19, govern which prescriptions must be sustained and which must be at a standstill provisionally. Converse proactively with patients and relations and deliver sustenance and predictive material. Recognize the patient's standards and predilections about life-sustaining intercessions.

When this situation is in place, it is better to avoid contact to anything, and in that case use of advanced technology comes into place in for providing information to aware people what to do and what not to do. Modern technology uses the drones, as used the china to fix loudspeakers in the drones to aware people about the information regarding the covid19. Entrée to civic data has led to the creation of dashboards that are uninterruptedly nursing the bug. A lot of establishments are emerging consoles by means of Big Data.

Face recognition and ultraviolet high temperature revealing methods must stand connected in leading areas.



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B: Quarantine:

This is one of the major steps in limiting down the spread of covid19. Literally quarantine means to stay at one place in isolation. Quarantine helps to stay away from this deadly virus by making social distance, as this disease has different sorts of incubation periods and the symptoms of this disease either start from seven days, called seven days quarantine where a person can be guessed that the condition of the person is good and is healthy so, on the basis of information, either the quarantine person was in contact with the affected person or not. The second type of incubation period of this disease is usually fourteen days where a person started to feel symptoms of this deadly disease, usually the person who gets contact with the affected person has to mandatorily go under 14 days of quarantine period so to avoid other contacts to any other person. There is also an incubation period of 28 days to detect whether a person is affected by this disease or not.

In this regard, the researchers in the epicenter of this disease Wuhan, made almost the database of six million people and on the basis of that database, they develop an application in which they sort the medical history of a person by means of that database and categorize the above quarantine figure below.

Figure 2: Different Types of Quarantine Periods





7 DAYS QUARTINE

YELLOW



HEALTHY

Every person in this database has to install the application and he or she will get information whether he has to perform 7 days quarantine or 14 days quarantine or 28 days quarantine.

With the help of advanced technology every person was put under surveillance with the help of police through sensor based robots so to avoid touching, because with the help of touching this disease has a vital chance of spreading. Whether a person should be isolated or allowable in community places is absolute built on the color code. People must have to log in to the application by means of pay wallet services.e.g.Ant`wallet service. Merely person`s people who must been specified a green color codes are allowable in civic ranges afterward using the labeled QR code at metro stations, offices, stations. There are barriers at best community places where the code and person`s body temperature is patterned. More than 200 Chinese cities are using this arrangement, and soon it will be protracted nation:

C: Medical supplies and Diagnostic's:

The medical facilities are supplied with the help of drones to avoid contact. Drones were also used to disinfect the areas with the help of spraying. The facial recognition technology were used to detect the diagnosis symptoms of the person without being in contact, also bolt temperature based sensors were used to determine the temperature of the body so that the person can detected easily whether the person is infected or not through this advanced technology without being in contact with that person. At a time of Spartan crisis of healthcare specialists and the risk that people to people holds, autonomous automobiles are demonstrating to be of countless usefulness in transporting vital possessions like drugs and products .They are animation used to forecast the feast of the coronavirus, map its inherited fruition as it communicates from human to human, haste up analysis, and in the progress of possible actions, while also helping representatives cope with connected matters, such as the bearing on transportation, nourishment supplies and portable.



Pic (autonomous bus)

In this table, data we show is how much impact of above advanced technology has to reduce the transmission of this disease in the number of newly cases detected from feb.15 2020.

Table 1: Reduction in number of new cases of Corona Virus by using Advanced Technology

	positive	Death	Positive cases Previous –current=New positive cases
Date			
20/01/2020	278	0	278
23/01/2020	639	0	361
26/01/2020	2700	56	2061
29/01/2020	7100	132	4400
31/01/2020	14300	359	7200
01/02/2020	27400	565	13100
08/02/2020	36800	724	9400
12/02/2020	44700	1116	7900
15/02/2020	68800	1668	24100
18/02/2020	74100	1870	5300
21/03/2020	75500	2236	1400
25/02/2020	77700	2663	2200
27/02/2020	78500	2744	800
01/03/2020	79800	2870	1300
04/03/2020	80300	2981	500
07/03/2020	80700	3076	400
10/03/2020	80800	3136	100
15/03/2020	81000	3199	200

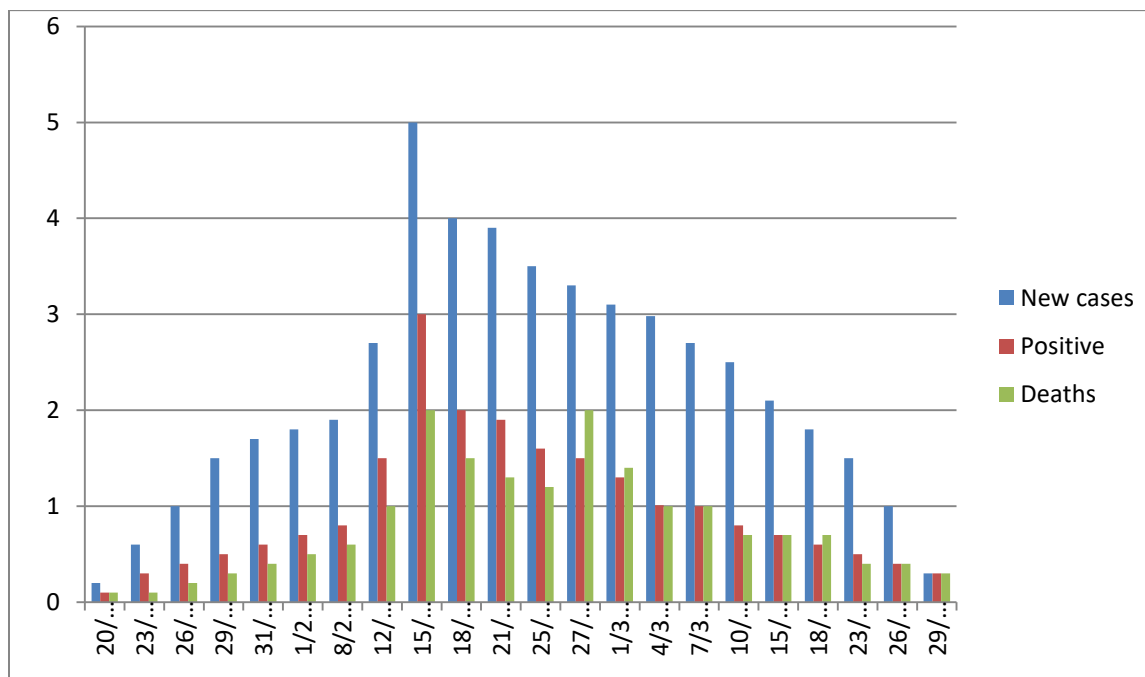
18/03/2020	81200	3237	200
23/03/2020	81500	3270	300
26/03/2020	81700	3287	200
29/03/2020	82100	3304	400

Source: <https://www.statista.com/statistics/1095024/china-age-distribution-of-wuhan-coronavirus-covid-19-patients/>

After February 14, the statical data clearly indicates that the number of new positive cases has been decreased due to the above mentioned three steps which have been taken by the use of advanced technology to avoid the people contact, so as to avoid the transmission of this disease any more.

The graph below shows the decline in the no.of new cases after Feb.15, 2020.

Graph 1: Reduction in number of new cases of Corona Virus by using Advanced Technology



Source: <https://www.statista.com/statistics/1095024/china-age-distribution-of-wuhan-coronavirus-covid-19-patients/>

The below table shows how much effective the advanced technology we used in controlling the transmission of this disease in the above methodology, were we use three basic steps to reduce the transmission of this diseases namely Covid19.tab.1

Table 2: Steps to Reduce the Transmission of Covid-19

TECHNOLOGY	Drones	Q-R codes	Robots	Facial Recognition
AWARENESS	EFFECTIVE	NON EFFECTIVE	EFFECTIVE	NON EFFECTIVE
QUARANTINE	NON EFFECTIVE	EFFECTIVE	NON EFFECTIVE	EFFECTIVE
MEDICAL FACALITIES	EFFECTIVE	EFFECTIVE	EFFECTIVE	EFFECTIVE

Source: <https://www.statista.com/statistics/1095024/china-age-distribution-of-wuhan-coronavirus-covid-19-patients/>

Conclusion:

The paper states how the technology helps us to limit the spreading of this catching ailment. The innovative information technology plays a dynamic role in attentiveness, diagnosis, and medical facilities to slow down the transmission of these diseases. This paper suggests the role of information technology in slow down the transmission of these diseases.

List of Abbreviations

1. **AI:** artificial intelligence.
2. **QR:** qr-codes
3. **COVID19:** corona virus 2019

Availability of Data and Materials:

1. The availability of data and materials is has the source from different research oriented sources as well as medical science fields in the respect diseases.
2. W.H.O
3. China official website of health department.
4. BBC world.

Competing interests

Not Applicable

Funding:

Not Applicable

Author's contribution

The author plays a vital role in the contribution of this paper, as he is the only person to come up with the research gap in this above detecting of this disease.

Acknowledgement

My sincere thanks to my parents and my teachers who play an important role in this research field.

References:

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SHAKABULAN EDUCATIONAL SYSTEM (S. E. S)**Mr. Olayinka AKINTAYO**

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ABSTRACT

If the Education Industry wish to experience a dynamic then entertainment must be incorporated with education and major problems in the industry will be neutralized e.g. Low Self Esteem of Teacher/ Students, theories and not Practical, Ineffective Examinations. A Huge percentage of Black People are not happy due to our deadly living conditions, so happiness is of Value to our Sub-conscious and Unconscious which is why entertainment is the Proactive industry in AFRICA-. Entertainment maintains a Peak in our mind, because nothing as yet outweigh it Euphoria(Motivation) in our Minds. *THE IMPORTANCE OF EDUCATION IN AFRICAN MIND IS PART OF THE JOB OF THE AFRICAN INTELLECTUALS.* **COMMUNICATION** - The ability to manipulate words so as to achieve a desired IMAGE OF THOUGHT in the student Mind is the CORE job of a Teacher -Oral Power-without Communication there's NO Education. Communication is the *BRIDGE* of education and this Program will be using a tool (CHESS) to provide a new Communication Bridge thus, a new teaching and learning Skills, Hence Advancing the Educational Industry and producing student whom will be forced to truly understand their Course of Study after undergoing a new EXAMINATIONAL PATTERN that requires each student to use S.E.S to answer ,explain and Analyse their Course of Study. **CHESSMATICS & CHESSLOGIC- Critical Thinking and Analytical Skills???** – If instead of using words of mouth to teach the disabled (DEAF AND DUMB) signs and Symbols are used and Communication is achieved. Then such educational system (signs and Symbols) must be developed which is what leads us to the USE OF CHESS ANALOGY to analyze, explain and Master almost all branch of courses. This Educational Philosophy is based on

STRUCTURE-Core knowledge of Subject Course**STRATEGY- Self Education (learning Phase)****SYSTEM- Operate in Chessmatics and Chesslogic (Teaching Phase)**

In this book we will be Teaching, history& biochemistry, using Chess Piece and Ideology.

Keywords- Chess, Education, Communication**INTRODUCTION**

Education- is a *psychological process* that involves the progressive awareness of your ignorance, the transition of knowledge, storage and use of acquired knowledge are all psychologically triggered, meanwhile this psychological process is the determinant of EDUCATION (Ignorance will be Enlightened / Ignorance

will be Ignorance). The success of any educational process is to possess a USABLE knowledge which can only arise from a successful educational SYSTEM. The Art of Teaching involves the use of language to pass across the knowledge to be learnt; signs and symbols are used to a lesser degree due to the expectation that the understanding of each and every word(language) mentioned by the teacher will be understood by the student (which most likely is not the case), the knowledge processing rest solely on Language, it is the system of education that we use and in the case of bad language skill, education has a barrier.

Africa-Underdevelopment has much to do with INTELLECT and lesser with any other sector. Millions of youth graduate from sciences, humanities but possess knowledge that cannot point to a problem, hence offering themselves as answer to all question e.g. graduate who studied chemistry; working in bank &all this are due to the language barrier that's unbearable for both the Teacher and student resulting in a lesser understanding of subject Course-Learning lower sciences or primitive science.

Bridge- Language is an invisible connector between two or more people, the purpose of Language is to communicate and communication is the bridge of EDUCATION. The communication bridge fulfils education by linking the teachers Mind to the Student Mind through

The Language

The signs and symbol

It is a fact that when you teach anyone with his/her native language they tend to perform better, because their brain computers is accustomed to the words(language) being used

Note- Language can be a POTENT tool to UNDER-EDUCATE.

Sign and Symbol carry a lot of energy due to the forceful interpretation that occur in the brain-computers after literally seeing a shape, curve or design and this forceful interpretation perfectly suit education and can serve as a strategy to foster self-learning

Entertainment- Watching movies that you do not understand the language spoken can be boring but listening to Radio Program without understanding the language is CRAZY- The various actions, signs and symbols shown by the actors must have undergone an INTERPRETATIONAL PROCESS in the brain-computers resulting to a near total understanding of the Movie. The will to interpret usually activate an Euphoria (makes the Object see the situation as a subject), many youth are locked in the illusion of MEDIA & ENTERTAINMENT and fashion their life to the interpretation of Media. If entertainment is incorporated with Education, this will result to EXCITEMENT in student to learn more

Chess- is a game(entertainment) that has 32 pieces and a Board (64 square,32 white Square ,32 Black Square), the main job of CHESS is to CONVEY, ANALYZE & SCRUTINIZE data.

Billions of Data gives Tangible information that can be seen in real life or converted to be used for problem solving in WAR, POLITICS, etc. and most importantly in EDUCATION. The Kind of DATA conveyed by the Chess Board depends on the CHESS USER(CHESSTORIAN). The Board is Sketched while the Pieces Are Ranked symbolizing a KINGDOM's Way of LIFE once viewed from an Angle and this leads us to the definition of CHESS- as a Psychological Process that carries out the progressive GAME OF LIFE.

A *CHESSTORIAN* is a **Professional** who uses the Philosophy behind the Game of Chess to tell a STORY(a subject Course).

The Practical knowhow of using CHESS to transfer knowledge in form of tiny data is SHAKABULAN EDUCATIONAL SYSTEM.

S.E.S is a system of education that prefers the use of signs and symbols to serve as communication bridge in order to ignite excitement in student and foster SELF LEARNING skill that will arise from self-interpretational psyche

Chess as a Game carries some psychological effect and increase the awareness of the chess player to their real life problems – a process that literally raise the INTELLECT resulting to different change in behaviors e.g. CALMNESS- as Moves cannot be returned on the chess board, this is the first unconscious result of CHESS on Human's Psyche.

The Objective of using Chess as a BRIDGE of EDUCATION is to Create student and Teachers who will truly believe in themselves and the purpose is to Spark self-learning and excitement in Teachers and Student alike while certifying the true understanding of subject course as chess analogy of a subject course cannot be done by a novice of the subject course because it requires true understanding before it can be analyzed with CHESS

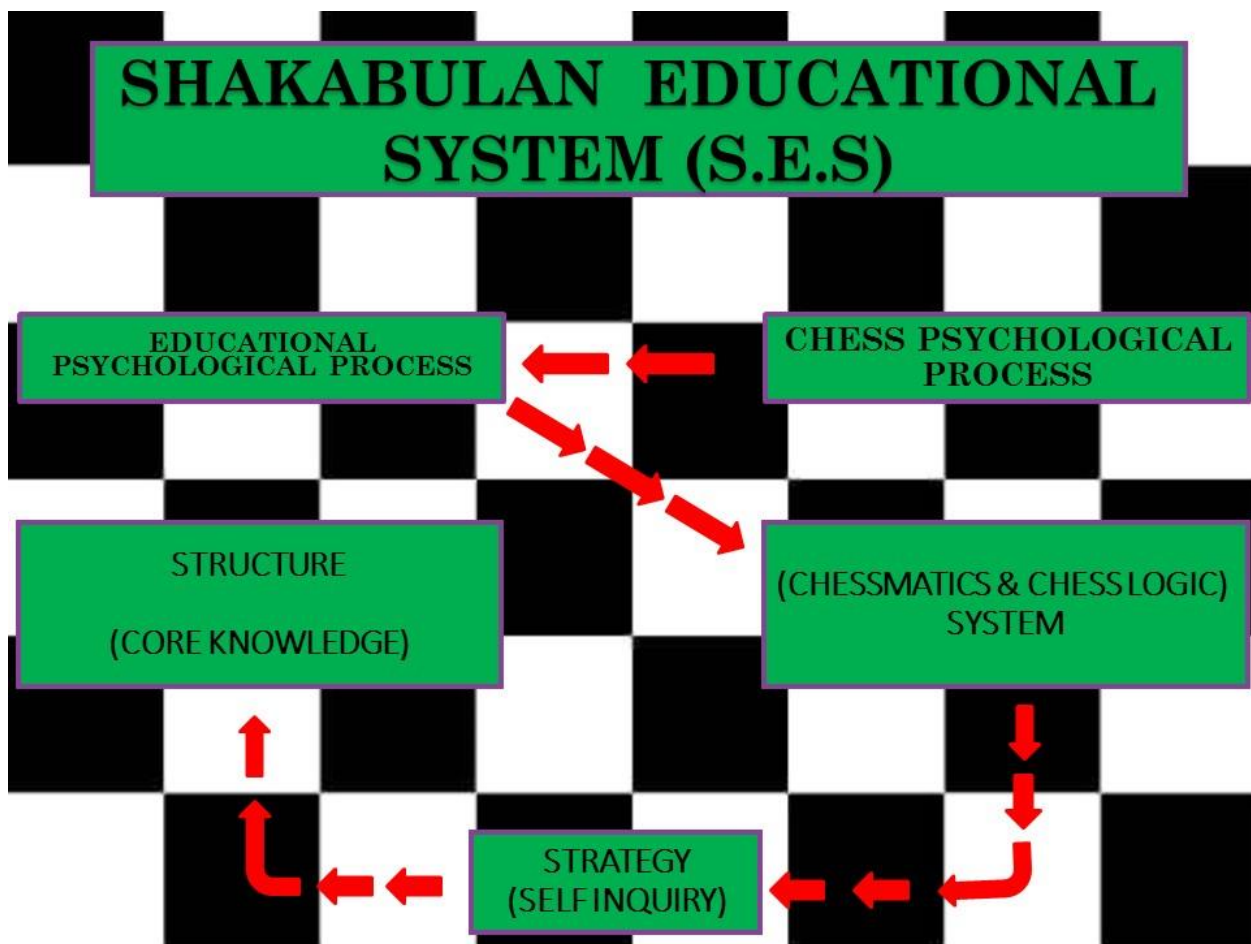
CONCEPTUAL FRAMEWORK

The first activity of S.E.S is to ignite an Excitement in student resulting from self-interpretational psyche of how chess board analyses their course of study , hence the brain has been prepared for Critical thinking , a skill needed for a successful Educational Program.

SES is a Versatile and Flexible system of Education involved in the Processing of Knowledge through the chess board.

S.E.S is setting a standard of education that will unveil all form of intellect because the CHESS BOARD encompass all the distinguish areas of people's activity and at such brings out the diversity in students.

Using Language as a Bridge to transfer knowledge between a teacher and a student leads to the possession of knowledge but using S.E.S as a bridge creates an **in-between**. An In-Between actively involved in scrutinizing and analyzing the knowledge to be possessed and this 'In-Between' is actively occupied with **Critical and Analytical Thinking Skills**- these will be used by the student for self-learning, Hence lessening the use of language to foster Understanding.



CHESSMATIC & CHESSLOGIC- Chessmatics can be defined as the science of chess Piece, board orientation and the Relationship between them. It is the process of inserting chess piece, pawn story(philosophies) &board orientation to arrive at an INFORMATION that will critically fit the analysis(scope) of a subject course(sciences). The scope of the subject course must be understood after which a chesstorian will use Chessmatics to design an Analogy that will focus on the scope of the subject.

Chesslogic can be defined as the science of making Inferences from the proper understanding of Chessmatics. It involves the process of analyzing chess data's in order to understand the information provided and this data will then be used to buttress a knowledge. A tactics is always the best to use in this case e.g. ZUGZWANG, ZUGZWICHENG, DISCOVERED CHECK, the PINNED, the PINNING and the SCREENED etc.

The use of CHESSMATICS & CHESSLOGIC promotes CRITICAL THINKING AND ANALYTICAL THINING SKILLS respectively.

RESULTS AND DISCUSSIONS

SES On Curriculum and Syllabus

The course

- English Language
- Politics & Law
- Education
- Economics
- Perception, Logic & Thought

The above listed courses are the subject course that are to be learnt in this study and the syllabus for

- English language is **integrated thesaurus**, vocabulary training ,spelling,pronunciation all of this are the core topics of the course and by using S.E.S, this english topics will be taught with Chessmatics. Since all words are first used historically as a result of an happening , now we have thousand of words today-the Million of Moves on the chess board is equivalent to Millions of words that can be mastered..
- Politics & Law- full details of the arms of Government, their role, dynamism of democracy and Monarchy, election and rise in rank , ancient African Constitutional system.
- Education- Lost of power, destruction of black civilization, glorious days and the history of West-Africa(Nigeria)and African Kingdoms/Empires (3000BC-2020AD)
- Perception, Logic & Taught will elaborate on how to identify Purpose in day to day life and relates it to chess, calmness at Home/School, importance of attention and how paying attention can help student know them self, know their purpose and know the move required to accomplish their purpose, personality identification.
- Economics– Marketing, entrepreneur, career discuss, teaching and learning

PAWN

1. English Language- This Is the smallest piece on the chess board and yet the majority piece on the board. Pawn is equivalent to the billions of people in the world excluding the government and there are thousands of words in the dictionary that are integrated with pawn e.g anybody, person, people, they, we, single, powerless, follower, man, woman, girl, boy, crowd, numbers, walk, work, forward, backward, obey, listen, adhere, stubborn, uncalm .Much of this words are to be searched by the student themselves haven understood the ideology behind a pawn. The self-learning process will produce student with strong vocabulary and good use of words.

2. Politics & Law- a populated nation are usually strong if channeled effectively by the government of such state, the state need the people as the state cannot exist without the people, The unity of state can only be secured with Laws-Rules and regulation, to shape our behavior and also make everyone stay on the same page which is extremely important for a peaceful nation.

3. Education- A Pawn without the **knowledge of his/her heroes past**(Muslim moors of Spain, Oba Akenzua II) language, cloth and Hair will move with the culture of another Race and this act will not progress the nation, centuries to come .The Fact that black people are the first people to exist on planet earth, to civilize the world with history dated back to thousands of years Ago, this give Black people pride and confidence to further wear, speak and think like an African, to pursue a goal that will further civilize the people of Africa and the world , but without the knowledge of the past , nothing will be added to Blacks Long lived Civilization since it is unknown-it won't be developed and no racial pride will exist among the children.
4. PLT-The ideology of a black person must not be of a foolish& un calm person but a dedicated and conscious one, who is conscious of national development and national threat and also know how chess opening affect reality since the first few moves we make on the chess board affect the whole game, it seems like first impression last longer then. The five sense of a man must be strictly under check and control by the Mind.
5. Marketing- the amount of people in a country is the amount of potential customers that can be targeted, selling of services & product as a black person can be to fellow people(Pawns), incorporation,n government(official) or to the white side of the board(International trade). By understanding the power of human resource, entrepreneur can solve problem or create one so he or she can solve it.

ROOK-

English Language- This official is regarded as the protector of the kingdom and in real life analogy, the rook protect his/her interest .There are so many words, phrases and meaning that are integrated with the rook in the dictionary, collocated words, with Rook as an ideology to build vocabulary e.g such words are Custom, door, security, border, gate, outskirt, exit, defense, attack, obey, state, observant, wait, late early, kemet(Egypt).

Politics & Law – Politics is constantly about making choices and when the choices made by the politicians is not favouring the people and the state , such nation is very vulnerable which in turn lead the people to be extremely ignorant of National consciousness , a behavior that will leave the borders of the country open to both prey and predator. National consciousness has proven itself historically to be a powerful state of mind that can Unite and promote National development by raising individual people who will love the interest of the state.

Education- The great wall of Benin is four times Taller and Longer than the china great war, the war built by the 9th century King and standing in the 16th century,a wall built to protect the border from foreigners(europenas) that usually trade and afterwards start war, always leaving their tracks with blood, Ancient Benin king was awared of this and so protected the Castle with a historical great wall as early as 9th century.

P.L.T- A sense of Protection from a person toward another person in an environment is highly needed for the development of a community, the high level of insecurity and hatred spreading among people can be stopped if all start helping themselves, showing genuine love and sincere protection to themselves and neighbors with the understanding that we are all on the same side of the chess board and must protect our self, hence we protect the entire Race .Any Person that holds this belief of protecting all People around him/her will swiftly be promoted to an official and will never be forgotten in history, since the people will see a reflection of

National interest in such Minds...This kind of thoughts from the people of a nation will make the entire kingdom stronger and less open to foreign invasion

Marketing- During Colonialism in Africa , the farmers were forced to change the kind of crops they plant, why because the colonial government want to plant and sell the product that suit his own interest, a situation that will render many farmers jobless and hungry as their goods is being downplayed in the market. The market structure of a person can be your talent, self-promotion. It is important to discover how your mind react to your five senses and how it process the information, the uniqueness of every man lies in the mind and this uniqueness must be found and marketed to the target audience

KNIGHT

1. English language- There are so many words in the dictionary that perfectly suit bravery, lion, warrior, war , soldier, order, violent, calmness, harshness, shout, wickedness, ammunition, evil, bad, good, different, colonialism, bourgeoisie, capitalism, try, chance, move, force, navy, military, country,
2. Politics & Law – a position that is filled with ordinary men and Royal men , discipline is the soul of brave leaders-to strengthen the Laws of the state , protect the state and uphold National Unity at all times. It is usually easy in the ancient African system for a Man to rise in rank from a knight to a King .
3. Education- Amilcal Cabral of Cape Verde & Guinea Bissau , a national warrior who fought against the Portuguese colonial government and strongly spoke against betrayal among black soldiers after the death of Kwame Nkrumah. Cabral said there can be no revolution without a Revolutionary theory. He set up an organization of armed guerrilla war fighter in the remote areas of the state and was silently recruiting and training cadet physically and intellectually. In the 20th century , during this agitation and after so many victory and at the edge of complete success, he was betrayed , leading way to puppet government of neocolonialism.
4. P.L.T- Morality is what shapes our collective behaviours and this moral are usually upheld by religion , the reason behind every action we take be it violent or not must be critically analysed before making a move. A move on the chess board is equivalent to an attack, an attack that can bring down different size of raining rocks , it is important that bravery must be in check always. If critical thinking & Calmness is not involved in Bravery, it might be used against you.
5. Marketing- Most hired labour are usually contented with feeding and living on their income which is partly right and also makes them partly the protector(rook) of their company and pawns of their Boss. Promoting your own market , service or product usually require bravery since the majority of minds will hurriedly want to get hired running away from the stress of war involved in fighting for your own market , but the market is for brave Minds alone.

BISHOP

1. Education- Foresight, prudent, vizier, maze, vision, foresight, future, before, love, hate, temporary, permanent, now, later, yet, time, seconds, calendar, date, senate, council, senior, priest, pastor, leader, chief, hat, with numerous and million of words .
2. Politics & Law- The council of people involved in making choices for a nation are usually called by different names but the future and present occurrence are controlled by the propose of this men (words and Action) , which are not to be ridiculed, ordinary men have rose in history from a small town and grow to

become a Bishop, a vizier whose words are followed up discretely by the people or the government and in few cases Both.

3. Education- Rameses 2 of the 1200 ,a powerful king , who socially reform many ethics and moral in Africaand greatly followed the art of bilding great stues, monument like his 18th dynasty predecessor before his reign(Hatshepsut,Thutmoses3). His writing were found beneath his statue that says King of King am i? OZYMANDIAS if any man would know how great I am and where I lie. Let him surpass one of my works. A proud African king that ruled before Europe had their first littreature(Oddysey and Illiad) first ever reading and writing skills first surfaced in the 9th century BC . In the 14th century BC, King Ramesis Statue was taken down by the colonizer and his head taken to the museum in london which in turn they laugh at why ? so as to bring down the Pride of Africa Civilization, destruction of black civilation have usualy been used by the foreigner as they believe this act will definitely affect the future.

4. P.L.T- Psychologist have proven that the last moment has a chance of affecting the next moment, to explain the importance of thinking about the future in every move taken since it is a fact that the future will be dependent of our Moves. Words and action are strictly powerful control tools as the brain manifest on them longer explaining the amount of consciousness that must be payed to this and all other Moves,

5. Marketing – a Person’s ability to Affect the future, deep posterity is always a good skill needed in an organization, country, and even family. Learning and teaching has greatly shaped our present world and will change the future since Education target the future and focus on creating a new kind of foresight on all peoples activity (economics, War, entertainment, religion, labor, play and Sex, Politics & law)

A new vision creates an Industry that will make life better for the people & be of monetary gains or Intellectual Gains.

QUEEN-

1. English Language –woman, black, special, mother, child, care, emotions, weak, strong, good, bad, human, power, leader, first, second, daughter, princess, girl, her, she, lady ,empress, ruler, female, feminine, feminism, official, state, baby, family

2. Politics & Law- On the chess board, the King is most important but the Queen is most powerful showing that the leader of a country can be either be the Man or Woman; a very important message the society has not perched so well but However revealed and proven on the chess board.

3. Education- Assata Olugbala Shakur- the blackwoman who started BLA-Black Liberations Army in the united states in the 20th century . She changed her name from Joane Chesimard claiming that such names are not to be answerd by the true sons and daughter of Africa. She said only the Strong go crazy and the weak just go along since they don’t have the power to make change. Se drastically influenced the black movement and was declare wanted all over America but was never caught or betrayed. She recieevd asylum in Cuba and promoted black ideology even with her armed struggle and history regard her as a Black Queen.

4. P.L.T- The powerful moves of a queen is unquestionable giving the fact that women are greatly desired in our society, a sense of importance that paves way for them at situation where a man will struggle with. However, a queen is only powerful when it identifies its own Personality and attach a Goal that will be of personal gain and most importantly National profit , since the requirement to be Royal is National Consciousness.

5. Marketing- The ability to unite and lead the people for a cause, is a career &historically, women have shown skills and expertise in leadership even though men have made themselves to be extremely interested in ruling, this career can also be a good business for women and must socially be an available decision in the subconscious of the women for the society to be balanced.

KING

1. English Language- Man, boy, Lion, President, leader, first , son, work, walk, winner, best, heir, sex, war, Tall, short, weak, strong, wise, foolish, emperor, commander, General, and millions of other thesaurus
2. Politics& Law- Royal family are usually the first family to arrive at a state or the ones that fought for the freedom, development and sustenance of this state and at such retain the right to rule. In ancient African System even though the king is the strongest and supreme, some kings can always be checked by the Council. Absolute rule has been possible only by some real intellectual Kings whose dedication to the states and people can not be questioned even by the council.
3. Education- The Benin empire is an highly beautiful state as recorded by euopean voyager -the road that leads to the Palace of the benin king is so wide that white eyes has never seen in Amsterdam..... Benin owns the greatest Artist, popularly known as NOK Culture. Due to their eloquent Sculptures that cannot be compared to any, even in this present 21st century and some of this sculputres design created since the 15th century compete with modern day art, but the subsequent Africans occupying this region are presently dancing to the tune of Foreign Economies Need and not on their Strenght as analyzed by Oba Akenzua II (Niso Norho) who ruled between 1933-1978 “I would rather serve my God in the Benin way, I would rather worship him in the benin manner. I will sing songs of paraises to him in benin custom , unless it can be proven to me he does not understand the Benin Language”(Akenzua 1970)
4. P.L.T – The purpose behind every move of a leader is what brings respect to a true king, the ancient African kings have the habit of continuing predescessor project since the role of a leader is to build th nation like a growing baby that countinously need attention and care and such perception must be present In the people leader.
5. Marketting- Building talents and managing people is a good business since humans are the advanced mammals and yet must be controlled by a faction of them.Human resources is definitely wealth but require painstaking attention –this art is also required In Nation Building.

4.CONCLUSIONS AND RECOMMENDATIONS

- Input-Process-Output, a system usually requires a professional to use them especially at the Input Stage e.g. IFA -a system of divination in Yoruba land(Western Africa) is all about some 200,000 verses(knowledge) **coded** inside a NUT through binary (smooth and Rough) and **processed** to give an **answer** (verse). The input process was done by Orunmila centuries ago and the processing of the system is done by a professional called Baba-Alawo to give an output (a verse from the input), Hence, giving solutions to whoever came seeking.

A Nut Piece with 2Binary Orientation (smooth and Rough) and an un-sketched board saved 6volumes of bible, 6 chess Piece and a sketched board has billions of orientation and will save all Knowledge human has CONCIIVED, right on the board.

In ancient Africa Signs and symbols are not only used to process knowledge(data) but also to predict the future , SES is providing change , a change that suits modern day philosophies of Learning from Home, Online Learning &an Informal form of education but yet effective and this huge amount of change is what Reality has turned to, the Future will be way different .THIS IS EDUCATIONAL REVOLUTION , S.E.S will Change the HUMAN MIND.

THANK YOU!!!

DEDICATION- I dedicate this work to student,member and staff of African Chess School-IgiAruwe.

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STATUS AND HEALTHCARE FACILITIES OF COVID-19 VIRUS IN BANGLADESH**S.A.M. Shafwat AMIN**

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ABSTRACT

COVID-19 is an infectious disease that has been spread all over the world. COVID-19 in Bangladesh has been a lethal catastrophe over the past few months. Meanwhile, it has become one of the biggest disasters in Bangladesh for every resident because of stopping all financial actions. In addition, destitution, monetary hardships, and longing have therefore been coordinated for the residents. More than 204,525 people have been affected and more than 2618 people died so far in Bangladesh. This paper comprehensively discusses this lethal catastrophe COVID-19 from its foundational level to the roofing level. The rationale of this paper is to help the community understand what is meant by COVID-19 and to prove to them that COVID-19 can be curbed, even if it is described as a lethal catastrophe. Before the resources for this paper were gained access, analytical documents that contained the whole of COVID-19 were obtained from well-known laboratories of Asia, specifically from Bangladesh. Careful studies and research were also conducted to re-affirm the data in the obtained documents. From the research conducted and the data obtained, it has been noticed that Bangladesh have the ability to adopt a very effective and convenient method, which can aid accurately in tracking, containing, and curbing and even preventing COVID-19. Simultaneously, Bangladesh can effectively fight against the COVID-19 virus by applying a proper healthcare system and maintaining the steps and rules of the government. It is high time cooperation between government, residents, health workers, alongside global assistance is needed to limit the aftereffect of this pandemic in Bangladesh.

Keywords: COVID-19, Status, Effective, Healthcare, Rules.

INTRODUCTION

As world greatest pandemic COVID-19 refers the infection of viral respiratory which is mainly called as SARS (Severe Acute Respiratory Syndrome). This virus usually enters into human body by using various respiratory tracts such as eyes, mouth and nostrils. Microbiologists reported that this COVID-19 virus

voyages through the arteries and vessels which are connected to the respiratory organs, and only affects the respiratory organs once in the body. In Bangladesh, most people mistake COVID-19 for malaria or fever, since the early symptoms of these ailments are similarly deceptive. However, the etiology of COVID-19, remains a debate, as several possible causes has been noticed throughout the world [1]. Epidemiologists, firmly accept that the pandemic is acquired from different well evolved creatures which incorporate bats, pooches, cows and different warm-blooded animals which mankind view as colleagues (pets or natural apparatus). Bangladeshi despite what might be expected, were not influenced by these creatures, yet by the effectively contaminated asymptomatic voyagers who entered the nation from December 2019 till when the Bangladeshi visitors and airports were shut. In spite of the fact that Bangladeshis knew about the malady, they were deceived by the way that COVID-19 infection can't be supported in hot temperature region. This conviction made the contamination spread at a quick pace among Bangladeshis, because of the way that, they were not watching the preventive estimates, for example, maintaining a strategic distance from mass gathering, social separations among individuals and the scarcity and utilization of PPE's. Therefore, currently the number of infected people is increasing in a high rate. However, to provide the proper treatment of the infected people the government of Bangladesh taken several effective strategies. The treatment of COVID-19 patients of Bangladesh in under healthcare system and policies which is taken care by health ministry. Broadly Health ministry is taken care the responsibility of international health treaties, Medical Education, prevention of food adulteration, quality control in Drug manufacturing, National Disease control and family planning. Bangladeshi health care under the public sector is to provide free to people who are below the poverty line.

COVID-19 AND BANGLADESH

COVID-19 in Bangladesh has been a disaster for the heads of states and each and every resident at a bigger point of view, since it has stopped every financial action, in this way coordinating monetary hardships, yearning and destitution to the residents. The financial hardships Bangladeshis especially lower income people, day labor and farmer experienced in the COVID-19 sequence, was because of the way that, most Bangladeshis method for living is portrayed as "hand to mouth", that is they spend what they procure per take a shot at utilities and other essential needs so as to support themselves [2]. This "hand to mouth" style of living among a few Bangladeshis set off the financial hardships referenced before in this paper. Bangladesh has truly faced an incredible conflict in battling with COVID-19, through the usage of stringent estimates which worked viably in driving the sickness out of the nation. The government of Bangladesh actualized a compulsory lock down as a method for diminishing the pace of spread of COVID-19 among Bangladeshi. This compulsory lock down was valuable as if, the effectively tainted asymptomatic individuals stayed at home, consequently they couldn't transmit the contamination to other people who have not yet been tainted. With the obligatory lock down set up, there was likewise a required isolate and testing of all vagrants inside the time of the pandemic. This measure supported in deciding the quantity of contaminated individuals. A few gifts were made to the COVID 19 store, which helped adequately in controlling the pandemic over Bangladesh. This fund supported the government of Bangladesh in bringing COVID-19 testing equipments and necessary PPE's which made crafted by healthcare staffs simpler and helpful. The fund also supported in building an application called the COVID-19 tracker app, which aided effectively in tracing all the contacts of the infected for immediate quarantine and testing, so as to reduce the rate of infection among Bangladeshi.

The mandatory quarantine and lock down which was initiated by the government, allowed for quite a large number of people to be tested, giving an accurate result of those who tested positive and those who tested negative. The first three known cases were reported on 7 March 2020 by the country's epidemiology institute IEDCR [3]. Infections stayed low till the end of March but saw a steep rise in April [4].

RESULTS AND DISCUSSION

Around 204,525 confirmed cases have been reported in Bangladesh till 19 July, 2020 among them 114,260 cases have received an outcome where 2.29% death and 97.71% recovered/discharged have been identified [5]. If we consider total confirmed cases of Bangladesh, then 1.28% have died and 54.59% cured [5]. That means 44.13% cases were still active [5]. Figure 1, 2, 3, 4, and 5 represents the total coronavirus cases, daily new cases, active cases, total coronavirus deaths, and daily new deaths in Bangladesh respectively [5].

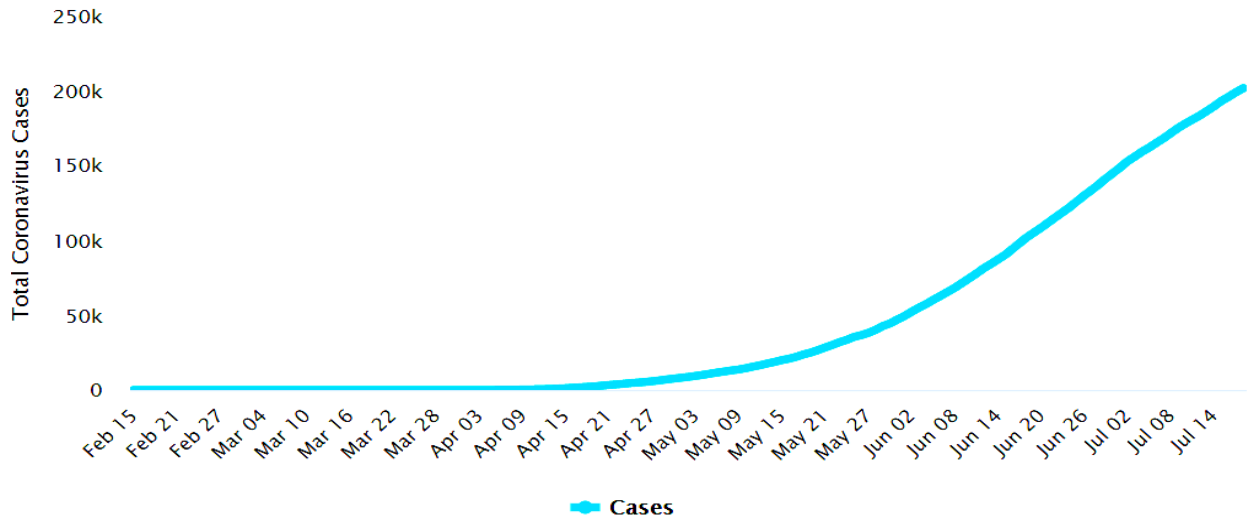


Figure 1. Total coronavirus cases in Bangladesh [5]

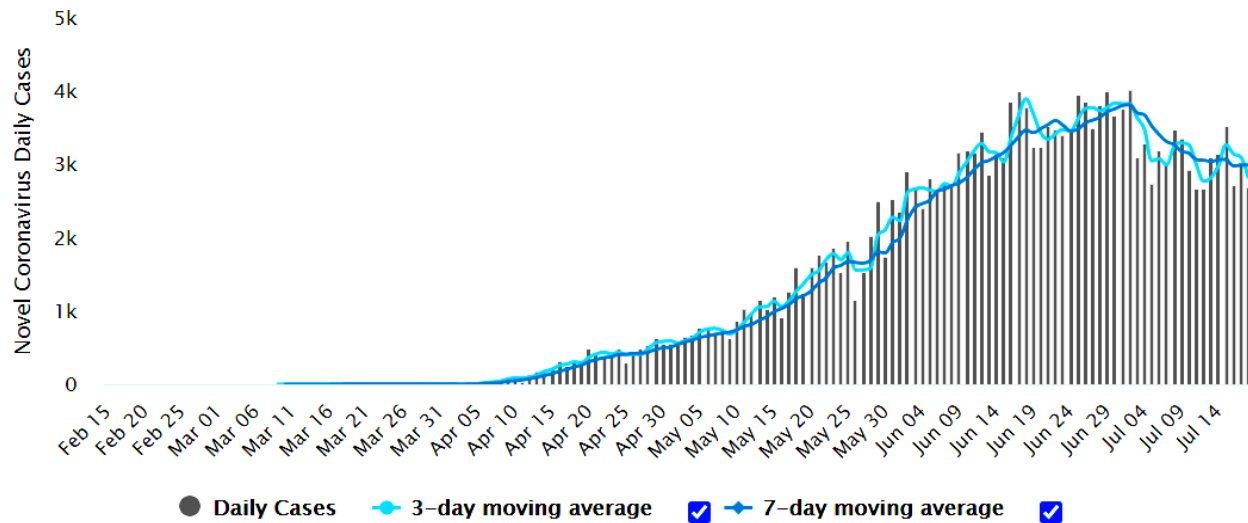


Figure 2. Daily new coronavirus cases in Bangladesh [5]

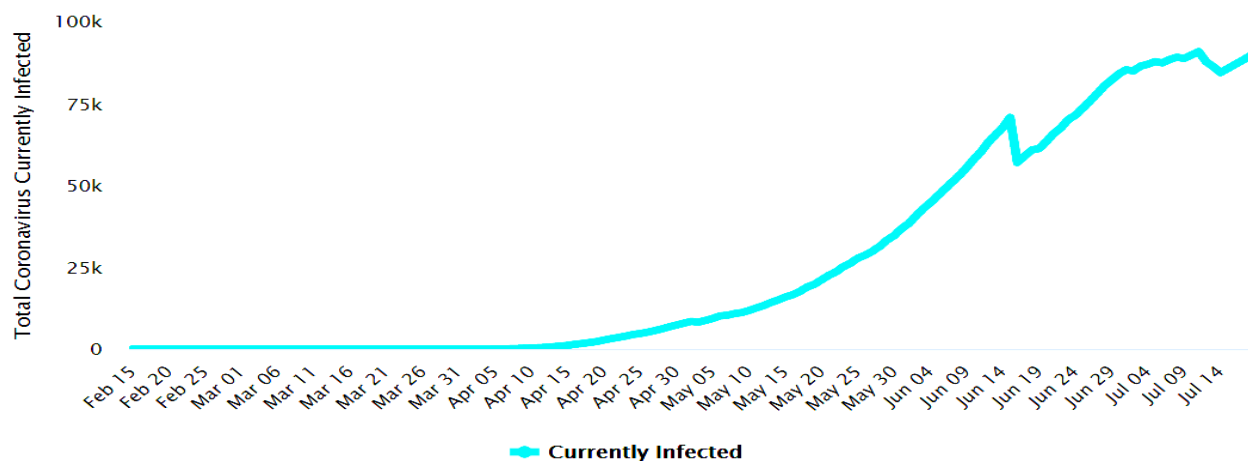


Figure 3. Active coronavirus cases in Bangladesh [5]

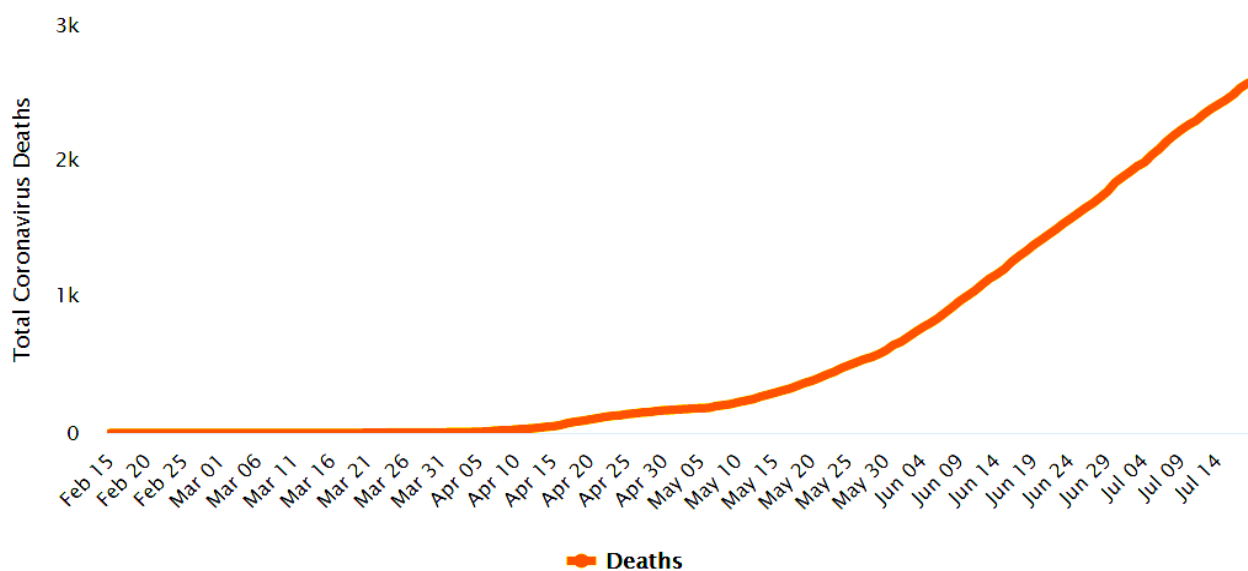


Figure 4. Total coronavirus death in Bangladesh [5]

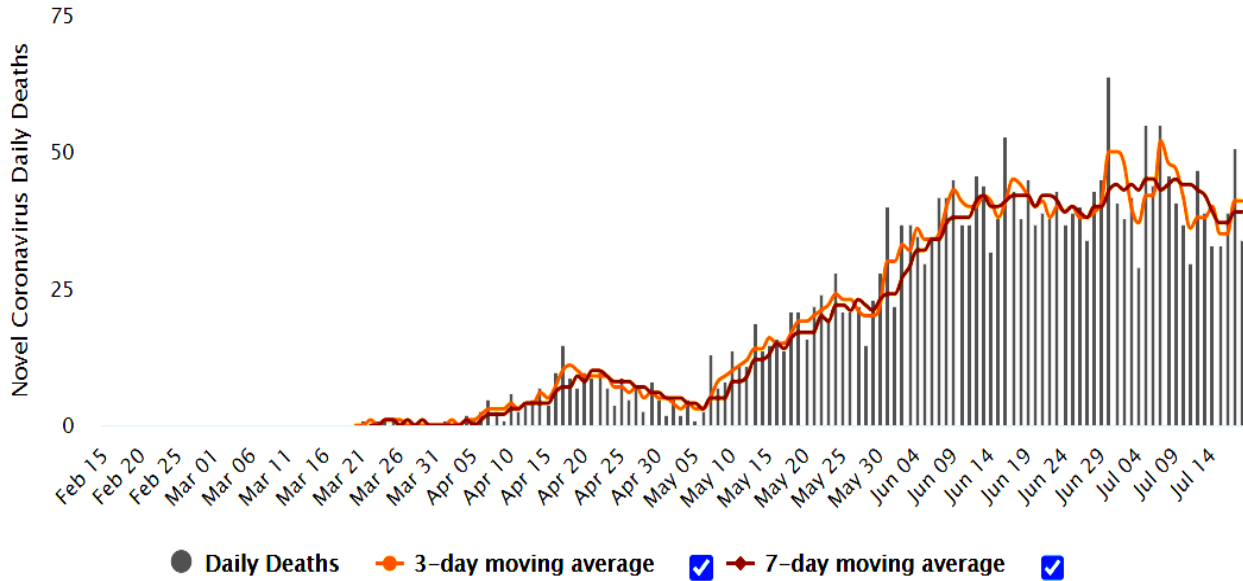


Figure 5. Daily new coronavirus deaths in Bangladesh [5]

Figure 6 represents demographic distribution of COVID-19 status of Bangladesh [6]. It has been noticed that majority of the confirmed cases (28%) were from 21 to 30 years age group and minority of the cases (3%) were from 1 to 10 years age group. Moreover, comparing confirmed cases by gender, it has been identified that most of them were male (71%) and others were female (29%). Furthermore, comparing death cases by gender, it has been observed that majority of them were male (77%) and minority were female (23%). In addition, comparing death cases based on age, it has been found that most of the death cases (38.99%) were recorded in people who were more than 60 years old and the lowest amount of death (0.82%) were recorded in people who were from 1 to 10 years age group.

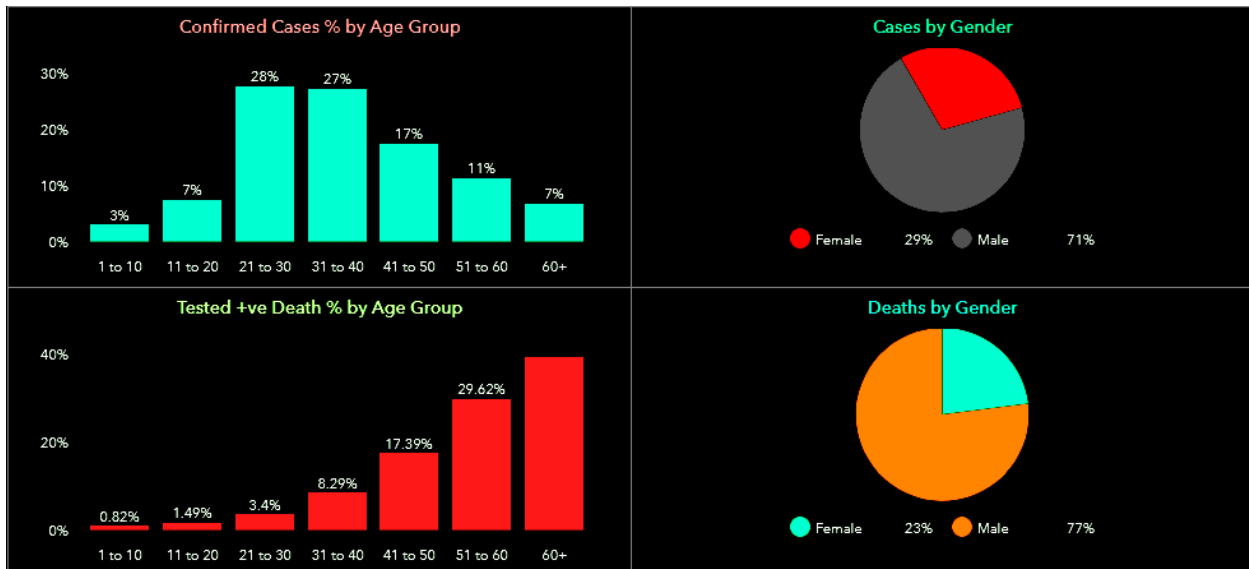


Figure 6. Demographic distribution of COVID-19 status of Bangladesh [6].

The highest number of confirmed cases (47.81% comparing with the whole country) have been found in Dhaka division and all other divisions have 52.19% confirmed cases [6]. Moreover, the second highest

number of confirmed cases (22.12% in comparison to the whole country) has been reported in Chattogram division [6].

Fighting against a SARS-like global pandemic such as the COVID-19 is not an easy task. Still, Bangladesh government has tried as much as possible to sort out the infected from the non-infected. It can be noticed that the positivity rate which resulted from the mandatory quarantine is greater than the rates from contact tracing and routine surveillances. It can therefore be concluded that the mandatory quarantine the government implemented has been effective in determining rate of infection among Bangladeshis.

However, to fight with this pandemic, Bangladesh government has taken several healthcare facilities to prevent and control COVID-19 which has been presented in Figure 7 [7].

Moreover, total flow chart of triage of COVID-19 in Bangladesh has been presented in Figure 8 [7]. By following this flow chart the COVID-19 positive cases are identified and sent them to receive proper healthcare facility. The healthcare facilities from entrance to end in Bangladesh for COVID-19 has been presented in Figure 9 [7] which has the capacity to create the COVID-19 healthcare system in Bangladesh strong. However, Bangladesh can fight against COVID-19 properly and will achieve success as well by properly applying the healthcare protocol of Bangladesh Government in each hospital which deals with COVID-19 positive cases.

Infection prevention and control in healthcare facilities to prevent Novel Corona Virus

PURPOSE: To prevent spread of COVID 19 DISEASE in healthcare facilities.

FOR: HEALTHCARE FACILITY MANAGEMENT

Strategies to prevent or limit transmission in healthcare settings include the following:

- Ensuring triage, early recognition, and source control (isolating patients with suspected nCoV infection)
- Applying standard precautions for all patients
- Implementing empiric additional precautions (droplet and contact and, whenever applicable, airborne precautions) for suspected cases of nCoV infection
- Implementing administrative controls
- Using environmental and engineering controls.

To facilitate the early identification of cases of suspected nCoV infection, healthcare facilities should:

- Encourage HCWs to have a high level of clinical suspicion
- Establish a well-equipped triage station at the entrance of health care facility, supported by trained staff
- Institute the use of screening questionnaires according to the updated case definition
- Post signs in public areas reminding symptomatic patients to alert HCWs

Personal Protective Equipment for Health Care Worker

- The rational, correct, and consistent use of PPE also helps to reduce the spread of pathogens
- The use of PPE effectiveness strongly depends on adequate and regular supplies, adequate staff training, appropriate hand hygiene and specifically appropriate human behavior

Environmental cleaning & Disinfection:

- Environmental cleaning and disinfection procedures are followed consistently and correctly.
- Thoroughly cleaning environmental surfaces with water and detergent and applying commonly used hospital-level disinfectants (such as sodium hypochlorite) are effective and sufficient procedures.
- Medical devices and equipment, laundry, food service utensils and medical waste should be managed in accordance with safe routine procedures.

Figure 7: Bangladesh government healthcare facilities to prevent and control COVID-19 [7]

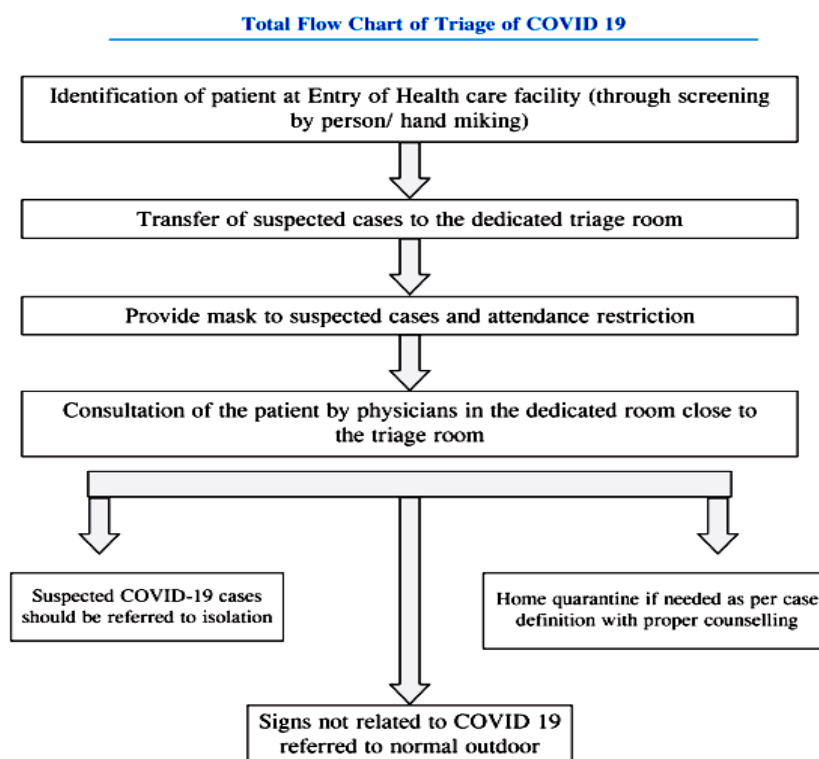


Figure 8. Total flow chart of triage of COVID-19 [7]

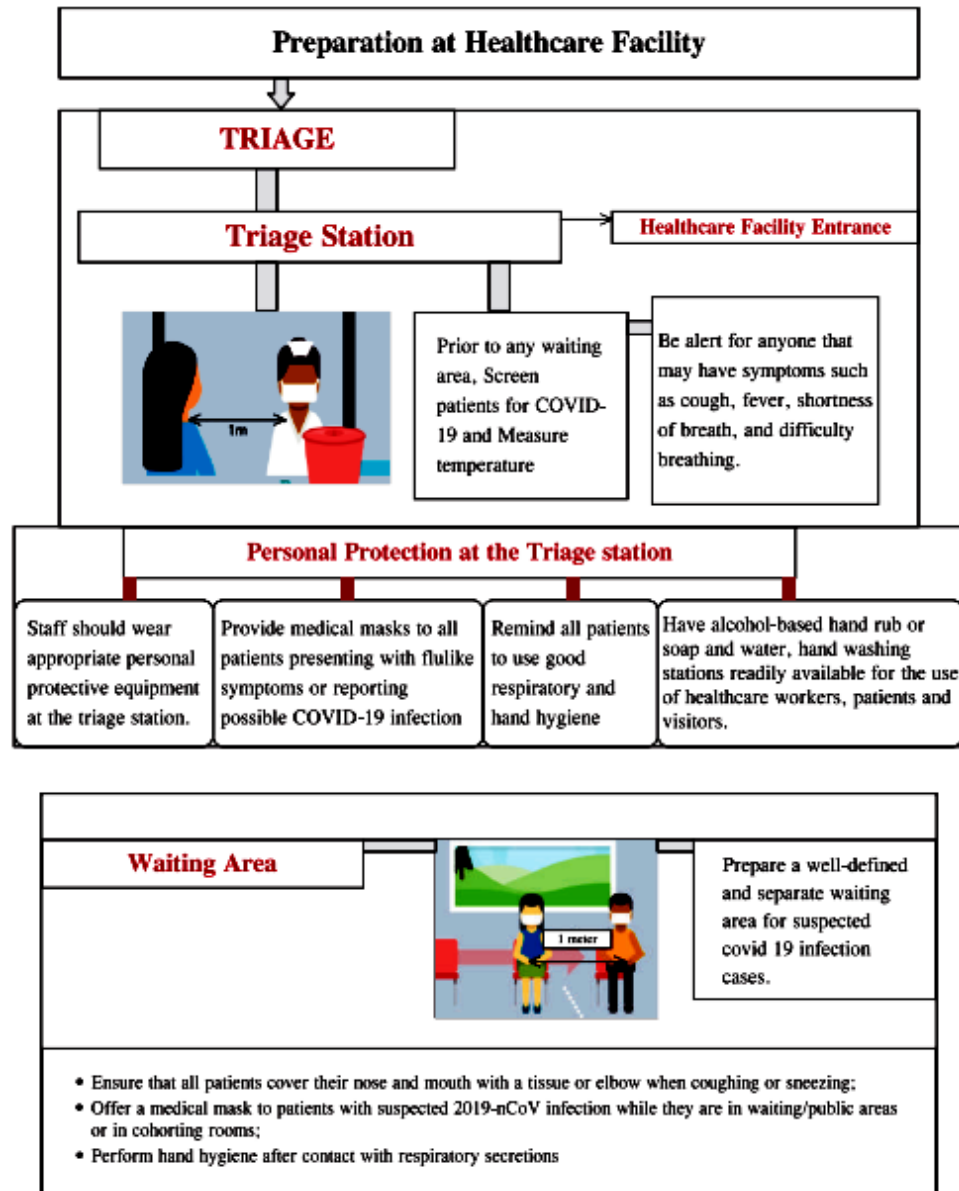


Figure 9: Preparation of healthcare facilities in Bangladesh [7]

CONCLUSION

Bangladesh as a nation has tried its best to play a very effective role in containing this lethal pandemic, but due to the nature of the virus, all Bangladeshi are urged to continue using the PPE's and practice social distances, and also all the initiatives recommended by the government for at least few months, before fully going back to their normal way of living. By obeying these simple principles, COVID-19 can be eradicated completely from Bangladesh, in order to promote a sustainable and high standard of living, so as to promote a positive socio-economic development in Bangladesh. Meanwhile, as government of Bangladesh already taken necessary steps to prevent and control this virus by applying proper healthcare system, therefore by maintain the steps and rules of government, Bangladesh can effectively fight against COVID-19 virus.

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IMPACT OF THE COVID-19 PANDEMIC ON MENTAL HEALTH AND QUALITY OF LIFE**Dr.Shaveta Thakur**

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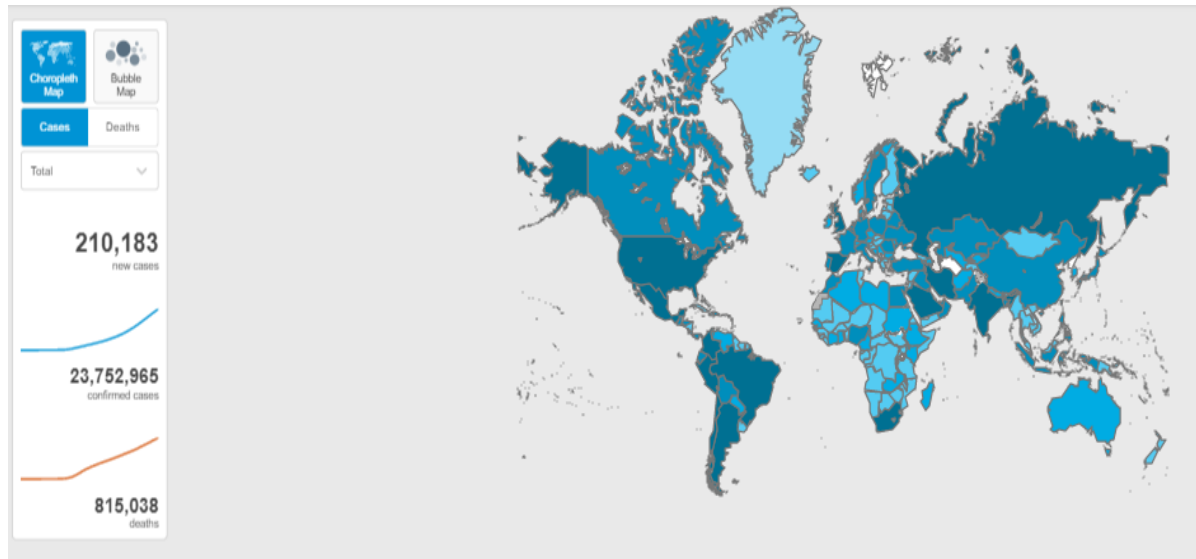
ABSTRACT

Coronavirus (COVID-19) pandemic is developing exponentially in the entire world. Scientists, technologists, specialists and other human services laborers are working day and night on the improvement of antibody and prescriptions to control and treat this infection. SARS-CoV-2 is the name of the infection liable for causing COVID-19 sickness, which is exceptionally irresistible and deadly. The most frequently-reported symptoms were fever/pyrexia (66.1%), cough (57.9%), body ache/pain (42.7%), fatigue (42.1%), headache (37.4%), and dyspnea (36.3%) amongst users who reported at least 1 symptom. Compassionate features like anosmia (28.7%) and ageusia (28.1%), were described. With exponentially expanding diseases, proportionate fatalities are being accounted for both from developed and under developed nations. More than 8.5 million cases of COVID-19 have been represented in 187 countries and locales, achieving more than 465000 deaths. There is promising fact that patients with Latent Tuberculosis Infection (LTBI) and Tuberculosis (TB) disease have an augmented risk of the SARS-CoV-2 infection and tendency towards developing severe COVID-19. The deaths due to COVID-19 have reduced in several developed countries, whereas the same has increased greatly in low- and middle-income countries. These countries bear about 80% of the global burden. Mortality associated with Coronary Artery Disease (CAD) in Asian Indians is 50% more than any other population. In India, because 80% of the health-care utilization happens in the private hospitals, it is of at most importance to assess the preparedness level of these hospitals against emerging infectious diseases. COVID-19 has made a financial crisis close by a health care emergency. During the fourteen days finishing on March 28, about 10 million individuals petitioned for joblessness protection, overshadowing any past month to month numbers. Assessments recommend that the US economy will decrease by 10% to 25% during the subsequent quarter. The US has entered a COVID-19 downturn.

Consequently, there is a critical prerequisite for directing scholarly examination on several aspects of this exceptionally infectious sickness, to discover viable methods for regulation and treatment of the ailment, until further notice, and in future. We have distinguished a few open doors for scholarly examination identified with COVID-19 and have likewise given recommendations to contain, forestall and treat this viral disease. As of now, there is no particular immunization or medicine for COVID-19. Nonetheless, there are numerous continuous clinical preliminaries assessing likely medicines. WHO will keep on giving refurbished information when clinical discoveries become accessible?

INTRODUCTION

The flare-up of the coronavirus illness 2019 (COVID-19) is one of the most noticeably awful pandemics in the referred to World history (WHO, 2020). As of July 26, 2020, more than 23 million affirmed positive cases have been accounted for internationally, causing more than 800000 deaths. More than 11 million individuals have recovered from the disease (Map-Johns Hopkins, 2020). As the pandemic keeps on desolating the world, various examination contemplates are being led whose centers go from trialing potential immunizations and anticipating the direction of the episode to exploring the attributes of the infection by contemplating contaminated patients.



Early investigations concentrating on recognizing the indications experienced by those tainted by the infection for the most part included patients who were hospitalized or gotten clinical care (Guan, Chen and Huang, 2020). Many contaminated individuals just experience gentle side effects or are asymptomatic and don't look for clinical consideration, in spite of the fact that the particular bit of asymptomatic bearers is unknown (Bai, Chan and Li, 2020). To all the more likely comprehend the full range of manifestations experienced by tainted individuals, there is a need to look past medical clinic or facility centered investigations.

COVID-19 was proclaimed a pandemic by the WHO on 11th March 2020 (WHO, 2020). COVID-19 has become a global crisis in a brief period and will have enduring impacts. There is indispensable need to recognize and examine the zones of scholarly exploration which will be affected by COVID-19 (Gilbert, 2020). The COVID-19 emergency has quick sent the utilization of innovation in psychological wellness care. Innovation is crucial in scaling up access to emotional wellness administrations during and after COVID-19. Given that individuals collaborate contrastingly with innovation, individuals of different ages, specialized capacities, dialects and levels of education will require particular kinds of mediations (Hall et al, 2015). Older individuals are especially powerless during this pandemic and as of now experience the ill effects of high paces of forlornness (Stephenson, 2020)). This is firmly connected with more noteworthy side effects of sorrow and uneasiness (Santini et al, 2020) and physical morbidities and mortality (Perissinotto et al, 2012). Past work shows that more seasoned grown-ups are keen on utilizing innovation to help their psychological wellness, and that portable wellbeing innovation is achievable and solid for evaluating intellectual and dysfunctional behavior (Moussa et al, 2017).

COVID-19 can cause a variety of symptoms of uncontrollably shifting seriousness in individuals. Some may be asymptomatic or have mild symptoms, while others are wiped out enough to require hospitalization, valuable oxygen and the utilization of a ventilator. Extensively, as a respiratory infection, COVID-19 causes windedness, exhaustion and muscle hurt. As the pandemic has advanced and archived clinical case narratives have aggregated, another side effect started to rise – the incomplete or all out loss of the feeling of taste and smell. This in itself isn't abnormal for a respiratory viral disease, yet what was remarkable is that individuals had this side effect with no of the other common manifestations of contamination. It's presently certain that the coronavirus doesn't simply assault the respiratory framework, and a few people have detailed gut issues and issues with their kidneys. Extreme COVID-19 patients have encountered what's known as a 'cytokine storm' in which the body's invulnerable framework goes into a

conceivably deadly overdrive and prompts multi-organ disappointment. This has likewise been seen with flu, SARS and MERS-CoV.

The long-term outlook for COVID-19

A striking element of COVID-19 is the way long the indications can last. From the get-go in the pandemic, starting clinical counsel on recuperation times for gentle COVID-19 had recommended 1 to 2 weeks. In any case, numerous individuals have seen indications keep going for 8 to 10 weeks or more, and side effects can appear to disappear just to return hustling. An exploration bunch at King's College London, UK, built up a COVID-19 tracker application for individuals to record their manifestations day by day, and assessed 2,00,000 have been revealing indications for the whole a month and a half since the tracker was propelled.

Numerous individuals had an example of side effects, where their indications were increased at first, about vanished, at that point returned again with fierceness, alongside an extremely wide scope of manifestations. A key inquiry is what is causing the repetitive side effects – for example regardless of whether it is reactivation of a diligent contamination, reinfection (which appears to be far-fetched dependent on current information), or whether the individual has gotten tainted with another infection or even microorganisms as their insusceptible framework is as yet recuperating. Given the multi-organ impact of COVID-19 on the body, survivors may have an assortment of long haul consequences for their organs, including what a few specialists are calling 'post-COVID lung disease'. The organs that are influenced during contamination could give a thought of where the drawn out impacts on the body are probably going to show. As we are still in the pains of the pandemic, and at a generally beginning phase of another ailment, it is too soon to determine what COVID-19 survivors are probably going to involvement with a year's time. A few scientists are concerned, in any case, that similarly likewise with SARS, numerous individuals with the new coronavirus will proceed to create post-viral interminable weariness disorder. The vulnerability of things to come for COVID-19 survivors is the reason a few long haul companion examines (that review hereditary and natural variables in huge gatherings over some stretch of time) have been repurposed to consider the physical, mental and financial results of the pandemic.

Symptoms	Cold	Flu	Allergies	COVID-19 (can range from moderate to severe)
Fever	Rare	High (100-102 F), Can last 3-4 days	Never	Common
Headache	Rare	Intense	Uncommon	Can be present
General aches, pains	Slight	Usual, often severe	Never	Can be present
Fatigue, weakness	Mild	Intense, can last up to 2-3 weeks	Sometimes	Can be present
Extreme exhaustion	Never	Usual (starts early)	Never	Can be present
Stuffy/runny	Common	Sometimes	Common	Has been reported

nose				
Sneezing	Usual	Sometimes	Usual	Has been reported
Sore throat	Common	Common	Sometimes	Has been reported
Cough	Mild to moderate	Common, can become severe	Sometimes	Common
Shortness of breath	Rare	Rare	Rare, except for those with allergic asthma	In more serious infections
Loss of smell and taste	Sometimes	Sometimes	Never	Has been reported
Diarrhea	Never	Sometimes in children	Never	Has been reported

Coronavirus Risk Factors

Anyone can get COVID-19, and most infections are mild. The older you are, the higher your risk of severe illness. You also have a higher chance of serious illness if you have one of these health conditions:

Chronic kidney disease

Chronic obstructive pulmonary disease (COPD)

A weakened immune system because of an organ transplant

Obesity

Serious heart conditions such as heart failure or coronary artery disease

Sickle cell disease

Type 2 diabetes

Blood clotting, stroke, and embolisms

Doctors report that patients hospitalized for Covid-19 are encountering high rates of blood clots that can cause strokes, coronary failures, lung blockages, and other difficulties. For occurrence, doctors are seeing an uptick in strokes among youthful patients with Covid-19. The blood coagulations additionally can venture out to different organs, prompting progressing medical issues.

Heart damage

Doctors have likewise detailed an expansion in aggravation of and harm to the heart muscle in Covid-19 patients. One investigation distributed in March found that out of 416 hospitalized Covid-19 patients, 19% gave indications of heart harm. Another investigation from Wuhan distributed in January discovered 12% of Covid-19 patients gave indications of cardiovascular harm. Different investigations have since discovered proof of myocarditis, aggravation of the heart muscle that can cause scarring, and cardiovascular breakdown in Covid-19 patients. Presently, doctors caution that Covid-19 survivors may encounter dependable cardiovascular harm and cardiovascular issues, which could expand their hazard for coronary episode and stroke. Specialists likewise caution Covid-19 could intensify existing heart issues.

Neurological side effects

Exploration shows Covid-19 can likewise influence the focal sensory system after patients demonstrated neurological side effects like cerebral pains, dizziness, loss of taste and smell, and weakened awareness. As indicated by scientists, side effects were generally normal in patients with serious instances of the sickness. Be that as it may, research encompassing SARS and MERS discovered neurologic confusions of these infections, including solid shortcoming, deadness, and copying or prickling didn't happen until around half a month into the course of the maladies. Other more genuine intricacies, for example, disarray and trance like states, were likewise found in MERS patients.

Coronavirus Prevention

- Wash your hands often with soap and water or clean them with an alcohol-based sanitizer. This kills viruses on your hands.
- Practice social distancing. Because you can have and spread the virus without knowing it, you should stay home as much as possible. If you do have to go out, stay at least 6 feet away from others.
- Cover your nose and mouth in public
- Don't touch your face.
- Converse with your neighbors about crisis arranging. Join your local talk gathering or site to keep in contact.
- Discover people group help associations that can help with medical care, food conveyance and different supplies.
- Make a crisis contact list. Incorporate family, companions, neighbors, carpool drivers, specialists, instructors, businesses, and the nearby wellbeing office.
- Pick a room (or rooms) where you can keep somebody who's debilitated or who's been uncovered separate from most of you.
- Converse with your kid's school about staying aware of tasks.
- Set yourself up to telecommute if your office is shut.
- Connect companions or family on the off chance that you live alone. Make arrangements for them to beware of you by telephone, email, or video visit.

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THE UTILITY OF QR CODES AMIDST THE PANDEMIC (CORONA VIRUS, COVID -19) IN THE FIELD OF ENGLISH LANGUAGE TEACHING

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ABSTRACT

This study explores the utility of QR codes amidst the pandemic (Covid -19) in the field of English Language Teaching (ELT). The background and emergence of QR codes are included in the paper so that readers can contextualize the study. The spread of Corona virus has affected every field of life including education. The virus started from China in December, 2019 and was declared as a global pandemic on 11 March, 2020 by the WHO ¹ (World Health Organization). To curb the the spread of Covid-19 , many precautionary measures such as maintaining social distance, avoiding touch of the surface and wearing masks etc. are recommended. The use of QR codes has been increased during the pandemic. It is being used in business , education, tourism industry, health sector, entertainment and many more during the pandemic. This paper investigates how QR codes could be integrated and utilized effectively in English Language Teaching (ELT) during the pandemic to implement the safety measures to control the spread of Covid-19. Some sample exercises and activities of teaching English using QR codes are part of the study. A survey is also conducted to get the feedback of English language teachers about the scope, utility and integration of QR codes in ELT. Some suggestions and recommendations are made in the light of the results of the survey. The integration of QR codes in ELT grabs the attention of technology enthusiastic learners. It makes the access of information very easy, safe and fast during the pandemic.

Key words : QR codes, ELT, pandemic, utility, integration

QR codes stand for ‘quick response codes’. They are two-dimensional barcodes which are used to accumulate and store information to be accessed quickly. They could be linked to variety of things such as websites, online videos, audio files, images, documents, text messages, and contact details including email accounts, phone number etc. QR codes can be used in English Language Teaching during the pandemic (Covid 19) in order to stay safe and provide access to the students to many learning resources and activities. QR codes could be used effectively in English language teaching and learning either face to face or online. The purpose of this study is to present the ways how QR codes can be integrated in English Language teaching during the pandemic for the safety of the faculty and the pupils and create a general awareness among English language teacher about its use in English Language Teaching.

THE REEMERGENCE OF QR CODES TECHNOLOGY AND ITS SIGNIFICANCE IN ENGLISH LANGUAGE TEACHING DURING THE PANDEMIC

QR codes (Quick Response Codes) is not a new technology. It was first introduced by a Japanese auto company, Toyota in 1994 to track the manufacturing process of the vehicles and auto parts

¹ (n.d.). Retrieved from WHO coronavirus disease (COVID-19) dashboard. Geneva: World Health Organization, 2020. Available online: <https://covid19.who.int/> (last cited: [05-07-2020]).

(Abeywardena, 2017; Kossey, Berger & Brown, 2015). Later, it was commercialized in 2011 by telecommunication companies, and many industries which started using the QR Codes for the benefits it offers.

Smart phones became the huge supporters for the QR code commercial use (Barcode to 2D 2010). They made the use of QR codes in marketing easy, smooth and accessible to all.

The innovative teachers started integrating it in teaching for better involvement of students in learning process but limited research on educational use of QR codes is done (Chapple, Weir, & San Martin, 2017). Furthermore, there are fewer studies done on the use of QR codes in the field of English Language Teaching (Thorne, 2016).

In the current situation, when the world is adopting every possible measure to curb the spread of Covid-19, the QR codes technology has gained popularity due to its utility and efficiency. Earlier, the use of QR codes was limited to marketing and personal use, but during the pandemic - Covid 19, QR codes are being used intensively in different fields other than marketing.

This technology could be used as an aid to grab and hold the attention of the learners in a safe and secure environment during the pandemic either in face to face or online learning. The integration of QR codes in English Language Teaching will not only make the lectures more interesting, effective and well-planned, but also it is safe due to least physical touch involved in it.

Bakla A. (2018) has presented some practical uses of QR codes in teaching English language skills. He also stressed that the use of QR codes in teaching English could be as limited as the creativity of the teachers who use them in the class.

Dourda, K., Bratitsis, T., Griva, E., & Papadopoulou, P. (2014) offers an educational strategy proposal combining two teaching approaches namely Game-based Learning (GBL) and Content and Language Integrated Learning (CLIL). QR codes technology was used in the strategy to teach primary school learners English.

Learners like to use smart devices as a quick and comfortable source of information and entertainment. The growing passion for using smart phones for everything could be manipulated for teaching English as a second or foreign language through variety of activities. Introducing the practice of QR codes in ELT can help in creating a dynamic and innovative learning atmosphere in the EFL classroom where learners can make use of their smart devices.

Jeon, Y. (2015) advocates in his study that the use of QR codes in teaching English can make English class more interesting and motivating.

QR codes can be utilized in preparing number of activities according to the nature and requirement of different language skills. QR codes can be incorporated effectively in activities based on vocabulary skills, writing assignments, speaking tasks, grammar, listening tracks, reading comprehension and picture description etc. It depends upon the creativity and skill of the instructor in preparing and planning a lecture. Incorporating QR codes in ELT also leads learners to inculcate 21st century learning skills (The University of Houston). When they operate their smart devices for learning English, they practice digital literacy automatically. In case if the smart devices are not working properly for some of the students, they try to fix the problem with the help of their instructor and peers. Consequently, they will learn how to communicate effectively, solve a problem and collaborate with one another to be a successful learner. There is always a scope of innovation and creativity when technology is used in learning and teaching process.

INTEGRATION OF QR CODES IN TEACHING ENGLISH LANGUAGE SKILLS

Writing is the most advanced stage and skill of learning a language. Sometimes, it seems to the learners the most challenging skill because they have to work on vocabulary, grammar, content, coherence and organization of the ideas simultaneously. Many students feel bored practicing writing skills. In this scenario, designing writing tasks with the help of QR codes may prove significantly a life saver for the ESL instructor to grab the attention of the learners. It will ultimately lead to develop the interest of the learners in the writing skill. Scanning the QR code in Figure 1 will connect to a URL where a sample writing assignment with the supporting material is provided. Students can explore the material themselves. This material helps them to complete their writing tasks smoothly and efficiently.



Figure 1. A Sample of QR Codes Writing Assignment

Speaking is another challenging productive skill which involves vocabulary, accent, pronunciation, fluency, interaction, and confidence. Integrating writing and speaking skills through QR codes could be a rewarding activity. Learners will get a chance to use new vocabulary while writing and speaking. This will enable them to build up their vocabulary. Such activities will also boost their confidence in learning a language. Scanning QR code in figure 2 will give them a topic for speaking activity.



Figure 2. QR Codes Speaking Activity

QR codes can also be linked with audio tracks. Scanning QR code given in figure 3 enables learners to access audio tracks in seconds. They can open and play audio tracks on their smart phones. This will ease the access to the listening tracks and they will enjoy learning process more.



Figure 3. Audio Tracks

FEEDBACK GIVEN BY TEACHERS ABOUT THE USE OF QR CODES IN ENGLISH LANGUAGE TEACHING DURING THE PANDEMIC

The opinion of the teachers who used QR codes is also part of this survey. Twenty five university instructors responded on a likert scale about the role of QR codes in ELT during the pandemic.

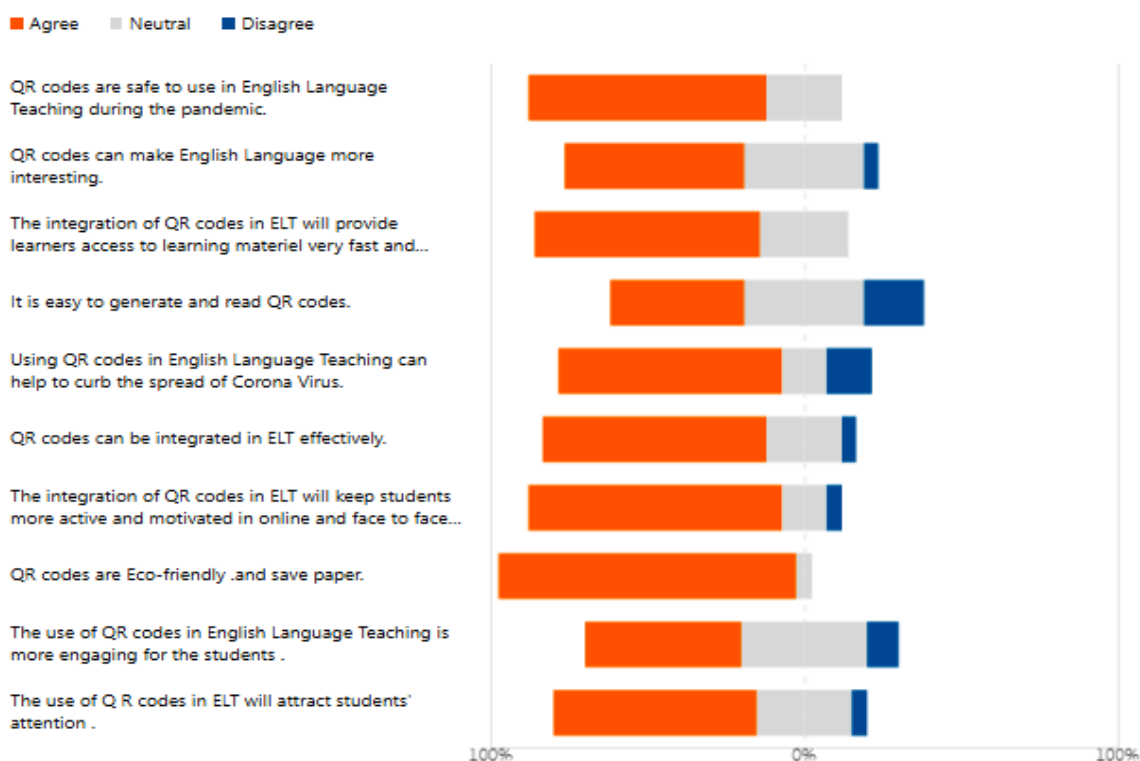


Figure 5. The Role of QR Codes in ELT during the Pandemic, Covid -19

The respondents of the survey have given their feedback about the safety and integration of QR codes in ELT during the pandemic. An open ended question about the utility, scope and integration of QR codes in ELT is also part of the survey. Some teachers suggested that QR codes can be used in ELT even after the pandemic due to the benefits which they offer. QR codes will make students more technology friendly and confident to integrate in learning English. One respondent says that using technology like QR codes in ELT will help to develop adaptability of the current situation among learners because pandemic is still around and in some countries there is fresh wave of infected cases. Another ELT instructor is of the view that QR codes technology facilitates the learning and teaching process and helps giving extra assignments in a safe and secure way that guarantees no transmission of infection.

The result of this survey is of great importance. It highlights the significance of QR codes in ELT during the pandemic. QR codes can provide access to many learning resources in ELT during and post pandemic scenario in a safe manner. Moreover, it is very easy to generate as many QR code as an instructor wants. They are free and also eco-friendly. They can save from printing papers for many things.

GENERATING AND DECODING QR CODES

Many websites and mobile applications generate variety of QR codes. These codes can be downloaded and shared with the students via available channels or Learning Management Systems (LMS). Students

need to install a QR Reader to decode the linguistic task in the activity. The latest smart devices have built in QR codes scanners or QR readers.

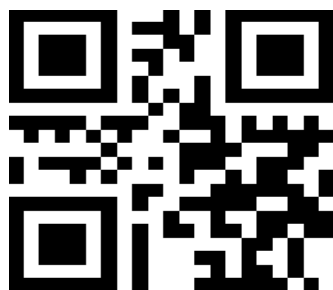


Figure 4. QR Code Generator

The website in the above QR code can generate any number of QR codes. Moreover, it is free. There are also other plenty of applications available on Android and IOS stores which create QR codes free of cost.

I-nigma is a high speed and efficient QR code reader. Students can download it in their smart devices to decode the assignment questions. In this way, they can make effective use their smart phones while learning English. It would also be a novel experience for them to use QR codes for learning a language.

CONCLUSION

English language teaching and learning has evolved due to Covid 19. The integration of QR codes in ELT serves multipurpose. On the one hand, it enables learners to use this technology effectively in learning English; on the other hand, it helps to curb the spread of Covid-19 due to least physical touch involved in it. It also provides learners a fast access to different learning resources. Nothing can replace the power of human brain. Technology is the brain child of human. Hence, the ultimate goal is to integrate technology productively with traditional teaching either face to face or online in EFL classroom during the pandemic where technology enthusiastic learners could be benefited to the maximum. Merging QR codes in ELT is one of the numerous ways to evoke interest in learning a new language. They will not only engage students positively but also enable students to learn 21st century learning skills (The University of Houston) while learning English.

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**IMPACT ON WORKMAN SAFETY & CARE FROM COVID-19
PANDEMIC INFECTION AT WORKPLACE IN INDIAN
MANUFACTURING SECTOR**

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ABSTRACT

At the time when the world is taken by the Covid-19 storm, the Indian Government, in order to contain the spread, morbidity, and mortality, declared a nationwide lock-down. The lock-down order that is not enough for to control corona virus infection.

In the study it found that from the safety and engineering perspective if manufacturing units will use some tools and techniques like to installation of fog system for automatic sanitation which can used in shift releveling, tea time and also in lunch time. The shift should be managed with time gap for to sanitation of workplace, offices, shop-floor. Ensuring wearing of mask, social distancing, sanitation of all workman and employees at shop-floor in all shifts in the coordination with HODs of respective departments and also report have to be submit on daily basis for follow-up to the management. Mandated all commercial, private, and industrial establishments to be take more percussion and care along with social distancing rules at workplace. Covid-19 not only brought economic crisis with itself but the virus which has changed the way in which most of us live, work or perform our basic day to day functions.

The purpose of the study is to explore the impact on workman safety and care form Covid-19 virus infection at workplace. The study understands the organization, as well as workman, and employees, are promoted for healthy work-life environment both mental and physical, with their schedules and convenience limiting employees to a prescribed work schedule.

Key Words- *Workman Safety, Workplace, Covid -19 Pandemic, Indian context.*

Introduction

The ongoing pandemic caused by the SARS-CoV-2 virus (Covid -19) has caused across the globe, forcing entire nations into a self-imposed quarantine to contain the local transmission and community spread of infection. The Government of India has mandated a country-wide total lock-down of all non-essential services. The Covid-19 pandemic and its social and economical impacts have created a global crises unparalleled in the history of the world.

With respect to the continuity of business, companies around the world have switched over to online/virtual modes of working while global mobility has come to a standstill.

The corporate sector to step up and rise to the challenge by going beyond the traditional way of thinking and follow some basic guidelines to maintain connectivity, motivation and excitement with its people, which includes: Inducing flexibility in ways of working by giving the space to your teams to work according to their schedules and convenience without limiting them to a prescribed work schedule, which can have a negative effect on one's productivity.

Today Workman and employees in manufacturing plants are better educated, efficient, ambitious and desirous of self fulfillment through good performance. Improving performance in organization may be demonstrated by way of intensifying effort towards increasing output level and quality. Effective execution of such essential responsibility, to a great extent, depends on the level of health/safety in the workplace. Therefore the challenges for organizations are to focus on updating and integrating their goals with the organizational objectives and bring synergy between individuals and team efforts towards excellence during Covid-19 pandemic situation.

Manufacturing sector is the core field of management which is a continuous process with the technical parameters and standard operating procedure /standard maintenance procedure and its correlation with schedule targets. Existence of significant correlation between effective occupational safety and health policy compliance and sustainable economic growth and development of the organization. In the version of Ogbu (2009), the quality of a work environment has a strong influence on the performance and profitability of organizations.

Workman's and Employee's performance is the key ingredient of any organization's success and studying this process is not a new research area. Several studies have been conducted over the years about employee stress management and work performance in different fields and disciplines. But organizational stress during Covid-19 pandemic can be defined as an emotional, cognitive, behavioral and physiological response to the aggressive and harmful aspects of work, work environment climate is an new for organizations. In the words, during Covid-19 pandemic situation work related stress and people's reactions when they have to face some demands or specials tasks that are out of their abilities or knowledge along with safety and care from virus infection.

Workman Safety & Care during Covid-19 pandemic

Safety constitutes one of the essential human needs under the stress influence, as postulated by Abraham Maslow in his theory of needs hierarchy. Feeling safe at work ranks as a very important factor in job satisfaction

(Kreitner, 2007). Under work environment, Hall and Goodale (1986) describe employee health as the absence of illness or disease resulting from the interaction of employee and the work environment. In general term, health means a state of complete physical, emotional, mental, and social ability of an individual to cope with his environment, and not merely the absence of disease or infirmity (Hippocrate, 1981). Health is the art and science of preventing disease, prolonging life, promoting physical and mental health, sanitation and personal hygiene, control of infections and organization of health services (Lucas, 2001). According to ILO (2005), organizational health and safety focuses on the development of specific measures and programmes, aimed at protecting employees in the course of performing their duties to maximize productivity and improve the overall organizational performance.

In order to fulfill the research gap this study makes an attempt to analyze the effect stress on employee work performance and health / safety.

Material and Methods

The research is majorly descriptive, as it involves an exhaustive study of the job Covid-19 pandemic and its impact on workman safety & care in manufacturing sectors and their contributions towards successfully organizations. This study is descriptive because the problem is diverse and the method would be best suitable for designing research framework, selection of sample and collecting data with the most appropriate tool.

The research would be purely conducted in India from top most Manufacturing Companies from Steel, Textile, Automobile, and Electronic. The Mixed Method Research Approach will be applied for this study as "it involves the use of both qualitative and quantitative approaches in tandem so that the overall strength of a study is greater than either qualitative research or quantitative research (Creswell & Plano Clark, 2007; Creswell, 2009). Used a semi-structured questionnaires is a mix of unstructured and structured questionnaire for online survey. For the purpose of this study the size of the sample is 100 workers from manufacturing sector of India.

Result

The disruption on manufacturing caused by Covid-19 has severe operational, social and financial consequences. It is forcing manufacturers to rethink risk management and contingency plans, workforce safety protocols, manufacturing operations and new ways of working opportunities, all at the same time.

Covid-19 creates significant workforce availability, safety and productivity challenges. Absenteeism may rise because of illness or reluctance and remote support may be required due to quarantine guidelines. These factors will likely cause a decline in productivity as new work processes are put in place at work sites to ensure health adequacy and social distancing of personnel, and revised skilling for multi-role coverage's or new product lines and processes are introduced.

A "worker-first" mindset requires meeting distancing protocols and unique personal protective equipment requirements for the safety of workers and their families. Workers are looking to their leadership for support in staying healthy and productive. Pragmatic human resilience recommendations are designed to help

companies keep the trust of their workforce's by addressing not only their physical safety, but also their mental well-being and need to stay connected with co-workers.

In the study it found that from the safety and engineering perspective if manufacturing units will use some tools and techniques like to installation of fog system for automatic sanitation which can used in shift releveling ,tea time and also in lunch time.

The shift should be managed with time gap for to sanitation of workplace,offices,shop-floor. Ensuring wearing of mask,social distancing ,sanitation of all workman and employees at shop-floor in all shifts in the coordination with Hod's of respective departments and also report have to be submit on daily basis for follow-up to the management. Mandated all commercial ,private,and industrial establishments to be take more percussion and care along with social distancing rules at workplace. Covid-19 not only brought economic crisis with itself but the virus which has changed the way in which most of us live,work or perform our basic day to day functions.

Discussion

Time-to-time updates and information on ways of working: With one being surrounded by tons of articles and news information on the current situation, there is also a greater chance of people getting “psychologically sick”, leading to decreased productivity. Hence, Educating and training to staff with precautions required via emails,posters and open space meetings. Hand sanitizes have been placed in all entry and exit of the departments. Bio-matrics across the company have been closed. Workers are encouraged to wash hands regularly and maintain social distancing while working. Thermal Scanners are being used location wise and temperature of all workers and employees entering the plants are been recorded. Eating areas (Canteens) furniture are being periodically sanitized. Sensitization schedules has been implemented for buses,during Boarding and De-boarding at in plant. Helplines has been created for all workers and employees for any Covid-19 related support. Most of the face to face meetings across the plants are cancel led.

Conclusion

We are living in challenging and uncertain times. Nearly every country across the globe is struggling to reduce the spread of the Covid-19 virus and limit its health, societal, and economic consequences. The full impact on community, work, family, and its intersections is not yet clear. Work & Family, we share a deep concern for the potential impact of this global health pandemic. We similarly stand in awe to all the communities, workers, and families doing their utmost to combat it.

In large parts of the India, seemingly simple measures to keep the spread of Covid-19 at bay, like keeping distance from other people and even washing hands with water and soap, are mere luxuries to many. This is an challenging times for all of us but the one thing we know is that our best response relies on global empathy, cooperation and community building that sit at the heart of our movement. Since highly engaged employees and a productive workforce is a critical need of the moment, it is paramount to make talent a top most priority

and move the needle by implementing strategies and initiatives that benefit society by supporting their employees, customers and the economy at large.

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PSYCHOLOGICAL TRACES OF THE CORONAVIRUS (COVID-19) OUTBREAK ON ELDERLY LIVING IN TURKEY**Nilgun ULUTASDEMIR**Gümüşhane University, Faculty of Health Sciences
Orcid ID: 000-002-2231-5236**Sureyya YIGITALP RENCBER**Batman University, Faculty of Health Sciences
Orcid ID: 000-003-2812-7110**Ebru OZTURK COPUR**Kilis 7 Aralık University, Faculty of Health Sciences
Orcid ID: 000-003-1843-3499**ABSTRACT**

The outbreak called COVID-19 has much negatively affected the society in terms of psychology. Aim of this researching Coronavirus's outbreak to determine psychologic remains on elderly living in Turkey and to present solution suggestions. Cross-sectional and descriptive type of the universe of the study has created 19 May to 19 July 2020, individuals living in Turkey. Owing to pandemic has been achieved 689 people who accept attending to researching applying online survey method up to present. To conduct the research from University and T. C. Ministry of Health Ethics Boards has been obtained by approvals. Researching's data; consisted of questions sociodemographic characteristics including coronavirus outbreak, health-social-psychological effects and Beck Anxiety Inventory (BAI) questions. Elderly average age is 55.37 ± 8.56 . 53.8% of the elderly stated that they had chronic disease. 92.7% of the elderly stated that they used masks outside and 78.8% stated that they were paying attention to social distance. 1.6% of individuals stated that they suffered from coronavirus, 38.5% of them were affected by coronavirus disease in their family or close environment, 17.1% of them were relatives who died of this disease, and 20.5% of them applied quarantine as a suspicious patient. 78.4% of the individuals stated that they stayed at home. In this study, individuals on elderly living in Turkey were found to experience high levels of anxiety due to the coronavirus. Psychological support should be given to the elderly with high anxiety.

Keywords: COVID-19, Psychology, Elderly, Turkey**ÖZET**

COVID-19 adlı salgın, toplumu psikoloji açısından çok olumsuz etkiledi. Coronavirüs salgını araştırmasının amacı, Türkiye'de yaşayan yaşlılara ait psikolojik kalıntıları belirlemek ve çözüm önerileri sunmaktır. Araştırmanın evrenin kesitsel ve tanımlayıcı nitelikte bir araştırma türüdür. . Araştırmanın evrenini 19 Mayıs - 19 Temmuz 2020 tarihleri arasında Türkiye'de yaşayan bireylerden oluşturmuştur. Pandemi nedeniyle online anket yöntemini uygulayarak araştırmaya katılmayı kabul eden 689 kişiye ulaşılmıştır. Araştırmanın yapılabilmesi için Üniversite ve T.C Sağlık Bakanlığı Etik Kurullarından onay alınmıştır. Araştırmanın verileri; koronavirüs salgını, sağlık-sosyal-psikolojik etkiler ve Beck Anksiyete Envanteri (BAI) soruları gibi sosyo demografik özellikleri içeren sorulardan oluşmuştur. Yaşlı ortalama yaşı $55,37 \pm 8,56$ 'dır. Yaşlıların% 53,8'i kronik hastalığı olduğunu belirtti. Yaşlıların% 92,7'si dışarıda maske kullandığını,% 78,8'i sosyal mesafeye dikkat ettiğini belirtti. Bireylerin% 1,6'sı koronavirüse yakalandığını,% 38,5'inin ailesinde veya yakın çevresinde koronavirüs hastalığından etkilendiğini,% 17,1'inin bu hastalıktan ölen akrabası olduğunu ve% 20,5'inin şüpheli hasta olarak karantina uyguladığını belirtti. . Bireylerin% 78,4'ü evde kaldığını belirtti. Bu çalışmada,

Türkiye'de yaşayan yaşlı bireylerin koronavirüs nedeniyle yüksek düzeyde anksiyete yaşadıkları tespit edildi. Kaygısı yüksek olan yaşlılara psikolojik destek verilmelidir.

Anahtar Kelimeler: COVID-19, Psikoloji, Yaşlılık, Türkiye

GİRİŞ

31 Aralık 2019 tarihinde Çin'de Hubei eyaletine bağlı 11 milyon nüfuslu Wuhan şehrinde bildirilen bir olgunun bugüne kadar hiç görülmemiş yeni bir Coronavirüs ile enfekte olduğu saptanmıştır. Covid-19 ilk olarak Aralık 2019'da Çin'in Wuhan şehrindeki deniz ürünleri pazarında bulunan insanlarda görülmüştür. Bu virüsün de SARS-CoV ve MERS-CoV gibi korana virüs ailesinden olup ciddi solunum yetmezliği oluşturan zarflı bir RNA virüsü olup zoonotik enfeksiyon yani hayvanlardan insanlara bulaşmaktadır. Bu hastalık insandan insana bulaşarak, Çin dışında diğer Asya, Avrupa ve Amerika kıtasına yayılmış, hasta sayısı milyona ve ölüm sayısı on binlere ulaşmıştır. Salgın halen pandemi düzeyinde devam etmektedir (Eylül 2020 itibarıyla). Coronavirüs hastalığı (Covid-19) yeni keşfedilen bir corona virüsünün neden olduğu bulaşıcı bir hastalıktır. Covid-19 virüsü bulaşmış çoğu insan hafif ile orta şiddette solunum yolları hastalığı yaşayacak ve özel tedavi gerektirmeden iyileşecektir. Bu virüse bağlı oluşan enfeksiyon hastalığı bazı bireylerde asemptomatik olarak ortaya çıkarken bağışıklık sistemi baskılanmış bireylerde, çocuklarda, yaşlılarda, diyabet görülen bireylerde ve hepatit gibi komplikasyonları olan kişilerde ağır ve ölümlü vakalara neden olabilmektedir ve bundan dolayı enfeksiyona duyarlılığı fazla olan kişiler (immün sistemi baskılanmış kişiler, ileri yaşlı kişiler, kronik hastalığı olan kişiler) toplumun geri kalanından ayrı tutulurlar(1).

COVID-19 salgını, toplumdaki tüm bireyleri ve özellikle yaşlı olarak nitelendiren gruptakileri psikoloji açısından olumsuz etkilemiştir. Dünyada birçok hükümet, söylemlerinde yaş vurgusu yaptı ve böylelikle yaş(lı) ayrımcılığına zemin hazırlayan bir ortam oluştu. Hem devletlerin hem de medyanın dilindeki "yaşlılık" vurgusu, toplumda 65 yaş üstünün "tedbirli" olmasından çok tehlikeli oldukları algısına yol açtı(2).

Türk Dil Kurumuna göre yaşlı, yaşı ilerlemiş, kocamış kimse olarak tanımlanmaktadır (3). Dünya Sağlık Örgütünün 2017 yılında yayınladığı yaş dilimlerine göre biyolojik yaş dört grupta toplanmaktadır. Bunlar:

- 45-59 yaşlar arasındaki bireyler orta yetişkin;
- 60-74 yaş arası bireyler yaşlı;
- 75- 89 yaş arası bireyler ileri yaşlı;
- 90 ve üstü bireyler ise çok yaşlı (ihtiyar) olarak ayrılmaktadır.

Arapça kökenli olan ihtiyarlık kavramının ilk anlamı "seçme, özgür irade, tercih etme", ikinci anlamı "hayırlı ve seçkin", üçüncü anlamı ise "kocalık, yaşlılık" anlamlarına gelmektedir (4). Toplumlar yaşlı nüfus bakımından ise dört gruba ayrılmaktadır (5):

1. Genç toplumlar: 65 yaş ve üzeri nüfus yüzde dörtten azdır.
2. Erişkin toplumlar: 65 yaş ve üzeri nüfus yüzde dört ile yüzde yedi arasındadır.
3. Yaşlı toplumlar: 65 yaş ve üzeri nüfus yüzde yedi ile yüzde 10 arasındadır.
4. Çok yaşlı toplumlar: 65 yaş ve üzeri nüfus yüzde 10'un üzerindedir."

Yaşlılık da aynı şekilde psikolojik, sosyal ve biyolojik olarak tanımlanır. Biyolojik boyutuyla yaşlılık, hücre fizyolojisinden tüm organizmanın fiziksel sağlık durumuna kadar ki temel işleyişte görülen değişimleri ifade ederken, sosyal yönden yaşlılık artan kronolojik yaş ile birlikte toplumsal roller ve sosyal işlevlerdeki değişiklikler anlamına gelir. Psikolojik yönden yaşlılık ise bilişsel ve mental yönden değişiklikleri ifade etmektedir (6).

Yaşlıları korunmak adına 65 yaş üstü bireylerin sokağa çıkması engellenmiştir. Ancak, salgının yayılımı ve mortaliteyi azaltmak için evde kalma süresinin uzaması yaşlılarda ruh sağlığına, işlevselliğe ve beden sağlığına olumsuz etkilerde bulunmaktadır. Çünkü yaşlı bireylerde sağlık

durumu, günlük yaşam aktivite ve rutinlerini devam ettirebiliyor olmaktan çok etkilenir. Ayrıca, yaşlıların hareketlerinin uzun süre kısıtlanması sarkopeniye neden olacaktır. Hem sarkopenin kendisi hem de sarkopeniye ikincil düşmelerin artması gibi durumlar yeni sorunlara neden olur(2).

Pandemilerin toplum üzerinde önemli psikososyal etkileri vardır. Sağlık hizmetlerine ulaşma kaygısı, panik, uyum bozuklukları, depresyon, kronik stres ve uykusuzluk önde gelen etkilerdir. Yanlış bilgi ve belirsizlik kitlesel histeriye neden olur. Bunların arasında yaşlılar özellikle savunmasızdır. Sosyal izolasyon, COVID-19 ile savaşmak için önemli bir strateji olsa da, özellikle depresyon, anksiyete bozuklukları ve intihar için bağımsız bir risk faktörü olan hemşirelik bakımı veya yaşlılık evleri gibi ortamlarda yalnızlığın önemli bir nedenidir. Halk sağlığının çöküşü sırasında sosyal bağlantılılık hayati önem taşır, daha çok “yaş ayrımcılığı” bu marjinalleştirilmiş popülasyonda damgalanmanın bir faktörü haline geldiğinden dolayı bu durum ihmal ve terapötik nihilizme yol açar. Yaşlıların çoğu akıllı telefonlardan veya medyanın dilinden memnun değildir, bu nedenle bir pandemiye karşı alınacak önlemlerin kendilerine kendi basit terimleriyle açıklanması gerekir. Bilişsel bozulma ve gezinme, sinirlilik ve psikotik belirtiler gibi sorunlar paniği daha da kötüleştirebilir ve uzaklaşma ve el hijyeni önlemlerine uymalarını zorlaştırabilir. Dahası, akıl sağlığı bozukluğu olan kişiler (yaşlılar dahil) daha savunmasızdır ve böyle bir kriz sırasında alevlenmeye eğilimlidir. Ayrımcılık ve sağlık hizmetlerinden yararlanmama, yetersiz bakımına katkıda bulunan diğer faktörlerdir. Ruh sağlığı, halk sağlığının temel taşıdır, daha çok yaşlı grubunda hayati önem arz ederken "Viral tedavi" ihtiyacı ruh sağlığının önemini gölgede bıraktığından, küresel panik sadece yayılmanın artmasına yardımcı oluyor.(7)

GEREÇ VE YÖNTEM

Bu araştırma, COVID-19 pandemi durumun bölgesel bazda değerlendirilmesine yönelik kesitsel ve tanımlayıcı nitelikte olan araştırmadır. Araştırmanın evrenini, Türkiye’de yaşayan bireylerden oluşmuştur Pandemi nedeniyle online anket yöntemi uygulanarak araştırmaya katılmayı kabul eden 689 kişiye ulaşılmıştır. Araştırmanın evrenini 19 Mayıs - 19 Temmuz 2020 tarihleri arasında Türkiye’de yaşayan bireyler oluşturmaktadır. DSÖ’nün yaşlılık kategorisi baz alınmıştır.

Araştırmanın verilerinin toplanma yöntemi olarak online anket yöntem tekniği kullanılmıştır. Araştırma öncesinde T.C. Sağlık Bakanlığı Etik Kurullarından ve Batman Üniversitesi Etik Kurulundan gerekli izinler alındıktan sonra, katılımcıların bilgilendirilmiş oluru alınarak, sosyodemografik özellikler, COVID-19 salgını ve sağlık-sosyal-ekonomik-psikolojik etkilerini içeren sorular ile Beck Anksiyete Ölçeği (BAÖ) iki bölümden oluşan sorulardan oluşmuştur. Beck, Epstein, Brown, ve Steer (1988) tarafından geliştirilen BAÖ, anksiyete belirtilerinin sıklığının belirlenmesi amacıyla kullanılmaktadır. Ölçeğin Türkiye’de geçerlik ve güvenilirlik çalışması 1998 yılında Ulusoy, Şahin ve Erkmen (1998) tarafından yapılmıştır. Geçerlik ve güvenilirliği yapılan ölçeğin tüm sağlık çalışanları için Cronbach alpha: 0,90 bulunmuştur. Bu araştırmada Cronbach alpha güvenilirlik katsayısı 0,90 olarak bulunmuştur. Ölçek, 21 maddeden oluşmakta ve her bir madde 0 ile 3 arasında puanlanan likert tipi bir ölçektir. Ölçekten alınabilecek en yüksek puan 63 olup 8-15 puan ‘hafif düzeyde anksiyete’, 16-25 puan ‘orta düzeyde anksiyete’, 26-63 puan ‘şiddetli düzeyde anksiyete’ şeklinde sınıflandırılmaktadır (8,9).

Toplam 21 maddeden oluşan BAÖ, maddeleri katılımcılar tarafından algılanan Anksiyete durumunu ölçen formda puanlar 4’li likert tipinde olup, (1) Hiç etkilemedi, (2) Hafif düzeyde etkiledi, (3) Orta düzeyde etkiledi, (4) Ciddi düzeyde etkiledi, olarak sıralanmıştır (8, 9).

BULGULAR

- Araştırmaya katılan yaşlı bireylerin ortalama yaşı $55,37 \pm 8,56$ olarak bulunmuştur.

Yaşlıların bireylerin;

- % 53,8’inin kronik hastalığı olduğu,
- % 92,7’sinin dışarıda maske kullandığı,
- % 78,8’inin sosyal mesafeye dikkat ettiği belirlenmiştir.

Araştırmaya katılan yaşlı bireylerin;

% 1,6'sının koronavirüse yakalandığı,

% 38,5'inin ailesinin veya yakın çevresinde koronavirüs hastalığından etkilendiği,

% 17,1'inin bu hastalıktan ölen akrabası olduğu,

% 20,5'ine şüpheli hasta olarak karantina uygulandığı,

% 78,4'ünün evde kaldığını belirlenmiştir.

SONUÇ VE ÖNERİLER

Yapılan çalışma sonucunda, Türkiye'de yaşayan yaşlı bireylerin koronavirüs nedeniyle yüksek düzeyde anksiyete yaşadıkları tespit edilmiştir.

Kaygı düzeyi yüksek olan yaşlı bireylere psikolojik destek verilmeli ve kaygı düzeyleri azaltılmalıdır. SARS gibi daha önceki pandemilerden edinilen kazanımlardan yola çıkarak , düzenli telefonla danışma seanslarının, aileyle sağlıklı iletişimin, ilgili ve güncel bilgilerin, genel tıbbi ve psikolojik ihtiyaçlara özen göstermenin ve kişisel alanlarına ve haysiyetine saygı duymanın yaşlılarda akıl sağlığı bakımının önemli bileşenleri olduğu görülmüş ve zihinsel sağlık bakımı ihtiyaçlarının erken tespiti için her düzeyde duyarlılığın sağlanması ve özellikle savunmasız yaşlı nüfus için uygun ve hali hazırda müdahaleleri planlanmasında buna yönelik hizmetlerin verilmesi büyük önem teşkil eder.

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PANDEMİ (COVID-19) DÖNEMİNDE OKUL ÇAĞI ÇOCUKLARI VE ADÖLESANLARIN BESLENME ALIŞKANLARININ VE BESİN DESTEĞİ KULLANIMININ DEĞERLENDİRİLMESİ

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Amaç: Bu araştırmada, pandemi döneminde okul çağı çocukları ve adölesanların beslenme alışkanlıkları ve besin desteği kullanımının değerlendirilmesi amaçlanmıştır.

Materyal ve yöntem: Çalışmaya ailesi tarafından katılmasına onay verilen ve en az 1 aydır sosyal izolasyonda olan 6-17 yaş grubu 222 (Kız: 112; Erkek:110) çocuk ve adölesan dahil edilmiştir. Araştırmaya dahil edilen çocuk ve adölesanların genel ve sağlık bilgileri, beslenme alışkanlıkları ve besin desteği kullanım durumları ailelerinin yardımıyla web tabanlı anket formu aracılığıyla sorgulanmıştır. Elde edilen verilerin değerlendirilmesinde SPSS programı kullanılmıştır.

Bulgular: Çalışmaya dahil edilen çocuk ve adölesanların yaş ortalaması 11.8±3.36 yıldır. Çocuk ve adölesanların %11.3'ünde herhangi bir kronik hastalığın olduğu görülmüştür. Kronik hastalıklar arasında en fazla görülen hastalığın ise solunum yolu hastalıkları (%60) olduğu saptanmıştır. Salgın döneminde çocuk ve adölesanların sadece %4.9'u besin desteği kullanmaya başlamıştır ve %57.1'i bu dönemde beslenme alışkanlıklarında değişim olmadığını, %19.9'u olumsuz etkilendiğini, %23.0'u olumlu yönde değişimin olduğunu belirtmiştir. Çocuk ve adölesanların pandemi öncesi ve sırasındaki ana öğün (PÖ: 2.9 ± 0.41; PS: 2.8 ±0.77, p<0.05) sayılarının anlamlı düzeyde azaldığı ve ara öğün sayılarının ise (PÖ: 1.7±1.06; PS: 2.3±1.28, p<0.05) anlamlı düzeyde artış gösterdiği saptanmıştır.

Sonuç ve öneriler: Bu araştırmayla toplumda önemli bir risk grubu olan çocukların ve adölesanların pandemi dönemine bağlı olarak beslenme alışkanlıklarının değişebileceği gözlenmiştir. Bu yaş gruplarının yaşamları boyunca karşılaşılabilecekleri hastalıklardan korunmaları için yeterli ve dengeli beslenmelerinin sağlanması gerekmektedir.

Anahtar Kelimeler: Covid-19, Okul çağı çocukları, Adölesan, Beslenme alışkanlıkları

EVALUATION OF EATING HABITS AND DIETARY SUPPLEMENTS USE OF SCHOOL-AGE CHILDREN AND ADOLESCENTS DURING THE PANDEMIA (COVID-19) PERIOD

Aim: In this study, it was aimed to evaluate the eating habits and dietary supplements use of school-age children and adolescents during the pandemic period.

Material and method: The study included 222 school-age children and adolescents in the 6-17 age group (female:112; male:110), who were approved by their family and who were in social isolation for

at least 1 month. The general and health information, eating habits and dietary supplements use of school-age children and adolescents included in the study were questioned through a web-based questionnaire with the help of their families. Obtained data was evaluated by using SPSS program.

Results: The mean age of the school-age children and adolescents was 11.8 ± 3.36 years. It was observed that 11.3% of school-age children and adolescents had one of the chronic disease and respiratory tract diseases (60%) was seen most common disease among chronic diseases. It was stated that only 4.9% of school-age children and adolescents started to dietary supplements use during the epidemic period and 57.1% of school-age children and adolescents stated that there was no change in their eating habits and 19.9% of them were negatively and 23.0% of them positively during this period. The numbers of the main meals decreased (Before Pandemia: 2.9 ± 0.41 ; During Pandemia: 2.8 ± 0.77 , $p < 0.05$) and the number of snacks (Before Pandemia: 1.7 ± 1.06 ; During Pandemia: 2.3 ± 1.28 , $p < 0.05$) increased significantly in pandemic to period before the pandemic.

Conclusion: It was observed that the eating habits of school-age children and adolescents who are an important risk group in the society may change depending on the pandemic period in this study. Adequate and balanced nutrition should be provided to protect these age groups from the diseases throughout their lives.

Keywords: Covid-19, School-age children, Adolescent, Eating habits

INTRODUCTION

The pandemic of the 2019 Coronavirus Disease (COVID-19) is a severe acute respiratory syndrome and has caused significant disruption in everyday lifestyle. It was firstly reported in late December 2019 in Wuhan, China and rapidly spread to the rest of the world (Wang, Horby, Hayden, & Gao, 2020). And it was declared a pandemic in March 2020 by World Health Organization (WHO) (Cucinotta & Vanelli, 2020). In Turkey, at the end of March, an important growth in infections and deaths were observed. The whole country became a protected zone, with severe restrictive national measures, such as the closure of all activities not considered essential, including schools/university, sports activities, shops, and factories. Then, it was started the lockdown and school-aged children and adolescents (aged under 20 years) and older people (over-aged 65) were forced to remain at home.

The pandemic-related quarantine can be classified as a stressful event. And such events are known to affect lifestyle, especially diet and physical activity in general. Due to the mandatory staying at home, a sudden and radical change has occurred in the habits and lifestyles of the children. Physical distancing and self-isolation strongly impacted nutritional habits and everyday behaviours of children (Brooks et al., 2020; Sidor & Rzymiski, 2020) (Di Renzo et al., 2020). A healthy balanced diet is an integral part of a personal risk management strategy during the pandemics, such as the one of COVID-19 (Sidor & Rzymiski, 2020). The World Health Organization indicates that a healthy diet can help in the prevention and treatment of the diseases (Lana et al., 2020). Maintaining a correct nutrition status is crucial, especially in a period when the immune system might need to fight back in this pandemic period. Adequate nutrition is considered a potential factor for health in the early stages of life and adolescence (Ruiz-Roso et al., 2020).

It has been hypothesized that the increased out-of-school time may change nutritional habits of children in pandemic period. To our knowledge, no other data about the effects of quarantine in children nutritional habits and lifestyle changes are currently available. So there is need for additional research in this issue. To address this gap in the literature, the objective of the present study was to evaluate eating habits and dietary supplements use of school-age children and adolescents during the pandemic period.

MATERIAL AND METHODS

A web-based, cross-sectional study was conducted using a survey instrument to obtain responses from 222 (110 boys and 112 girls) school aged children and adolescents aged 6-17 years forced to quarantine themselves at home in Antalya, Turkey between 01 April 2020 and 30 May 2020. The questionnaire was made available via online Google forms for a period of two months during COVID-

19 confinement. The permission of the study was taken from the Republic of Turkey Ministry of Health Scientific Research Platform. Ethical approval of the study was obtained from the Clinical Research Ethics Committee of Akdeniz University. The participants consented to participate in the study, with a digital informed consent form. Approval was obtained on the online platform from each parent for their children and adolescents prior to participate in the study.

Data were collected using an online questionnaire prepared by researchers. Children, adolescents and their parents were asked about the children's demographic characteristics, health information, nutritional habits were assessed.

The Statistical Package for the Social Sciences (version 24.0) software was used for all analyses (SPSS, 2011). The evaluation of the demographic characteristics, health information and nutritional habits of the children was based on numbers and percentages. The means and standard deviations (SD) of each question on dietary patterns were measured.

RESULTS

The characteristics, health information and nutritional habits of the children according to gender are shown in Table 1. The mean age of the male and female children was 11.2 ± 3.07 and 12.5 ± 3.52 years, respectively ($p < 0.05$). More than half of children have chronic disease and vitamin-mineral deficiency. Percentage of parents of female (72.3%) children thought that their children have adequate and balanced nutrition were more than parents of male (69.1%). Near the half of children (male: 18.2%; female: 25.9%) had used one of the vitamin, mineral and food supplements before pandemic. But only 10 % of children started to take supplements during pandemic. And it was found that more male children (47.3%) had changed nutritional habits (either positively or negatively) during pandemic than female (38.4%).

Table 1. The characteristics, health information and nutritional habits of the children according to gender (n;%)

	Male (n:110)	Female (n:112)	χ^2 ; p
Education level			
Primary school	44; 40.0	41; 36.6	
Secondary school	48; 43.6	36; 32.1	7.256; 0.027*
High school	18; 16.4	35; 31.3	
Having chronic disease (allergy and respiratory tract diseases)	14; 12.7	11; 9.8	0.469; 0.493
Having vitamin and mineral deficiency	12; 10.9	21; 18.8	2.696; 0.101
Thinking that having adequate and balanced nutrition	76; 69.1	81; 72.3	0.280; 0.597
Changing nutritional habits during the pandemic period	52; 47.3	43; 38.4	1.788; 0.181
Positive/more healthy	27; 51.9	23; 53.5	
Negative/more unhealthy	25; 48.1	20; 46.5	
Taking vitamin, mineral and food supplements			
<i>(Vitamin C, D, B₁₂, multivitamin, iron, probiotic, fish oil, black elderberry, propolis, beta glucan)</i>			
Before pandemic	20; 18.2	29; 25.9	

During pandemic	8; 7.3	3; 2.7	3.933; 0.140
Not taking	82; 74.5	80; 71.4	

*p<0.05

Evaluation of dietary patterns of children was shown in Table 2. The number of main meals significantly decreased and the number of snacks increased in pandemic period to before the pandemic period (p<0.05).

Table 2 Evaluation of dietary patterns of children before and during the pandemic period (X±SD)

Variable	Male (n:110)		Female (n:112)		Total (n:222)		Change	p
	BP	DP	BP	DP	BP	DP		
Number of main meals	2.9±0.37	2.8±0.73	2.9±0.45	2.8±0.81	2.9±0.41	2.8±0.77	-0,1±0,76	0,015*
Number of snacks	1.7±1.01	2.3±1.28	1.8±1.11	2.3±1.29	1.7±1.06	2.3±1.28	0,5±1,05	0,000*

BP: Before Pandemic, **DP:** During Pandemic, *p<0.05.

CONCLUSION

In conclusion, this was the first study analysing nutritional habits changes in children during the lockdown period from Turkey. Further larger studies on this topic are needed to confirm these preliminary results obtained in a limited number of children. Understanding the present children's nutrition behaviour during Covid-19 lockdown will help public health authorities reshape future policies on children's nutritional recommendations when new pandemics arrive and lockdown policies are implemented.

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COVID-19 (YENİ KORONAVİRÜS) SALGINI SÜRESİNCE ÜNİVERSİTE ÖĞRENCİLERİNİN SAĞLIK BAKANLIĞINCA YAYINLANAN 14 HİJYEN KURALINA UYMA DAVRANIŞLARININ İNCELENMESİ

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ÖZET

Bu çalışma üniversite öğrencilerinin Covid-19 salgını sırasında T.C Sağlık Bakanlığının yayınladığı 14 hijyen kuralına uyma davranışını belirlemek amacıyla yapılmıştır. Araştırmanın evrenini 2019-2020 öğretim yılında Süleyman Demirel Üniversitesi'nde öğrenim gören ön lisans ve lisans öğrencileri oluşturmuştur. Araştırmada veriler 17.07.2020- 05.08.2020 tarihleri arasında toplanmış olup anket formunu yanıtlayan 410 öğrenci çalışmanın örneklemini oluşturmuştur. Veriler 36 sorudan oluşan anket formu kullanılarak elektronik ortamda toplanmıştır. Anket formunda sosyodemografik özellikler ve T.C Sağlık Bakanlığı tarafından yayınlanan Covid-19 salgını süresince uyulması önerilen 14 kurala uyma davranışına ilişkin sorular yer almıştır. T.C Sağlık Bakanlığının yayınladığı 14 kuralına uyma davranışı toplam puanı hesaplanmıştır. Çalışmanın yürütülmesi için Sağlık Bakanlığı Covid-19 Araştırmaları Kurulu'ndan, çalışmanın yürütüldüğü üniversitenin Etik Kurulu'ndan ve kurumdan yazılı izin alınmıştır. Ayrıca çalışmaya katılan öğrencilerden de bilgilendirilmiş onam alınmıştır. Verilerin analizi SPSS 25.0 programında yapılmış, verilerin analizinde sayısal ve yüzdeler dağılımı, t testi ve tek yönlü varyans analizi (ANOVA) kullanılmıştır.

Araştırmaya katılan öğrencilerin %78'i kadın, yaş ortalaması 20,46±2,53 yıl'dır. Öğrencilerin %72'si ön lisans, %28'i lisans öğrencisidir, yaklaşık yarısı (%48,3) 1. sınıftır, %31,7'sinin geliri giderinden azdır ve %7,6'sının kronik bir hastalığı bulunmaktadır. Katılımcıların yaklaşık yarısı Covid-19'un neden olduğu hastalık belirtilerinin biri veya birkaçının görüldüğünü belirtmiştir. Katılımcıların en çok uyduğu kuralın "Soğuk algınlığı belirtileri olduğunda maske takmadan dışarı çıkmama" (%90), en az uyduğu kuralın ise "Uyku Düzenine Dikkat Etme" (%38,5) olduğu saptanmıştır.

Öğrencilerin T.C Sağlık Bakanlığının yayınladığı 14 kuralına uyma davranışı puan ortalaması 36,13±4,26 olarak belirlenmiştir. Yapılan analizde cinsiyetin 14 kurala uyma davranışını etkilediği ve kadınların bu davranışlara daha çok uydukları (t=2,004, p<0.05) saptanmıştır. Yabancı dille hazırlık sınıfına devam etmenin, okuduğu sınıfın, genel not ortalamasının ve gelir gider düzeyinin 14 kurala uyma davranışını etkilemediği (p>0.05) belirlenmiştir.

Sonuç olarak üniversite öğrencilerinin T.C Sağlık Bakanlığı tarafından yayınlanan Covid-19 salgını süresince uyulması önerilen 14 kurala uyma davranışı puan ortalamasının yüksek olduğu belirlenmiştir. Öğrencilerin 14 kurala uyma davranışını arttırmak için okullarda bu konuda eğitim verilmesinin uygun olacağı düşünülmektedir.

Anahtar Kelimeler: Covid-19; Yeni Koronavirüs; Hijyen Davranışları; Sağlık Bakanlığı On Dört Kural

EXAMINATION OF UNIVERSITY STUDENTS' BEHAVIORS OF COMPLYING WITH THE 14 HYGIENE RULES PUBLISHED BY THE MINISTRY OF HEALTH DURING THE COVID-19 PANDEMIC

ABSTRACT

This study was conducted to determine the behavior of university students to comply with the 14 hygiene rules published by the Ministry of Health during the Covid-19 outbreak. The population of the research was composed of associate degree and undergraduate students studying at Süleyman Demirel University in the 2019-2020 academic year. The data in the study were collected between 17.07.2020 - 05.08.2020. 410 students who answered the questionnaire formed the sample of the study. In order to carry out the study, written permission was obtained from the Ministry of Health Covid-19 Research Board, the Ethics Committee of the university where the study was conducted, and the institution. In addition, informed consent was obtained from the students who participated in the study. The data were collected electronically using a questionnaire which was consisting of sociodemographic questions and questions related to comply with the 14 hygiene rules published by the Ministry of Health during the Covid-19 outbreak. Also total compliance scores were calculated. The analysis of the data was made in SPSS 25.0 program, numerical and percentage distribution, t test and one-way analysis of variance (ANOVA) were used in the analysis of the data.

Most (78%) of the students were female, the average age was 20.46 ± 2.53 years, 72% of them were associate degree, 28% are undergraduate students, approximately half of them (48.3%) were in first year, and 7.6% have a chronic disease. It was determined that about half of the participants had one or more of the disease symptoms caused by Covid-19. It was determined that the most common rule followed by the participants was "Do not go out without wearing a mask when there are symptoms of a cold" (90%), and the least obeyed rule was "Paying Attention to the Sleep Pattern" (38.5%).

The average score of the students' behavior of obeying the 14 rules published by the Turkish Ministry of Health was determined as 36.13 ± 4.26 . In the analysis, it was determined that gender affects the behavior of obeying the 14 rules and women more obey to those behaviors ($t=2,004$, $p<0.05$). It was determined that attending the preparatory class with a foreign language, the class their studied, the general score average and the income and expense level did not affect the behavior of obeying the 14 rules ($p>0.05$).

As a result, it was determined that the average score of the behavior of university students to complying with the 14 rules recommended to be followed during the Covid-19 epidemic published by the Turkish Ministry of Health was the high level. It is thought that it would be appropriate to provide education on this subject in schools in order to increase the behavior of students obeying the 14 rules.

Key Words: Covid-19; New Coronavirus; Hygiene Behaviors; Ministry of Health Fourteen Rules

Giriş

Dünya Sağlık Örgütü (DSÖ) Çin Ülke Ofisi 31 Aralık 2019 tarihinde, Çin'in Hubei eyaletinin Vuhan şehrinde etiyolojisi bilinmeyen pnömoni vakalarını bildirmiştir. Etken daha önce insanlarda tespit edilmemiş yeni bir koronavirüs (2019-nCoV) olarak tanımlanmıştır. Daha sonra 2019-nCoV hastalığının adı COVID-19 olarak kabul edilmiştir (Türkiye Cumhuriyeti Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü, 2020). DSÖ 30 Ocak 2020'de yeni bir koronavirüsün ortaya çıkmasının uluslararası endişe verici bir halk sağlığı acil durumu olduğunu duyurdu (Liang et al., 2020) Adhikari et al., 2020) Devam eden COVID-19 salgını, şimdiye kadar kişisel hijyen, karantina, bireysel koruyucu ekipmanlar veya temel epidemiyolojik önlemler gibi sıradan hale gelen temel sağlık kavramlarının pratikte uygulanmasının ne kadar büyük öneme sahip olduğunu göstermiştir (Signorelli & Fara, 2020).

Yeni koronavirüs hastalığı pandemisi sırasında önleyici gelişmiş tedbirler uygun el hijyenini içerir (Cavanagh & Wambier, 2020). Tüm Dünyada olduğu gibi ülkemizi de etkisi altına alan Covid-19 salgını boyunca özellikle yaşlı bireyler ve kronik hastalığı olan bireylerin risk altında olduğu bildirilmiştir. Neredeyse her ülke bu pandemiye karşı savaşmak ve yaşlı nüfus ile kronik hastalıkları olan insanları korumak için kısıtlamalar ve yaptırımlar uygulamaktadır, çünkü bunlar risk grupları olarak sınıflandırılmıştır. Bu nedenle, genç nüfus Covid-19'un yayılımını engellemek için bu kısıtlamaları ve kendi kendine izolasyonu takip etmelidir (Aydemir & Ulusu, 2020).

Ülkemiz süreci serinkanlı ve bilimsel verilere dayalı olarak yürütmektedir. Hızla Bilim Kurulu oluşturulmuş, tüm seviyelerdeki eğitim kurumlarında eğitime ara verilerek 65 yaş üzerindeki bireylere sokağa çıkma yasağını uygulayarak hareketliliği, sosyal alan faaliyetlerini ve süreci yüksek hassasiyetle yönetmeye başlamıştır (R. Aslan, 2020). Ülkemizde izolasyon önlemleri nüfusun büyük çoğunluğunun evde kalmasını gerektirmiş ve okullarda salgın nedeniyle örgün eğitime ara verilmiştir. Türkiye’de 20 yaş ve altındaki çocuk ve gençlerin 4 Nisan 2020 tarihinden itibaren sokağa çıkması yasaklanmıştır. Böylece çocuk ve gençler günün tamamını evde geçirmek zorunda kalmıştır. Okulların kapatılması, sosyal etkileşimin en fazla olduğu çocuk ve gençlerin birbiri ile temasını engelleyerek toplumdaki bulaşmanın azaltılması etkili olmuştur (Günay, 2020).

Kişisel önlemler olarak, kişiden kişiye bulaşmayı sınırlandırmak için; maske kullanmak, el hijyenine dikkat etmek, bu amaçla elleri en az 20 saniye sabun ve suyla yıkamak, sabun ve suyun olmadığı durumlarda alkol bazlı el dezenfektanları kullanmak önerilmektedir (Aslan , 2020; Glabska et al., 2020; Soysal ve ark.,2020).

Hasta olan insanlarla yakın temastan kaçınmak; hasta olduğunda evde kalmak kalabalık ve sosyal ortamlardan uzak durmak, iletişimleri 1-2 metrelik sosyal mesafe korunarak 1-2 dakikayı geçmeyecek şekilde yapmak, öksürürken veya hapsirirken ağzı ve burnu örtmek; gözlere, burna ve ağza dokunmaktan kaçınmak; ve sık temas edilen yüzeyleri temizlemek ve dezenfekte etmek, bolca uyumak ve bol sıvı içmek önerilen bireysel önlemlerdir (Morawska & Cao, 2020; Rai et al., 2020; Setti et al., 2020; Srivastav et al., 2018).

Yaygın anlayış, gençlerin hastalıktan etkilenmediği veya hastalığı kolay atlatabildiği yönünde olsa da virüse yakalanan bireyin yaşı önemli olmaksızın, özellikle akciğerlerde kalıcı hasar bırakmaktadır (Aslan, 2020).

Amaç: Bu çalışmada, Covid-19 salgını süresince üniversite öğrencilerinin Sağlık Bakanlığınca yayınlanan 14 hijyen kuralına uyup uymama davranışını belirlemek amacıyla yapılması planlanmıştır.

Araştırmanın Soruları;

- 1- Üniversite Öğrencileri Covid-19 salgını boyunca hijyen kuralına uymakta mıdır?
- 2- Üniversite Öğrencileri Covid-19 salgını boyunca belirlenen kısıtlamalara uymakta mıdır?

Materyal Metot

Araştırmanın Tipi

Covid-19 salgını süresince üniversite öğrencilerinin T.C Sağlık Bakanlığı’na yayınlanan 14 hijyen kuralına uyumunun incelendiği çalışma kesitsel ve tanımlayıcı türde bir çalışmadır.

Araştırmanın Yeri ve Zamanı

Araştırma, Süleyman Demirel Üniversitesi Rektörlüğünün 17.07.2020 tarih ve 87523 sayılı izniyle, Süleyman Demirel Üniversitesi’nde 17.07.2020- 05.08.2020 tarihleri arasında yapılmıştır.

Araştırmanın Evreni ve Örneklemi

Araştırmanın evrenini; 2019-2020 öğretim yılında Süleyman Demirel Üniversitesi'nde öğrenim gören ön lisans ve lisans öğrencileri (N=41380) oluşturmuştur. Örneklem sayısı, büyüklüğü belli olan evren için hazırlanmış olan örneklem büyüklüğü saptama formülü ile belirlenmiştir (Sümbüloğlu K, 2009). Bu çalışmada %95 güven aralığında %5 hata payıyla yapılan hesaplama sonucunda örneklem sayısı 381 olarak tespit edilmiştir. Çalışma araştırmaya katılmayı kabul eden, 410 öğrenci ile tamamlanmıştır. **Çalışmaya;** Türkçe konuşup anlayabilen, çalışmaya katılmaya gönüllü olan ve elektronik onam formu alınan, Süleyman Demirel Üniversitesi'nde öğrenim gören, görme-ışitme-yazma problemi olmayan öğrenciler dahil edilmiştir.

Veri Toplama Yöntemi ve Veri Toplama Araçları

Araştırmanın yürütülmesi için; Süleyman Demirel Üniversitesi Sağlık Bilimleri Etik Kurulu'ndan (24.06.2020 tarih 43/1 sayılı karar), Süleyman Demirel Üniversitesi Rektörlüğünden (17.07.2020 tarihli 87523 sayılı) ve Sağlık Bakanlığı Covid-19 Araştırmaları Bilimsel Araştırma Platformu'ndan (2020-05-24T22_01_40 sayılı) izin alınmıştır. Hazırlanan elektronik anket tüm öğrencilere elektronik ortamda gönderilmiştir. Veriler 36 soruluk bir anket formu ile dijital ortamda toplanmıştır. Anket formunda öğrencilere ait tanıtıcı bilgiler ve hijyen alışkanlıklarına uyma ile ilgili 36 soru yer almıştır. Anket formunda bulunan "Bilgilendirilmiş Onam Formu" kullanılarak öğrencilerin onamı alınmıştır. Anket formunda T.C Sağlık Bakanlığı tarafından yayınlanan Covid-19 salgını süresince uyulması önerilen 14 kurala uyma davranışı toplam puanı hesaplanmıştır. Her bir kural için uymayanlara 1 puan, "bazen uyanlara" 2 puan, uyanlara ise 3 puan verilerek toplam uyma puanları hesaplanmıştır (minimum 14, maksimum 42 puan).

Verilerin Analizi:

Verilerin analizi SPSS 25.0 programında yapılmıştır. Verilerin analizinde sayısal ve yüzdelerik dağılım, t testi ve tek yönlü varyans analizi (ANOVA) kullanılmıştır.

Bulgular

Sosyo-Demografik Özelliklere Ait Bulgular

Katılımcıların; %78'i (320) kadındır, yaş ortalaması 20,46±2,53 yıl olarak bulunmuştur, %72'si (295) ön lisans öğrencisidir, %28'i (115) lisans öğrencisidir, %14,6'sı yabancı dil hazırlık eğitimi almıştır, %48,3'ü (198) birinci sınıf, %43,4'ü (178) ikinci sınıf, %4,1'i üçüncü sınıf, %4,1'idördüncü sınıf öğrencisidir, %1,7'sinin ağırlıklı genel not ortalaması (AGNO) 1,99 ve altında, %18,5'nin 2,0-2,49, %33,4'nün 2,5-2,99, %33,9'nun 3,0-3,49 %12,4'ünün 3,5-4,00 aralığındadır, %60,5'nin ailesinin geliri giderine eşit, %31,7'sinin ailesinin geliri giderinden az, %7,8'inin ailesinin geliri giderinden fazladır. Katılımcıların %95,6'sı salgın sürecinde ailesi ile birlikte, %2'si yalnız, %1,5'i arkadaşları ile, %0,7'si akrabaları ile, %0,2'si diğer bireylerle birlikte yaşadıkları belirlenmiştir. Katılımcıların %4,6'sının 11 Mart 2020 sonrası yurt dışı seyahat planı olduğu, seyahat planı olanların %78'inin seyahatini iptal ettirdiği belirlenmiştir. 11 Mart 2020 tarihinden sonra yurt dışından Türkiye'ye giriş yapan 3 öğrenci olduğu ve bu kişilerden 2'sinin yurt dışından dönüşte ilk 14 günü evinde geçirip, karantina kurallarına uyduğu belirlenmiştir.

Sağlık Durumlarına İlişkin Bulgular

Katılımcıların hastalık belirtilerine ilişkin bulgular Tablo 2'de verilmiştir. Katılımcıların %45,2'sinde Covid-19'un neden olduğu hastalık belirtilerinin biri veya birkaçının görüldüğü belirlenmiştir. En çok görülen belirtinin ise %15,5 görülme sıklığı ile "halsizlik" olduğu saptanmıştır. Katılımcıların %1,5'inde düşmeyen ateş, öksürük ve nefes darlığı yakınmalarının bir arada yaşandığı ve bu şikayetleri yaşayanlarının tamamının (n=6) maske takarak bir sağlık kurumuna başvurduğu ve başvuru yapanlardan 4 kişiye Covid-19 Testi yapıldığı ve 2 kişinin testinin sonucunun pozitif olduğu belirlenmiştir. Test sonucu pozitif çıkan 2 kişiden birinin hastanede tedavi gördüğü ve diğerinin ise evde tedavi gördüğü belirlenmiştir. Evde tedavi gören katılımcı, ev halkını korumak için "kendi odasında karantinada kaldığını belirtmiştir.

Katılımcıların Sağlık Bakanlığının belirlediği 14 kurala uyma düzeylerine ait bulgular Tablo 3'de gösterilmiştir. Katılımcı öğrencilerin büyük çoğunluğunun (%76,6) tüm kurallara tamamen uyduğu

belirlenmiştir. Katılımcıların en çok uyduğu kural “Soğuk algınlığı belirtilerim olduğunda maske takmadan dışarı çıkmama” (%90) iken, en az uyduğu kuralın “Uyku Düzenime Dikkat Etme” (%38,5) olduğu bulunmuştur.

Tablo 1. Sağlık Bakanlığınca Belirlenen 14 Kurala Uyma İle İlgili Bulgular

Covid-19 Salgını Boyunca;	Kurala Uyan		Kurala Uymayan		Kurala Bazen Uyan	
	n	%	n	%	n	%
11- Soğuk algınlığı belirtilerim olduğunda maske takmadan dışarı çıkmadım.	402	98,0	2	0,5	6	1,5
10- Soğuk algınlığı belirtilerim olduğunda yaşlılar ve kronik hastalığı olanlarla temas etmedim.	392	95,6	4	1,0	14	3,4
3-Öksürme veya hapşırma sırasında ağızımı ve burnumu tek kullanımlık mendille kapattım. O anda mendil yoksa dirseğimin iç kısmını kullandım	386	94,1	0	0,0	24	5,9
6-Bulduğum mekanlarda ortamı sık sık havalandırdım.	373	91,0	8	2,0	29	7,1
2-Soğuk algınlığı belirtileri gösteren kişilerle arama en az 3-4 adım mesafe koydum.	366	89,3	7	1,7	37	9,0
1- Ellerimi sık sık su ve sabun ile en az 20 saniye boyunca ovarak yıkadım.	359	87,6	1	0,2	50	12,2
9-Havlü gibi kişisel eşyalarımı ortak kullanmadım.	338	82,4	25	6,1	47	11,5
12- Bol Sıvı Tükettim.	324	79,0	11	2,7	75	18,3
7- Kıyafetlerimi 60-90 derecede normal deterjanla yıkadım.	320	78,0	29	7,1	61	14,9
4-Diğer insanlarla tokalaşma, sarılma gibi yakın temaslardan kaçındım.	316	77,1	8	2,0	86	21,0
5-Ellerimle gözlerime, ağızıma ve burnuma dokunmadım.	231	56,3	24	5,9	155	37,8
8- Kapı kolları, armatürler, lavabolar gibi sık kullandığım yüzeyleri su ve deterjanla her gün temizledim	223	54,4	38	9,3	149	36,3
13.Dengeli Beslendim.	212	51,7	27	6,6	171	41,7
14. Uyku Düzenime Dikkat Ettim.	158	38,5	92	22,4	160	39,0

Puan Ortalaması	36.13 ± 4.26
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Cinsiyete göre 14 kurala uyma davranışı arasında fark olup olmadığını belirlemek amacı ile bağımsız örneklem t testi yapılmıştır. Analize ait bulgular Tablo 2’de gösterilmiştir. Kadınların 14 kurala uyma durumlarının (36,35±4,27), erkeklere oranla daha fazla olduğu ve bu farkın istatistiksel açıdan anlamlı olduğu saptanmıştır (p<0,05).

Tablo 2. Cinsiyete göre 14 Kurala Uyma Durumu ile İlgili Bulgular

Cinsiyet	n	Ortalama	Standart sapma	t	p
Kadın	320	36,35	4,27	2,004	0,046
Erkek	90	35,34	4,11		

Öğrenim görülen bölümün sağlıkla ilgili olup olmamasının, 14 kurala uyma davranışını etkilemediği (p>0.05) belirlenmiştir (Tablo 3).

Tablo 3. Öğrenim Görülen Bölümün Sağlıkla İlgili Olup Olmama Durumuna Göre 14 Kurala Uyma

Öğrenci bölümü	n	Ortalama	Standart sapma	t	p
Sağlıkla ilgili bölüm	323	36,30	4,27	1,530	0,127
Sağlıkla ilgili olmayan bölüm	87	35,51	4,16		

Okuduğu sınıfın, genel not ortalamasının ve gelir gider düzeyinin 14 kurala uyma davranışını etkilemediği (p>0.05) belirlenmiştir (Tablo 4).

Tablo 4. Sosyo-demografik Özelliklere Göre 14 Kurala Uyma Durumu İle İlgili Bulgular

Değişkenler	Gruplar	n	Ortalama	S.S.	t	p
Sınıf	1.sınıf	198	36,38	4,25	2,565	0,054
	2.sınıf	178	35,94	4,32		
	3.sınıf	17	33,88	3,40		
	4.sınıf	17	37,52	3,84		
GANO	1,99 ve altında	7	36,57	3,55	0,418	0,796

	2,00-2,49	76	36,13	4,55		
	2,50-2,99	137	35,80	4,40		
	3,00-3,49	139	36,27	4,24		
	3,50-4,00	51	36,60	3,56		
Gelir düzeyi	Gelir giderden az	130	36,36	4,08	0,280	0,756
	Gelir gidere eşit	248	36,04	4,27		
	Gelir giderden fazla	32	35,90	4,94		

Tartışma ve Sonuç

Çalışmamızda üniversite öğrencilerinin büyük bir kısmının (%95,6) salgın boyunca aileleri ile birlikte yaşadıkları tespit edilmiş olup; (Liang et al., 2020) Çin’de yapılan çalışmada da benzer olarak üniversite öğrencilerinin salgın boyunca aileleriyle birlikte yaşadıkları belirlenmiştir. Covid-19 salgını nedeniyle DSÖ ve diğer yetkili kuruluşlar, bir virüsün yayılmasını önlemenin en ucuz, en kolay ve en önemli yollarından biri olarak sık sık el yıkama ve uygun hijyen prosedürlerinin uygulanması gerektiğini söylemektedir (Głabska et al., 2020).

Bu çalışmada cinsiyetin 14 kurala uyma davranışını etkilediği ve kadınların bu davranışlara daha çok uydukları ($p<0.05$) saptanmıştır.

Polonya’da Covid-19 salgını sırasında bireylerin cinsiyetlerine göre kişisel koruyucu kullanma davranışı incelediğinde, çalışmada kadınların erkeklere göre daha dikkatli olduğu bulunmuştur ($p<0,05$) (Guzek et al., 2020).

Halkın genel hijyen davranışını belirlemeyi ve bu konudaki cinsiyet farklılıklarını araştırmayı amaçlayan bir çalışmada, kadın katılımcıların genellikle erkeklerden daha iyi bir bilgi düzeyine ve daha olumlu davranışlara sahip olduğu bulunmuştur (Suen et al., 2019).

Covid-19 salgını sırasında öğrencilerin el hijyeni, maske takma davranışlarının incelendiği bir çalışmada kız öğrencilerin erkek öğrencilere göre daha uyumlu olduğu bulunmuştur ($p<0,05$) (Chen et al., 2020).

Taşkıran ve ark. (2019), üniversite öğrencilerinin hijyen davranışlarını incelemek amacıyla yaptıkları çalışma sonucunda kız öğrencilerin el hijyeni ve kişisel hijyen puan ortalamalarının erkek öğrencilere göre anlamlı derecede yüksek yüksek olduğunu bulunmuştur. Çalışma sonuçlarımız, literatürü destekler niteliktedir. Covid-19 salgını tüm dünyada yeni yaşanan bir durum olduğu için konuya ilişkin benzer bir çalışmaya ulaşılamamıştır. Bu çalışma sonucunda üniversite öğrencilerinin T.C Sağlık Bakanlığı tarafından yayınlanan kurallara uyma durumunun oldukça yüksek (36.13 ± 4.26) olduğu belirlenmiştir. Bu sonucun öğrencilerin büyük çoğunluğunun sağlık ile ilgili bir bölümde öğrenci olmalarına ve enfeksiyondan korunma konusunda oldukça fazla bilgi sahibi olmalarından kaynaklandığı düşünülmektedir.

Öneriler

Üniversite öğrencilerin 14 kurala uyma davranışını arttırmak için okullarda bu konuda eğitim verilmesinin uygun olacağı ve üniversite öğrencilerine yönelik kamu spotlarının oluşturulması gerektiği düşünülmektedir.

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ROLE OF SELECTED PLANTS AND PLANT PRODUCTS IN IMPROVEMENT OF HUMAN IMMUNITY (NATURAL TREATMENT) AGAINST COVID-19**Sree Sai Vyshnavi NALIMELA**

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ABSTRACT

The history of man is the record of a hungry creature in search of food, thus wrote Van loon in the story of mankind. Man gets food from plants and animals, the later wholly depending on very existence of humanity depends. From thousands of years the biological products of animals and plants have been used by human to treat many diseases. In many ways herbs are used as basis of medicine in human life existence till the date. In different herbs, a wide range of phytochemicals have been identified.

Natural products and folklore medicines are the main contributors of the leads in the design and development of therapeutic agents. Several plant derived compounds have been identified over the years for their discovery and isolation of more specific immunomodulatory agents from plant origin possess potential to counteract the side effects and high cost of synthetic compounds. This review highlights the significance of medicinal plants as produces of immunomodulatory molecules in animals and humans,

Appropriate precautions must be taken to counter the microbial contamination and additional task is the classification of plant derived immunomodulatory agents as per inherent risk. This classification of novel plant derived immunomodulatory agents by level of risk can be endeavour from collective knowledge of metaanalysis of clinical trials, national registries and physicians. Another significant constraint with natural product is inadequate quantities, needed for development and clinical use. So, the development of novel isolation techniques to improve the amount for pharmaceutical applications needs more attention of researchers.

Plants are rich in photochemical like flavonoid etc., which enhance immune function. The flavonoid rich herbs may also possess mild inflammatory action and immune stimulant action. It can promote the activity of lymphocytes, increase phagocytosis and induce interfere on production. Example: Garlic is one of the most remarkable plants that can effect strongly on immune system. Garlic is an immune system booster has been found to exert an immune potentiating effect by stimulating natural killer cell activity.

Key words: Ayurveda, plants .medicinal use, improvement in immunity.

Introduction: Herbal Plants the types of herbs used in treatment of diseases caused by microorganisms. Word is derived from Latin word."herba"and old French word "herbe". Now a day, herb refers to any part of the plant like fruit, seed, stem, bark, flower, leaf, stigma or a root, as well as a non woody plant earlier, the term herb was only applied to non-woody plant, including those that came from trees and shrubs. These medicinal plants are also used as food, flavonoids, medicine or perfume and also in certain spiritual activities. Plants have been used for medicinal purpose long before prehistoric period Ancient Unani manuscripts Egyptian papyrus and Chinese writings described the use of herbs. Eviednces exist the Unani Hakims, Indian Valds and European and

Mediterranean cultures were using herbs for over 4000 years as medicine indigenous cultures such as Rome, Egypt, Iran, Africa, and America used herbs in their healing rituals. While other developed traditional medical systems such as Unani, Ayurveda and Chinese Medicine in which herbal therapies were used systematically.

Traditional system of medicine continue to be widely practised on many accounts, Population rise, inadequate supply of drugs, prohibitive cost of treatments side effects of several synthetic drugs and development of resistance to currently used drugs for infectious diseases have led to increased emphasis on the use of plant materials as a source of medicines for a wide variety of human ailments.

Among ancient civilisations, India has been known to be rich repository of medicinal plants. The forest in India are the principal repository of large number of medicinal and aromatic plants, which are largely, collected as raw materials for manufacture of drugs and perfumery products. About 8,000(Approx.) herbal remedies have been codified in AYUSH (Ayurveda, Yoga, Unani, Siddha, homeo) systems in India. Folk (tribal) medicines are the major systems of indigenous medicines. Among these systems, Ayurveda and Unani Medicine are most developed and widely practised in India.

Recently, WHO(World Health Organization) estimated that 80 percent of people worldwide rely on the herbal medicines for some aspect of their primary health care needs. According to WHO around 21,000 plant species have the potential for being used as medicinal plants.

Medicinal plants are considered as rich resources of ingredients which can be used in drug development pharmacopoeia, non-pharmacopoeia or synthetic drugs. A part from that these plants play a critical role in the development of human cultures around the whole world. Moreover, some plants are considered as important source of nutrition and as a result of that they are recommended as important source of nutrition and as a result of that they're recommended for their therapeutic values. Some of these plants include ginger, green tea, walnuts, aloe, pepper and turmeric etc. Some plants and their derivatives are considered as important source for active ingredients which are used in aspirin and toothpaste etc.

Recipes for the treatment of common ailments such as diarrhoea, constipation, hypertension, low sperm count, dysentery and weak penile erection, piles, coated tongue, menstrual disorders, bronchial asthma, leucorrhoea and fevers and given by the traditional medicine practitioners very effectively

Over the past two decades, there has been a tremendous increase in the use of herbal medicine however; there is still a significant lack of research data in this field. Therefore since 1999, WHO has published three volumes of the WHO monographs on selected medicinal plants.

Importance of some herbs with their medicinal values:

- Herbs such as black pepper, cinnamon, myrrh, aloe, sandalwood, ginseng, red clover, burdock, bayberry, and safflower are used to heal wounds, sores and boils.
- Basil, Fennel, Chives, Cilantro, Apple Mint, Thyme, Golden Oregano, Variegated Lemon Balm, Rosemary, Variegated Sage are some important medicinal herbs and can be planted in kitchen garden. These herbs are easy to grow, look good, taste and smell amazing and many of them are magnets for bees and butterflies.
- Many herbs are used as blood purifiers to alter or change a long-standing condition by eliminating the metabolic toxins. These are also known as 'blood cleansers'. Certain herbs improve the immunity of the person, thereby reducing conditions such as fever.
- Some herbs are also having antibiotic properties. Turmeric is useful in inhibiting the growth of germs, harmful microbes and bacteria. Turmeric is widely used as a home remedy to heal cut and wounds.

- To reduce fever and the production of heat caused by the condition, certain antipyretic herbs such as *Chirayta*, black pepper, sandal wood and safflower are recommended by traditional Indian medicine practitioners.
- Sandalwood and Cinnamon are great astringents apart from being aromatic. Sandalwood is especially used in arresting the discharge of blood, mucus etc.
- Some herbs are used to neutralize the acid produced by the stomach. Herbs such as marshmallow root and leaf. They serve as antacids. The healthy gastric acid needed for proper digestion is retained by such herbs.
- Indian sages were known to have remedies from plants which act against poisons from animals and snake bites.
- Herbs like Cardamom and Coriander are renowned for their appetizing qualities. Other aromatic herbs such as peppermint, cloves and turmeric add a pleasant aroma to the food, thereby increasing the taste of the meal.
- Some herbs like aloe, sandalwood, turmeric, sheetroj hindi and khare khasak are commonly used as antiseptic and are very high in their medicinal values.

Ginger and cloves are used in certain cough syrups. They are known for their expectorant property, which promotes the thinning and ejection of mucus the lungs, trachea and bronchi. Eucalyptus, Cardamom, Wild cherry and cloves are also expectorants.

- Herbs such as Chamomile, Calamus, Ajwain, Basil, Cardamom, Chrysanthemum, Coriander, Fennel, Peppermint and Spearmint, Cinnamon, Ginger and Turmeric are helpful in promoting good blood circulation. Therefore, they are used as cardiac stimulants.
- Certain medicinal herbs have disinfectant property, which destroys disease causing germs. They also inhibit the growth of pathogenic microbes that cause communicable diseases.
- Herbal medicine practitioners recommend calmativ herbs, which provide a soothing effect to the body. They are often used as sedatives.
- Certain aromatic plants such as Aloe, Golden seal, Barberry and Chirayata are used as mild tonics. The bitter taste of such plants reduces toxins in blood. They are helpful in destroying infection as well.
- Certain herbs are used as stimulants to increase the activity of a system or an organ, for example herbs like Cayenne Lal Mirch, Myrrh, Camphor and Guggul.
- A wide variety of herbs including Giloe, Golden seal, Aloe and Barberry are used as tonics. They can also be nutritive and rejuvenate a healthy as well as diseased individual.
- Honey, turmeric, marshmallow and liquorice can effectively treat a fresh cut and wound. They are termed as vulnerary herbs.

Chemistry of plant-derived immune modulators

In different herbs, a wide-ranging of phytochemicals, have been identified such as the

- flavonoids,
- lignans,
- terpenoids,
- polyphenolics,
- sulfides,
- saponins,
- carotenoids,
- curcumins,

- plant sterols and
- phthalides.

How medicinal plants can help immune system?

- Plants are rich in flavonoids, vitamin C, or the carotenoids can enhance immune function.
- The flavonoid-rich herbs may also possess mild anti-inflammatory action. Their beneficial effect named as anti-inflammatory and as an immune-stimulant action.
- Some studies powerfully suggest that garlic is a promising candidate as an immune modifier, which preserves the homeostasis of immune functions because it has a higher concentration of sulfur combinations which are responsible for its therapeutic effects.
- The chemical components of garlic have also been found for treatment of cancer, diabetes, atherosclerosis and hyperlipidemia

Glycosides:

- Glycosides are organic compounds of plant and animal origin which on hydrolysis (enzymatic or acidic) give one or more sugar moieties along with non-sugar moiety.
- In glycosides, sugar group is bonded through its anomeric carbon to another group via glycosidic bond. Glycosidic bond is formed between the hemiacetal group of saccharide and the hydroxyl group of an alcohol.
- The sugar group is known as the glycine and the non-sugar group as aglycone or genin part of the glycoside.T
- The sugars may present in the glycosides may be glucose and rhamnose (monsaccharides) or more rarely, deoxysugars such as the cymarose found in cardiac glycosides.
- For eg. Dendroside A and dendronobilosides A and B, three new sesquiterpene glycosides, have been isolated from the stems of *Dendrobium nobile*, a plant used in Chinese traditional medicine.
- Dendroside A and dendronobilosides A and B were found to stimulate the proliferation of murine T and B lymphocytes in vitro, while dendronobiloside B showed inhibitory activity in this same assay.

Flavonoids:

- Chemically, flavonoids have a fifteen carbon skeleton (C₆- C₃-C₆) which consists of two phenyl rings connected by a three-carbon bridge.
- Several types of flavonoids exert immunomodulatory activities, including apigenin, oligomeric proanthocyanidins, isoflavonoids, flavones, and anthocyanidins.
- Such flavonoids are found in *Terminalia arjuna*.

Vitamin C:

- This particular vitamin is a crucial participant in the army of immunity. It helps prevent the common cold.
- It acts as a powerful antioxidant and protects against damage induced by oxidative stress.
- For severe infections, including sepsis and acute respiratory distress syndrome (ARDS), high dose intravenous vitamin C treatment has been shown to significantly improve symptoms in patients.

Vitamin D:

- Vitamin D supplements have a mild protective effect against respiratory tract infections.
- Most people are deficient in Vitamin-D, so it's best to consult with a doctor about taking a Vitamin D supplement to boost immune response.

Zinc

- Zinc is a vital component to WBC (white blood corpuscles) which fights infections. Zinc deficiency often makes one more susceptible to flu, cold and other viral infections.
- It is advisable to take a zinc supplement, especially for older people.
- **High zinc fruits** include avocados, blackberries, pomegranates, raspberries, guavas, cantaloupes, apricots, peaches, kiwi fruit, and blueberries.

Lycopene:

- Lycopene, a member of the carotenoid family, is a fat-soluble pigment responsible for the red color of certain fruits and vegetables.
- Its pigment protects the plant from damage by oxygen and light. Lycopene possesses antioxidant and anti-proliferative properties in animal.
- has been found to be very protective, particularly for prostate cancer.
- Several prospective cohort studies have found associations between high intake of lycopene and reduced incidence of prostate cancer, though not all studies have produced consistent results.
- The major dietary source of lycopene is tomatoes, with the lycopene in cooked tomatoes, tomato juice and tomato sauce included, being more bioavailable than that in raw tomatoes. Lycopene makes **tomatoes** red and gives other orangey fruits and vegetables their color.
- Processed **tomatoes** have the highest amounts of lycopene, but **watermelon, pink grapefruit,** and fresh **tomatoes** are also good sources
- The dietary antioxidant lycopene reduces oxidative stress and the levels of bone turnover markers in postmenopausal women, and may be beneficial in reducing the risk of osteoporosis.

Elderberry

- Elderberries are full of nutrients including minerals like phosphorus, potassium, iron, copper and vitamins, such as vitamin A, B, and C, proteins and dietary fibre. Elderberries have antibacterial and antiviral qualities which help fight cold and influenza

Licorice root:

- It is good for so many ailments, and one amazing power it has is to boost the adrenals and support the stress response.
- Our adrenal system is intricately linked with your immune system. When we're too stressed and our adrenals are worn down, our immune system is more vulnerable to attack.
- Helping support our adrenals and stress response is a great way to support your immune system!
- Plus, liquorice has been shown to enhance immunity more directly by boosting immune system chemicals that help ward off viruses.

Withania somnifera

- Withania is an adaptogen, which means it can decrease stress levels.
- Stress lowers your immune response and makes the body vulnerable to viral infections.
- Consume *ashwagandha* during this pandemic to reduce the risk of contracting the coronavirus infection



Withania somnifera

- ***Allium sativum***
- *Just like ginger, garlic too will protect us from coronavirus by stimulating our immunity.*
- *It contains allicin- a plant compound that acts as a germicide. But remember, to make the most of garlic, consume it raw or partially cooked.*
- *Garlic has powerful anti-inflammatory and antiviral properties which enhances body immunity.*



Allium sativum

Zingiber officinale

- Ginger has been an age-old remedy for flu and the common cold.
- It can also be effective against COVID-19. It contains gingerol – an antioxidant that can power up our immune system and kill viruses.
- Ginger is particularly good in preventing respiratory tract infections.
- Add ginger to your meals or you can also have it raw.



Zingiber officinalis

Nigella sativa***Black cumin***

- Black cumin extracts can keep you safe from a range of viruses and bacteria that attack our immune system.
- Both black cumin seeds and oil act as antioxidants and help flush out free radicals that weaken your immunity.



Nigella sativa

Curcuma longa

- Turmeric contains curcumin- a phytochemical that can remove toxins from our body and strengthen our immune system to fight off germs and bacteria.
- Add an extra dash of turmeric to our meals or consume it with milk. The bright yellow spice, Turmeric, contains a compound called curcumin, which boosts the immune function.

Curcuma longa



Ocimum sanctum

- *Tulsi* is another wonder herb that is much favoured by Ayurveda.
- This aromatic leaf can be our primary line of defence against COVID-19. [*Tulsi*](#) or basil is a powerful germicide.
- Because of its phytochemicals and antioxidants, it can effectively locate germs, viruses and bacteria the moment they enter our body and destroy them.
- Simply chew a few leaves first thing in the morning. We can also add a few drops of water boiled with *tulsi* leaves into our food.

Ocimum sanctum



Terminalia chebula

- Parts used Dried immature fruits, generally the fruit rind.
- Chemical composition: *Terminalia chebula*, including the triterpenes arjunglucoside I, arjungenin, and the chebulosides I and II.
- Chebulic acid is a phenolic acid compound isolated from the ripe fruits.
- Luteic acid can be isolated from the bark. *T. chebula* also contains terflavin B, a type of tannin, while chebulinic acid is found in the fruits.
- *Terminalia chebula* fruits afforded four immunodeficiency virus type 1 (HIV-1) integrase inhibitors, GA (I) and three galloyl glucoses (II-IV). Their galloyl moiety plays a major role for inhibition against the 3'-processing of HIV-1 integrase of the compounds.
- *Terminalia chebula* has also retroviral reverse transcriptase inhibitory activity.
- It protects epithelial cells against influenza A virus, supporting its traditional use for aiding in recovery from acute respiratory infections.
- *Terminalia chebula* extract (100 mg/kg/p.o.) increased the level of liver mitochondrial enzymes CAT and SO as well as GSH but decreased the level of LPO in the liver when compared to the vehicle, sheep red blood cells (SRBC) and cyclophosphamide-treated groups.
- Secretion of melatonin by pineal gland was enhanced by *T. chebula* treatment. The extract also increased spleen lymphocyte proliferation.
- Immunomodulatory activity of ripe *T. chebula* fruits as evidenced by increase in the concentration of antioxidant enzymes, GSH, T and B cells, the proliferation of which play important roles in immunity.
- This phenomenon also enhances the concentration of melatonin in pineal gland as well as the levels of cytokines, such as IL-2, IL-10 and TNF- α , which play important roles in immunity

Tinospora cordifolia

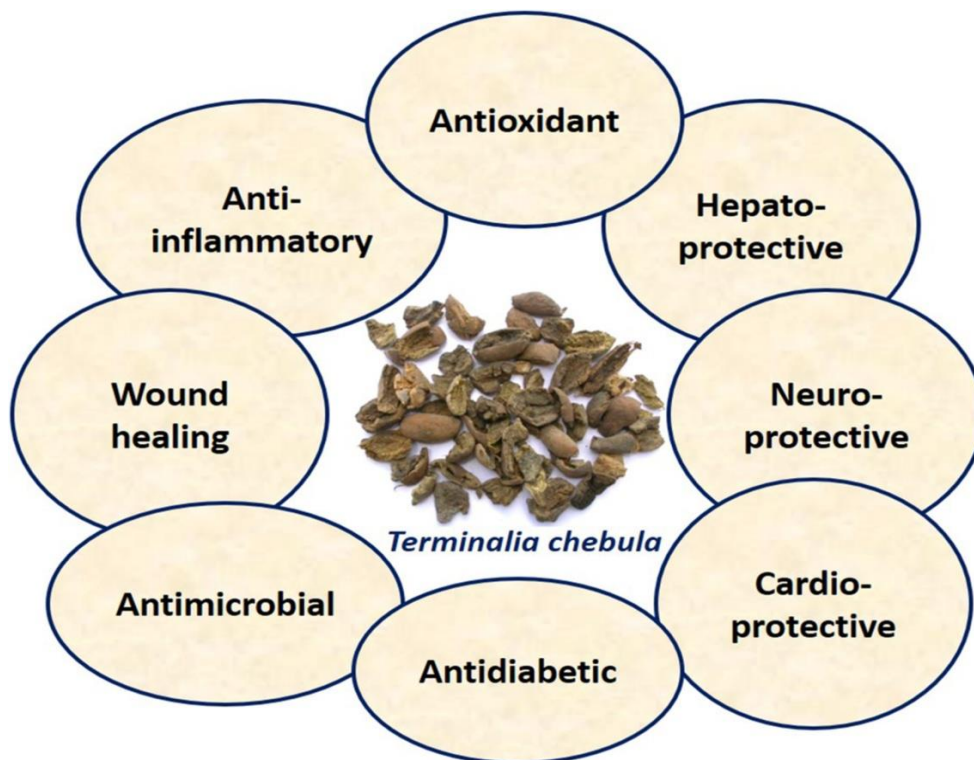
- Ayurvedic name Amrita, Guduchi
- **Menispermaceae**
- Parts used Stem, root, whole plant
- *Tinospora Cordifolia* stimulates granulocytes macrophage formation. It shows predominant neutrophilia and stimulation of macrophage.
- Its bitter nature makes it efficient natural antipyretic agent and capable of producing antibodies that fights against H1N1 Virus.

Biological activities of *T. Cardifolia* concerning different parts of the plant.

Active compound	Biological activity
Terpenoids	Stem: Respiratory track infection [98], skin disease [5], Anti-hyperglycemic property [99].
Alkaloids	Stem and root of plant: Anti-cancer property [100], Antioxidant activity [101].
Lignans	The root of plant: Anti-neoplastic property [102], Antioxidant activity [101].
Steroids	Arial part of stem: Anti-stress activity [83].
Other	The whole part of Plant: Antidote to snakebite and scorpion sting, Analgesic and Neuropharmacological activities, Diabetes, Rheumatoid arthritis, Gout, Cancer, high cholesterol content, antipyretic, antileprotic, radioprotective [8,103, 104, 105, 106,



T.cardifolia



Adhatoda vasica

- It is also called Vasaka or Malabar nut tree
- *Adhatoda vasica* (AV) belong to the family Acanthaceae
- The leaves, roots and young plants of AV contain the quinazoline alkaloids vasicine, hydroxyvasicine, vasicinolone, deoxyvasicine, vasicol, vasicoline, vasicolinone, triterpenes, anisotine) betaine, steroids carbohydrate and alkanes.
- Sore Throat, Throat Pain, Tonsillitis.
- VASICINE compound found in *Adhatoda vasica* is bronchodilator, which eases the breathing process and reduces wheezing due to asthma.
-
-

- Vasaka is commonly used in Ayurveda for fever, upper respiratory tract infections, and cough, positively modulates the immunity of the host.



Adathoda vasica

- The Ministry of AYUSH has recommended the following self-care guidelines as preventive measures and to boost immunity with special reference to respiratory health.
- Drink warm water throughout the day.
- Practice Meditation, Yogasana, and Pranayama.
- Increase the intake of Turmeric, Cumin, Coriander and garlic.
- Drink herbal tea or decoction of Holy basil, Cinnamon, Black pepper, Dry Ginger and Raisin.
- Avoid sugar and replace it with jaggery if needed.
- Apply Ghee (clarified butter), Sesame oil, or Coconut oil in both the nostrils to keep the nostrils clean.
- Inhale steam with Mint leaves and Caraway seeds.
- The things we need to improve your immunity are all within your reach. Consume these herbs and stay home to beat corona virus!

Conclusion

- As our lifestyle is now getting techno-savvy, we are moving away from nature. While we cannot escape from nature because we are part of nature. As herbs are natural products they are free from side effects, they are comparatively safe, eco-friendly and locally available. Traditionally there are lot of herbs used for the ailments related to different seasons. There is a need to promote them to save the human lives.
- These herbal products are today are the symbol of safety in contrast to the synthetic drugs, that are regarded as unsafe to human being and environment. Although herbs had been priced for their medicinal, flavouring and aromatic qualities for centuries, the synthetic products of the modern age

Surpassed their importance, for a while. However, the blind dependence on synthetics is over and people are returning to the naturals with hope of safety and security. It's time to promote them globally.

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CHALLENGES OF FAKE NEWS AND COVID-19 LOCKDOWN**Dr. Charu DUREJA**

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ABSTRACT

In the era of technology and fast paced digitalization, where on the one hand life has become easy and comfortable by facilitating online zoom meeting, virtual classrooms, socialization through facebook, whatsapp, easy and speedy online shopping and home deliveries from web-portals, came as a blessing in our fast and busy environment. Information and communication technology changed our world. It assists people in sharing and exchanging their views, ideas and creativity at a larger platform, where with one click one can share information across the world. Technology has transformed this world into a place which digitally appears to be small and approachable. No one ever thought that the opportunities of connectivity, sharing, information retrieving, online banking, online shopping provided by ICT would also invite cyber criminals and hackers to commit offences of online theft, cheating, impersonation, phishing, spoofing, voyeurism, cyberstalking, hacking, online defamation, dissemination of obscene material, spreading of fake news and rumors, child pornography etc. Fake news is a form of spreading wrong information among the people in general consisting one or more misleading information. Fake news may spread with or without intention i.e. intention is no consequence and spreading of fake news is a criminal offence. The rate at which fake news is increasing in the countries across the world is alarming and has raised new challenges for the society as well as the Governments. There can be myriad reasons for spreading fake news. Since the enormity of Covid-19 has increased and so as the number of fake news too have increased. Vaccine Confident Project has shown that a total sum of 240 million messages are identified on various social media platforms which neared about three million messages daily about Covid-19. IFCN i.e. International Fact Checking Network has stated that 35% of those of the total videos and 30% of the total pictures are marked as fake. This really puts a doubt on the governmental policies. The whole world is battling the challenges not only against Corona Virus but also against the fake news.

Keywords: Fakenews, Information, Myriad, ICT, Spoofing, Phishing

INTRODUCTION

In the era of technology and fast-paced digitalization, where on the one hand, life has become easy and comfortable by facilitating online zoom meeting, virtual classrooms, socialization through Facebook, WhatsApp, easy and speedy online shopping, and home deliveries from web-portals, came as a blessing in our fast and busy environment. Information and communication technology changed our world. It helps people share and exchange their views, ideas, and creativity at a larger platform, where with one click, one can share information across the world. Technology has transformed this world into a place that digitally appears to be small and approachable. No one ever thought that the opportunities of connectivity, sharing, information retrieving, online banking, online shopping provided by ICT would also invite cybercriminals and hackers to commit offenses of online theft, cheating, impersonation, phishing, spoofing, voyeurism, cyberstalking, hacking, online defamation, dissemination of obscene material, spreading of fake news and rumors, child pornography etc. Fake news is a form of spreading wrong information among the general people, consisting of misleading information. Fake news may spread with or without intention i.e. intention is no consequence, and spreading fake news is a criminal offence. The fake news is increasing at an alarming rate in the countries across the world has raised new challenges for society and the governments.

During COVID 19 pandemic, fake news got a boost because of the helplessness of the people worldwide. Today, not a vaccine has been invented by scientists because it involves too many researches and tests. By seeking that chance, some groups of people started to spreading rumors regarding coronavirus. And most of the people have a coherent tendency to believe a fact without correctly judging it. And it leads us towards the dangerous conclusion if we are misguided by those rumors. So before sharing or considering a fact, we must check it from an authentic source like WHO

MEANING OF FAKE NEWS.

Fake news is a form of spreading wrong information among the general people, consisting of misleading information. It is created to defraud people. Generally, mens-rea is an essential factor here. Sometimes, it may be true that those fake news are spreading due to some misconception without intention. No matter what the case, maybe, spreading fake news is a crime in cyber-law. In every country, the alarming number of increasing fake news has raised a new challenge for society and the Government.

REASONS OF SPREADING FAKE NEWS

During COVID 19 pandemic, fake news got a boost because of the helplessness of the people worldwide. Today, not a vaccine has been invented by scientists because it involves too much research and tests. By seeking that chance, some groups of people started spreading rumors regarding the coronavirus. And most of the people have a coherent tendency to believe a fact without properly judging it. And it leads us towards the dangerous conclusion if we are misguided by those rumors. So before sharing or believing a fact, we must check it from an authentic source like WHO.

There are lots of factors or reasons behind the alarming increase of fake news. Those are

1. To increase the viewers or TRP to that particular source of electronic media,
2. To achieve negative popularity among the people in large, to gain political benefit by misleading people and blaming the opposing party or the ruling party as the case may be,
3. To make fun or pranks or memes based on a fact not believing as accurate,
4. For the monitory purpose like fraud or deceive to collect the bank details or ATM pin code so that they can withdraw money from that account,
5. To sail goods or offer service by misinterpreting the real facts,
6. Or to distract the public's attention and curiosity from and highlight topic & create and engage them into something else, etc.

IMPACTS OF FAKE NEWS ON COVID-19

Since the very first case of COVID-19 positive case reported by WHO, a larger group of people started sharing rumors regarding it without any knowledge, information, or solution. They have chosen social media platforms like FACEBOOK, WHATSAPP, TWITER, INSTAGRAM, TIKTOK etc. They share the photos videos claiming it to be issued by Government. People too share wrong information without judging its truth or falsehood. The frequency of spreading those are often more than that of the corona affected patients.

A recent result of VCP (Vaccine Confidence Project) shows that a total sum of 240 million messages are identified on various kinds of social media platforms that means near about 3 million daily messages on COVID-19.

IFCN i.e. International Fact Checking Network recently has ensured that 35% of the total videos and 30% of the total pictures are marked as fake. This is a matter of question on the Governmental policies. The entire world is going through that big challenge if fake news. At that moment, some privacy policies of the user of those social media are compelled to be changed by the CEO of those platforms. As because those giant SNS (Social Networking Sites) gave billion users worldwide, it is too difficult for them to

control them¹. Recently to deal with these problems, the CEO of WHATSAPP has confirmed two important updates by limiting the amounts to forwards a single time from unlimited to only 5 & by showing a level of 'forwarded and numbers of forwards' within the app itself. Even Mark Zuckerberg's FaceBook also launched a new update of fact-checking and auto delete or report option of every post, comments, shares, etc. Thus all of them are trying to hold this challenge within control.

SOME INSTANCE OF THOSE FAKE NEWS IN INDIA OF COVID 19 & ITS IMPACTS ON SOCIETY:

For example, we all have witnessed a few instances of fake viral messages regarding COVID 19. Those are as follows²:

CORONA VIRUS IS SPREADING FROM CONSUMPTION OF CHICKEN Due to that fake news, all the POULTRY firm and sellers suffer huge losses of near about 2000 rupees.

NEWS OF TABLIGHI JAMAAT IN DELHI'S NIJAMUDDIN CAUSED THE HIKE IN CORONA SPREADING IN THE INDIA

Most of those news created a verbal war and hate speech between the opposite religions like Hindu – Muslim Christian etc

FAKE NEWS CLAIMING EXTENTION OF LOCKDOWN" EVEN BEFORE GOVT. HAS DECIDED TO GO FOR IT

INTENTIONALLY SPREADING OF COVID 19

It also checked by fact-checking cite ALT NEWS and proved as fake.

FAKE VIDEOS REGARDING QUARANTINE CENTER" OF THE RULING PARTY TO BRING DISAFFECTION TOWARDS THEM BY OPPONENT PARTIES:

Those are also proved by the cyber-crime department & lodged FIR against those individuals to bring them through the due process of law.

FAKE NEWS AND PUBLIC ORDER DURING COVID 19 PANDEMIC:

Fake news can directly affect the public order of that state. Cybercriminals are also aware that the law regarding fake news is there, but most are nothing but like a toothless tiger. That's why they have chosen the path of spreading fake news to fulfill their aim and desire by making the public fool by those baseless facts.

Sometimes, it is often found that they are trying to spread some news by way that may be identical to a Govt. That's because people may ignore the normal message but they surely will have faith if they find that the same was published as a Government order. Thus they are just making an identical copy of the government to make people believe in it DURING THE PANDEMIC SITUATION.

FAKE NEWS OF COVID 19 & DARKNET³ :

It is not clarified that now a day fake news are generated from Dark-net. This is because the offenders are trying to conceal their identity to avoid legal proceedings in court of law. That's why they are hiding by using the same technology like PROXY I.P, change or hide the IMEI NUMBER, LOCATION ACCESS – for those, it became more difficult to track the criminals. But the trained officers and experts are appointed in CYBER CRIME DEPARTMENT to track their identity by developed technology.

¹ <https://www.thequint.com/news/webqoof/how-coronavirus-misinformation-is-keeping-fact-checkers-across-the-globe-on-their-toes>

² <https://www.orfonline.org/expert-speak/how-fake-news-complicating-india-war-against-covid19-66052/>

³ <https://theconversation.com/sketchy-darknet-websites-are-taking-advantage-of-the-covid-19-pandemic-buyer-beware-143237>

FAKE NEWS INVOLVING SALE OF CORONA PREVENTION KITS :

Due to the excessive demands of mask, sanitizer, hand wash, and other kits among each human being on the earth, some fraud companies are publishing advertisements to attract people. When they want to buy those products, they got cheated. Money has been deducted from the customers' bank accounts, but they can't receive products or got duplicate products instead of originals.

FAKE NEWS CREATING FEAR OF COVID-19:

Another is that many fake posts are shared in social media platforms that are fake, but those can create fear among people in general. Lots of posts we found claiming that "there is COVID-19 positive case near you". But most of them are false checked by the fact-checking authority. Mostly the confusion arises between "covid suspected" and "covid positive". Mainly in India people have a huge tendency to share every single moment in social media. So, as soon as they come to know a rumor flying in the air, they believe it as true without proof & they share those on their social media, which leads to make it viral and create a complicated situation in the society. Those all are creating a challenge before the countries' proper administration.

FAKE NEWS & CYBER-CRIMES :

Fake news and its spreading through any means are treated as an offence. During COVID19, as per the report of various survey, points it out that there are sudden increase in cyber-crimes during that period. Various forms of cybercrimes like hacking, spoofing, stalking etc. are committed day by day. And its spreading can't be tolerated. Fake news is also one of those kinds of cyber-crimes that prevails in society⁴.

LEGAL PROVISIONS RELATING WITH FAKE NEWS

Different laws in different countries regarding fake news. Those are as follows:

LACK OF INTERNATIONAL LAW ON FAKE NEWS :

Though it is the ultimate truth that more or less all the countries on the earth are suffering from fake news and its day by day huge spike, there is no INTERNATIONAL LAW on fake news. It often created problems in those cases where the fake news are generated from one country & cause of action arises in another country just because of the limitation of TERRITORIAL JURISDICTION

LAW OF LAND OF VARIOUS COUNTRIES ACROSS THE WORLD TO DEAL WITH FAKE NEWS:

There are various laws in various countries within their jurisdiction to deal with fake laws. Those can be mentioned hereunder⁵.

INDIAN LAW:

In India, **Information Technology Act, 2008** is in force to deal with cyber offences. But this Act is like a paper tiger in case of dealing with fake news just because the Act came into force in the year 2000 & got amended in 2008 – when the concept of fake news was not a massive attack. That's why the remedy in this Act is not at all useful enough.

The Supreme court of INDIA in **SHREYA SINGHAL V UNION OF INDIA** in 2015 declared **Sec 66A of I.T ACT, 2000** as null and void by invoking writ petition of her as it violated **FUNDAMENTAL RIGHTS U/S 19(1)(a)** of INDIAN CONSTITUTION. Although it was necessary to be declared so, to some extent, it curtailed the provision of fake news as **clause 2 of sec 66A** was dealing with false news.

⁴ <https://www.trendmicro.com/vinfo/pl/security/news/cybercrime-and-digital-threats/fake-news-cyber-propaganda-the-abuse-of-social-media>

⁵ <https://www.loc.gov/law/help/fake-news/counter-fake-news.pdf>

During the COVID-19 outbreak, another Act, i.e. **DISASTER MANAGEMENT ACT (D.M.A), 2005** has come into force to prevent spreading wrong information and fake news of COVID-19. **Sec 54 of the D.M. ACT, 2005** is there to tackle fake news spreading. By the ceaseless efforts of the police officers and investigating departments, lots of people was arrested invoking sec 54 of D.M. ACT who were allegedly trying to share fake news on social media platforms.

LAW OF GERMANY:

GERMANY'S THE NETWORK ENFORCEMENT ACT is there to deal with their cases of fake news. Germany has imposed 50 million Euros as fine on social media if the accused failed to remove that "obviously illegal" contents from the web within 24 hours of receiving a complaint against him.

Further, another pending Anti-botnet legislation was proposed by the Justice Ministers in three German states for dealing with automated social media accounts that spread false news.

LAW OF FRANCE:--

France's ideology and conception to deal with fake news laws are somehow different than the others. It first had a look about the global thought with distinctive legislation on fake news in 2018 about Manipulation of Information.

LAW OF RUSSIA:-

RUSSIA does not have laws concerning this matter to date. However, a Bill has been proposed to deal with the publication of "FALSE INFORMATION" on social media & to declare it a criminal offence and make it punishable before the court of law.

This law, if passed, shall be applied not only upon any individuals but also it plans to include companies and corporations too.

LAW OF USA:-

In the US congress, the NATIONAL DEFENCE AUTHORIZATION ACT was passed in July 2017. This Act targets explicitly Russian discrimination operation.

LAW OF CHINA:-

China has sought to regulate any fake news under its CYBERSECURITY LAW. Further, it is to be said that the laws of cybersecurity of China have been broadly drafted there.

CONCLUSION

India has been fighting two viruses simultaneously; one real and other the fake but equally dangerous. Fake news and misinformation have posed numerous hurdles for governments at all levels; central, state, and local, fighting against the pandemic. Authorities have repeatedly engaged in issuing clarifications to keep people from not falling prey to such rumors and fake news. Even one saw the reports of social media companies such as Google, Facebook, and other intermediary platforms in mid-February deciding to create an Information Trust Alliance (ITA) to tackle fake content. But it has borne little fruit if the latest findings from BOOM are to be seen. With the existing [Information Technology \(IT\) Act 2008](#) proving to be toothless to tackle fake content, the central and state governments have invoked the provisions of (Section 54) of the Disaster Management Act (DMA), 2005 to check the menace. A few states have imposed sedition laws to tackle fake news and [violent attacks and stigmatization of frontline health workers and paramedics](#). While hundreds of attackers have been arrested and several social media platforms have been issued with warnings, the fake news ecosystem surrounding the virus continues to flourish. It significantly impacts [the country's inter-community relations](#) and its collection efforts against a life-threatening pandemic.

Thus, we can easily understand that more or less all the large country with colossal populations has some laws regarding fake news. Further, it is indeed a very new challenge for all the countries' administration. Many countries plan to enact new rules for this purpose that could not be completed due to the pathetic situation of COVID-19 across the earth.

PANDEMIC AND POPULAR CULTURE: PERSPECTIVES AND TRENDS**Dr. PRATIBHA**

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ABSTRACT

COVID 19 pandemic has suddenly changed the face of the entire world. Along with all the spheres of knowledge, research and scientific developments, it has also had a huge impact on the psychological, social and cultural domains pertaining to humankind. Humanity has had a history of pandemic or similar kinds of apocalyptic crisis and each one has left a deep impression on the popular culture of that particular age and time. We know the way writers, artists, filmmakers, advertisement agencies and other patrons of popular culture have responded to the pandemic situation. New genres are emerging in the fields of literature, cinema, languages, music sports, cyber culture, advertising, television etc.--the components of Popular Culture or Pop Culture. Talking about etymological sense of the word 'culture', it has its roots in Italian language where it originally meant 'cultivation'. Gradually it came to mean anything that was built/created by humankind or a 'set of practices' of humankind which created some meaning- as averred by the practitioners of Cultural Studies. However, the meaning of culture is not fixed. It changes from time to time from place to place and there are various determiners which always make it dynamic in the realm of space and time. It is not stable and keeps changing its meaning depending upon the identities, regions and situations such as the present one. The word 'popular' also has its roots in the Italian word 'populus' which simply means 'people'. So, Popular Culture means dominant ideas, beliefs, notions, experiences and practices relating to/pertaining to general people/mass at a particular time. Some common Pop Culture categories are films, television/entertainment media, music, video games, fashion, technology, slang, sports, print literature like graphic novels, comics etc. The current paper aims to give an overview of some recent trends that have emerged in the various areas of popular culture due to the unexpected and unprecedented outbreak of the pandemic COVID19 and how some of these trends are going to have a lasting impression on the history of humankind by remaining permanently etched in the annals of the current civilization as a memorabilia of COVID19 that shook the world.

Key words: Pandemic, Pop Culture, Popular Culture, COVID19

INTRODUCTION

Mathew Arnold's Culture and Anarchy is considered to be the first formal treatise in the field of cultural studies in which he defines culture as "aiming for perfection" talking essentially about the culture of the elite. F.R. Leavis, however, in "Mass Civilization and Minority Culture" says that culture belongs to the minority of society, in where the appreciation of art and literature depends. Culture is a powerful influence upon people and there are many defining factors of culture like philosophy, religion, traditions, customs etc. The term 'culture' etymologically is based on the term 'cultura animi' referring to the cultivation of soul, as meant by the ancient Roman orator Cicero. Later, in middle English phase, the word came to mean a 'place tilled'. It has a parallel in Latin also which came from the word 'colere' meaning to 'inhabit', till, worship, care for etc. Paul G. Herbert in Cultural Anthropology defines culture as "the integrated system of learned patterns of behaviour, ideas and products, characteristics of a given society." One of the most staple features of culture is that it is dynamic, it changes, it is not static and that it has the ability to innovate. Cultural Studies as a discipline came to the fore with Richard Hoggart's establishment of Centre for Contemporary Cultural Studies at the University of Birmingham. Stuart Hall, who replaced Hoggart as the Director later carried the legacy forward. The works of Raymond Williams, a Welsh Marxist theorist, also laid foundation for the fields of cultural studies. Cultural Studies contrasts notions of high culture with popular everyday forms practised by minorities and it subverts the distinction between high and low culture.

LITERATURE REVIEW/ POPULAR CULTURE

Popular culture is also known as Pop Culture or Mass Culture, and it was a by-product of the urbanization and Industrial Revolution of the nineteenth century. In the article “Sociological Definition of Popular Culture”, Ashley Crossman writes, “Popular culture (or “pop culture”) refers in general to the traditions and material culture of a particular society. In the modern West, pop culture refers to cultural products such as music, art, literature, fashion, dance, film, cyberculture, television, and radio that are consumed by the majority of a society’s population. Popular culture is those types of media that have mass accessibility and appeal”. The term is believed to have been coined in nineteenth century when after the Industrial Revolution, the working class was moving towards urbanisation culminating into creation of a culture of their own. People began spending money on means of entertainment like pubs and sports thereby giving birth to commercialisation and capitalist tendencies of tapping on a great consumer potentiality and profit making. In this sense, Popular Culture contrasted with that of ‘High Culture’ or ‘culture of the elite’. Ashley Crossman in the aforementioned article further extrapolates the term by writing the six most important definitions of the term as given by John Storey In his wildly successful textbook “Cultural Theory and Popular Culture” (now in its 8th edition). These definitions are quoted below from the same article:

1. Popular culture is simply culture that is widely favoured or well-liked by many people: it has no negative connotations.
2. Popular culture is whatever is left after you've identified what "high culture" is: in this definition, pop culture is considered inferior, and it functions as a marker of status and class.
3. Pop culture can be defined as commercial objects that are produced for mass consumption by non-discriminating consumers. In this definition, popular culture is a tool used by the elites to suppress or take advantage of the masses.
4. Popular culture is folk culture, something that arises from the people rather than imposed upon them: pop culture is authentic (created by the people) as opposed to commercial (thrust upon them by commercial enterprises).
5. Pop culture is negotiated: partly imposed on by the dominant classes, and partly resisted or changed by the subordinate classes. Dominants can create culture but the subordinates decide what they keep or discard.
6. The last definition of pop culture discussed by Storey is that in the postmodern world, in today's world, the distinction between "authentic" versus "commercial" is blurred. In pop culture today, users are free to embrace some manufactured content, alter it for their own use, or reject it entirely and create their own.

These definitions summarise in a nutshell what Wikipedia says about the term i.e. “Popular culture (also called mass culture and pop culture) is generally recognized by members of a society as a set of the practices, beliefs and objects that are dominant or prevalent in a society at a given point in time.” Dustin Kidd in the article “Popular Culture” says that, “Popular culture is the set of practices, beliefs, and objects that embody the most broadly shared meanings of a social system. It includes media objects, entertainment and leisure, fashion and trends, and linguistic conventions, among other things. Popular culture is usually associated with either mass culture or folk culture, and differentiated from high culture and various institutional cultures (political culture, educational culture, legal culture, etc.)”

In the first chapter of the book *Introduction to Popular Culture* Raymond Schuck writes, “We can begin to answer the question “What is popular culture?” by defining the word “culture.” Building out of the work of cultural theorist Raymond Williams, we can define culture as “a particular way of life”. A “way of life” includes a lot of things, including traditions, values and beliefs, behaviours, everyday activities, rituals, norms and rules, objects, and much more.” which means that Schuck basically understands Pop Culture as a set of routine practices, of every day life. Dictionary.com defines Popular Culture as, “ cultural activities or commercial products reflecting, suited to, or aimed at the tastes of the general masses of people.” Dai Smith in “The History of Popular Culture” says that “it is the description and analysis of the popular tastes, customs, folk beliefs, manners and entertainments within any given social order. In short, it is the culture of most of the people as opposed to the culture organised, thought and transmitted by various elites.” All these and more definitions of Popular

Culture basically point to just one direction- Pop Culture is the culture of the masses, of the people, how and what things in everyday life appeal to them. “It is the set of practices, beliefs, and objects that embody the most broadly shared meanings of a social system. It includes media objects, entertainment and leisure, fashion and trends, and linguistic conventions, among other things.”

PANDEMIC AND POPULAR CULTURE

As we have discussed earlier, one of the most dominant characteristics of culture is that it keeps evolving and keeps changing. It is never the same, it varies from society to society and place to place but it always keeps adding to itself. Socio economic, religious, psychological scenario, trends and currents on global/local level and similar changing patterns in the society have a bearing on culture. According to Wikipedia “Popular culture is constantly evolving and occurs uniquely in place and times. It forms currents and eddies, and represents a complex of mutually interdependent perspectives and values that influence society and its institutions in various ways.” So, when Popular Culture is constantly evolving, it is natural that a humungous global crisis like COVID 19 would definitely start a new genre in the domain of Popular Culture. We are living in the times of flourishing and thriving social media and things getting ‘viral’ at the drop of hat. Julie McGaha writes in the article “Popular Culture and Globalisation” that Popular Culture is “Heavily influenced in modern times by mass media, and that it permeates the everyday lives of people in a given society. Therefore, popular culture has a way of influencing an individual's attitudes towards certain topics.” COVID situation has given birth too many genres and sub genres of Pop Culture and they are heavily popularised by the social media. Let us have a look at some of these categories of pop culture- originated from and rooted in the Pandemic situation and became instantaneous hit with the millennials and other people across the globe via cyber culture.

COVID VOCABULARY

- Dictionary.com gives a list of COVID related new words that have been created by people and they have gained popularity and acceptance in the communication and conversation related to the pandemic.
- **“COVIDIOT-** A blend of *COVID-19* and *idiot*, *covidiot* is a slang insult for someone who disregards healthy and safety guidelines about the novel coronavirus.
- Some signs of *covidiocy* are: not washing your hands regularly, hanging out in groups of people, standing within six feet of a stranger at the grocery, hoarding items like toilet paper and hand sanitizer all to yourself.
- **MORONAVIRUS-** Another term for a *covidiot*. The wordplay, here, centers on the word *moron*.
- **Example:** *My roommate is being such a moronavirus. He went down to the beach with a huge group of friends.*
- **Quaranitini--**How do you take your *quarantini*? Dirty, dry? Shaken, stirred? Vodka, gin?
- *Quarantini* is a slang term for a *cocktail* people drink at home while under quarantine during—and because of—the coronavirus.
- **ZOOM BOMBING-** This one’s a more serious entry. When using Zoom or similar services, be wary of *zoom-bombing*. This is when uninvited guests to a virtual meeting disrupt it with various obscene, violent, or offensive images or words.
- *Bombing*, here, is based on *photobombing*, or when people ruin a photograph by appearing in the image without the photographer’s knowledge, often in some dramatic or comical way.
- **ZUMPING** --The experience of COVID-19 isn't just taxing on couples who live together. People who are dating are also reconsidering their relationships during the pandemic—and sometimes *zumping* each other.
- A blend of *dump* and *Zoom* (the popular video service), *zumping* is when you break up with someone over a video conferencing service. At least they didn't just text? (Hey, you can do better, anyways).

- CORONACATION: Coronavirus-compelled *staycations*, due to cancelled classes, shifts, and the like. It's usually an ironic term—just ask parents working from home while teaching their kids.

PANDEMIC POETRY

The article Post-pandemic poetry: As world comes to a screeching halt, 'digital poets' are writing odes to nature, says that “there is finally time now for everyone to ‘stand and stare’, as W H Davies put it, just over a century ago. Amid more bucolic imagery, Davies had also written about ‘streams full of stars, like skies at night’. The article “Poetry in the times of Covid-19” by Anusuya Menon says that Much is being written about this virus that “binds us, but holds us apart”. People have taken to verse to express their new realities and the internet abounds with poetry.

#coronapoetry and covid19 poetry are trending on social media. Instagram has poets' communities from around the world versifying by the minute about the challenges the virus has thrown up — isolation, quarantine, sickness and loneliness.

Irish priest, Brother Richard Hendrick's poem *Lockdown* is one such. It went viral, as the world resonated with it. He speaks of the birds that have begun to sing again and of skies that have turned blue again. The Poem is like this:

*“Yes there is Fear
Yes there is isolation.
Yes there is panic buying.
Yes there is sickness.
Yes there is even death.
But,
They say that in Wuhan after so many years of noise
You can hear the birds again.”*

The poem became very popular on social media platforms because it was so much in tune with the hidden blessings, ironically enough, arising from the pandemic and the subsequent lockdown imposed upon the world. “Humans have always had their own ways to cope with disaster and literature and poetry have always been born out of great suffering,” says Bhaskaran Bara, artist, writer and poet. “Now, we have the facility to air our haikus and verses instantly as they occur to us.” British poet Simon Armitage in a poem, (also titled 'Lockdown') remembers the villagers of Eyam in Derbyshire, who locked themselves up during the 17th century outbreak of plague:

*“And I couldn't escape the waking dream
of infected fleas
In the warp and weft of soggy cloth
By the tailor's hearth...”*

“Ultimately, it is about taking a re-look at your priorities”, says Kristin Flyntz in her poem, “An imagined letter from Covid 19 to Humans,” which was shared over 27,000 times on social media and is still being passed around. In it, she writes:

*“Despite what you might think or feel, we are not the enemy
We are messenger. We are Ally. We are a balancing force*

We are asking you.

To stop, to be still, to listen...

Another article “ COVID19- Minu Bakshi’s 60 Seconds Poem Says it All” by Angela Paljor gives an insight into pandemic themed poetry of this poet Minu Bakshi, who has created 60 seconds ‘shayari’ (urdu verses) on COVID. The article begins by saying that “Every time the world collectively experiences a traumatic episode, it finds succour through art. Example: the Spanish flu pandemic of 1918 gave birth to musical genres such as the Blues, among others. The COVID-19 pandemic is no exception, and among the many who have turned to self-expression to deal with the crisis is acclaimed singer and poet, Minu Bakshi, who has recently composed a one-minute shayari on COVID-19.”

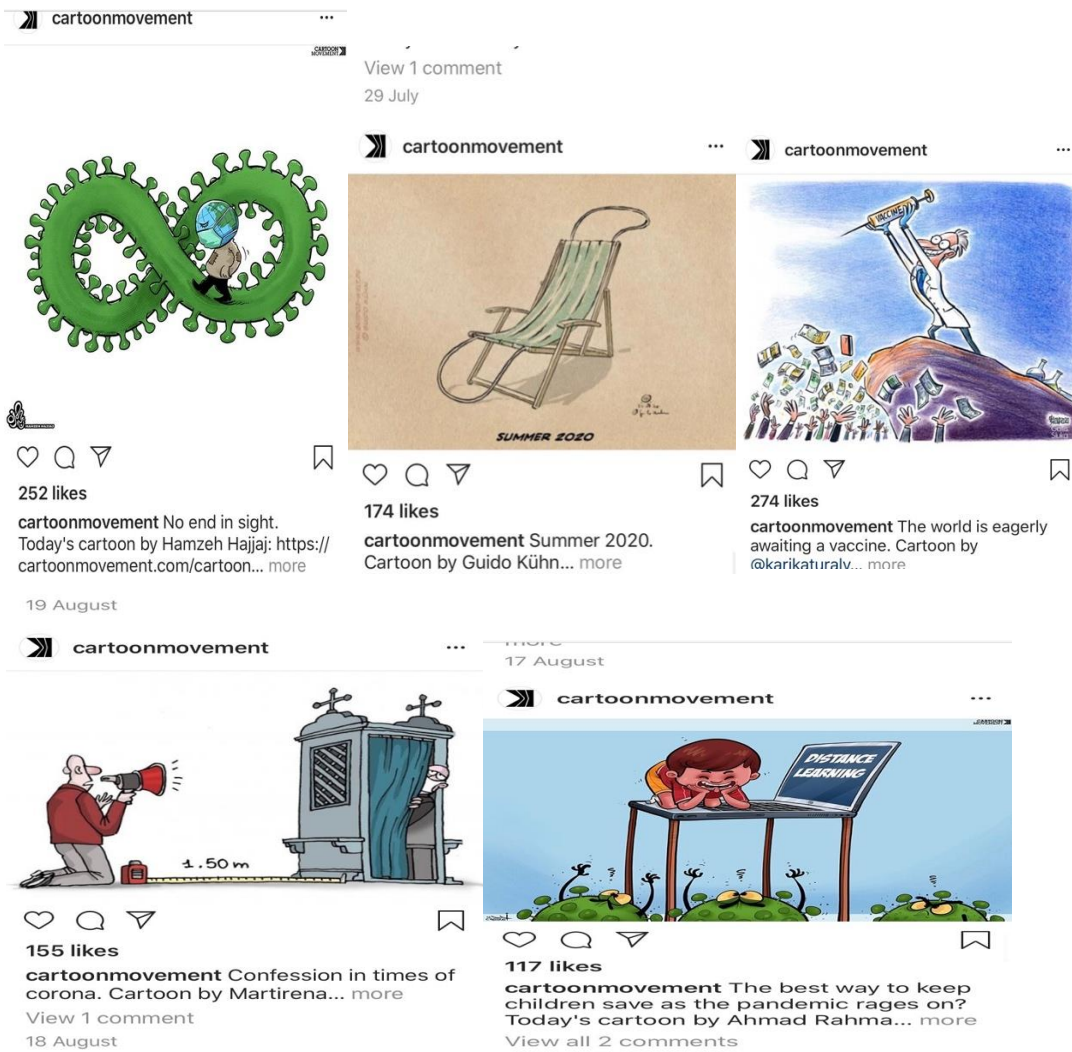
Raftaarkarokam, kebachenge to milenge; Gulshan narahega to kahanphoolkhilenge

(Slow down the speed, we will meet if we survive; If there are no gardens left, where will the flowers bloom?) The poet says that “I believe that human beings have really taken nature and life into their hands and caused havoc”

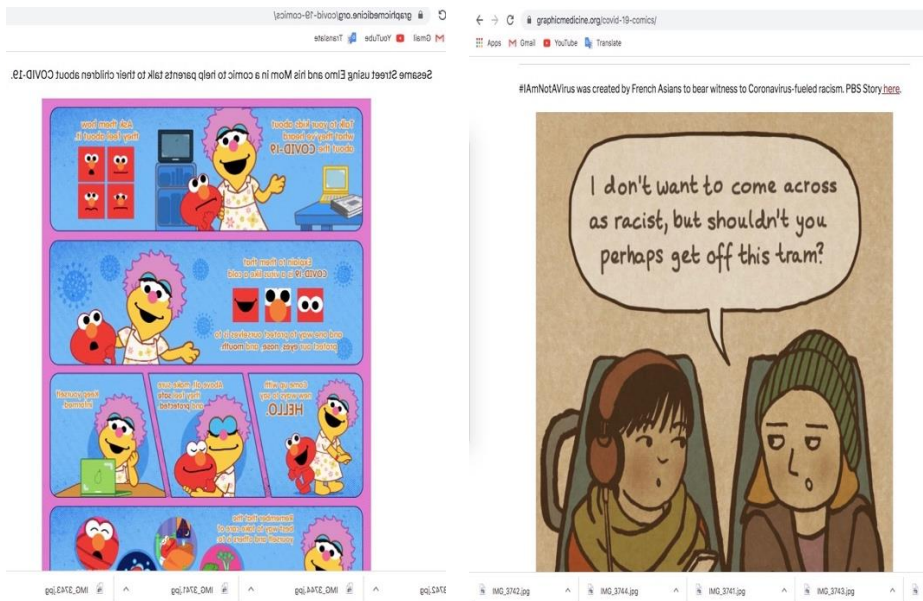
PANDEMIC CARTOONS/GRAPHIC NOVELS/COMICS

Almost all social media platforms are immersed with cartoons on the pandemic but Instagram is particularly a popular one. There is one particular page named ‘Cartoonmovement’ which is an open rostrum of cartoonists from all over the world, contributing their creations and naturally, some of their recent features are excellent cartoons on COVID. Let’s have a look at some of them





Some comic strips on pandemic are really interesting as well. Graphicmedicine.org has some informative and evocative comics strips. Some of them are given below for quick reference:





The first comic strip above is by the famous Children Comics Sesame Street, and this comic series is to teach the children in a fun and play way method the basics of Coronavirus disease. The second strip takes a thoughtful and biting dig at racism that came to the fore all afresh in the wake of the pandemic. The third strip is to portray the multitasking fathers during lockdown, I particularly liked this one for its gender neutral depiction of household chores and child care work. The fourth strip is also about sensitising each other about the protocols and safety measures to prevent the spread of the virus. The fourth one is ironically humorous where a maths teacher is unsuccessfully trying to calculate the total expected damage from the virus in terms of loss of human lives. In the last strip, the ghost of Susan Sontag is awoken from the deep slumber so that it can spread awareness about the fatal virus.

PANDEMIC ART

Washington Post asked its readers to send them the art that they had been creating during the pandemic lockdown. They received more than 650 entries from near and far and the entrants belonging to all age groups. They brought out a special feature to publish the best of all the submissions. Some of them are given below

1 <https://www.washingtonpost.com/arts-entertainment/2020/07/06/art-pandemic-readers/?arc404=true>



<https://www.washingtonpost.com/arts-entertainment/2020/07/06/art-pandemic-readers/?arc404=true>



<https://www.washingtonpost.com/arts-entertainment/2020/07/06/art-pandemic-readers/?arc404=true>



<https://www.washingtonpost.com/arts-entertainment/2020/07/06/art-pandemic-readers/?arc404=true>



[washingtonpost.com/arts-entertainment/2020/07/06/art-pandemic-readers/?arc404=true](https://www.washingtonpost.com/arts-entertainment/2020/07/06/art-pandemic-readers/?arc404=true)



<https://www.washingtonpost.com/arts-entertainment/2020/07/06/art-pandemic-readers/?arc404=true>



The picture on the left in the first column is titled as “A World United” and the artist is Vasu Tolia, a retired passionate medical professional who says that the medicine is his first love “and during these unprecedented, tumultuous times, it beckons me again as I watch helplessly from the sidelines now. Since my retirement as a physician, I’ve poured my creativity into art and poetry, so creating this kind of response came naturally to me.” The second art (first row, right) is a really intriguing one and it has been titled as “Hold Me” by Cheryl Zemke who describes it thus, “Considering life with covid-19 and the future [of] wearing masks and gloves when exposed to others led me to consider the restrictions. [I’m thinking of] an intimacy and our innate need for personal contact with others.” The art on the left in the second column has been called “The Distancing Bench” by Kimberley A. Kelzer and the one on the right is called “Doctor” by Lisa Gorden. She says about the art, “A friend of mine is a doctor

and an artist, and at the beginning of the pandemic, she posted a photo of her looking so beaten up.” That, in a way, became the inspiration for this artwork. The last two are called “Endurance” and “Social Distancing in the Mission”. “Endurance” is by Jamie Holmes and “is about endurance. Like no matter what you will go through in life, sometimes beautiful things can come from it. You can see a cement flower pot with a green plant growing from it, symbolizing growth from rough conditions. You can see the expressions of the faces of me and my brother — looking worn but yet still maintaining what’s normal to us.” “Social Distancing in the Mission” is by Jennifer M. Potter who says “I drew this after picking up groceries one day. As I walked around the neighbourhood, I was heartened to see how people and small businesses were adapting. Even though we can’t socialize in the usual way, seeing everyone make an effort strengthens the sense of community I feel, and I wanted to share that feeling with others.”

CONCLUSION

After every disaster in human history, the writers, poets, artists and other practitioners of cultural studies have responded profusely and deeply and gigantic corpuses of work has followed. We have seen 9/11 Fiction and poetry emerging after the momentous tragedy. There have been art and literary works on Indian Partition, America’s attack on Hiroshima and Nagasaki, World Wars and other situations of human crisis. In fact, War Literature has a huge body of work and it’s a separate genre in its own right. COVID pandemic is just another addendum to the trend. People are already writing lockdown diaries and journals and one might just see them published as books and gain considerable popularity after the crisis is over, just like Anne Frank’s diary. Popular Culture is an umbrella term and lot of categories come under its ambit. There are songs, films, fiction, memes, sports events, cyber writing, blogs, etc which also fall into the scope and extent of Pop Culture. So apart from the above classification, there are many others to be explored, and they might or might not become established as permanent edifices in the literary/Cultural traditions, but one thing is sure, The future generations will definitely add one more area of research and study in their academic pursuits-i.e. COVID and Popular Culture and how its social/psychological/economic/educational aspects had the biggest impact on the human race in recent times.

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COVID- 19 IMPACTING MENTAL HEALTH OF THE WORKERS IN VARIOUS SECTORS OF INDIA

Ishwani

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ABSTRACT

Covid-19 has created impact not only on the Indian Economy rather the whole world has been affected at large. Still it has been affecting continuously the whole global community. The fear and anxiety is apparent in all parts of the world as all are worried about what will happen in the future or how to deal with this pandemic, not only physically but economically and socially too. Economic, social, psychological pressures have been interlinked and thereby are deteriorating the mental health of the workers in almost all the sectors of the economy. The present paper makes an attempt on highlighting the effects of Covid-19 on the mental health of the workers working in financial sector, multinational corporations and educational sectors of the Indian economy. A primary data survey was done with the help of perceived stress questionnaire which included thirty questions in it. This survey was developed in 1993 as a new tool for psychometric research by Levenstein et al. The survey was conducted with 90 respondents (30 respondents from each sector). Linking the mental health issues with the economic scenario of the Indian economy is the main thrust of the study. The research also tries to highlight the causes of the stress which have deteriorated the mental health of the workers during this pandemic. Coping up with the stress, anxiety, fear, depression during these hard times is the need of the hour. In this research study it is an attempt to suggest and identify coping strategies in order to reduce mental health problems of the workers.

KEYWORDS: Mental health, banking, teachers, multinational corporations, Covid-19.

INTRODUCTION:

The government on 22nd March 2020 initiated the lockdown in the country so that the number of cases does not rise in the country. The lockdown was imposed to restrict the movement of the people from one place to another and was to promote social distancing. The whole nation had to experience a lockdown which forced the shutdown of business in the economy. The nationwide lockdown not only effected people economically but that economic effects also lead to depression, anxiety, stress among the individuals which created a concern on the mental state of the people during the period of this pandemic. Since, this Covid-19 has begun in India; the cases of mental illness have been increasing on regular basis. According to the India Psychiatric Society there has been 21% rise in the cases of the mental illness throughout the nation.

METHODOLOGY: on a scale from 1 (“almost”) to 4 (“never”) how frequently they experience certain stress-related feelings. Higher scores indicate greater levels of stress. A total score is found by tallying each item {questions 1, 7, 10, 13, 17, 21, 25, and 29 are positive and are scored in opposite direction 1(“never”) and 4 (always)}. A PSQ index can be found by subtracting 30 from the raw score and dividing the result by 90, yielding a score between 0 and 1.

In the present study both primary data sources and secondary data sources has been used. A primary data survey was done with the help of perceived stress questionnaire which included thirty questions in it. The survey was conducted with 90 respondents (30 respondents from each sector). For secondary data sources many research papers, journals and newspapers information was used in the study.

DEMOGRAPHIC DATA:

Variable	No. of respondents
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Number of employees responded to the survey	90 (30 employees each)
AGE	
21-30	30 (33.33%)
31-40	41 (45.55%)
41-50	11 (12.22%)
51-60	7 (7.77%)
above 60	1(1.11%)
GENDER	
Male	28(31.11%)
Female	62 (68.9%)

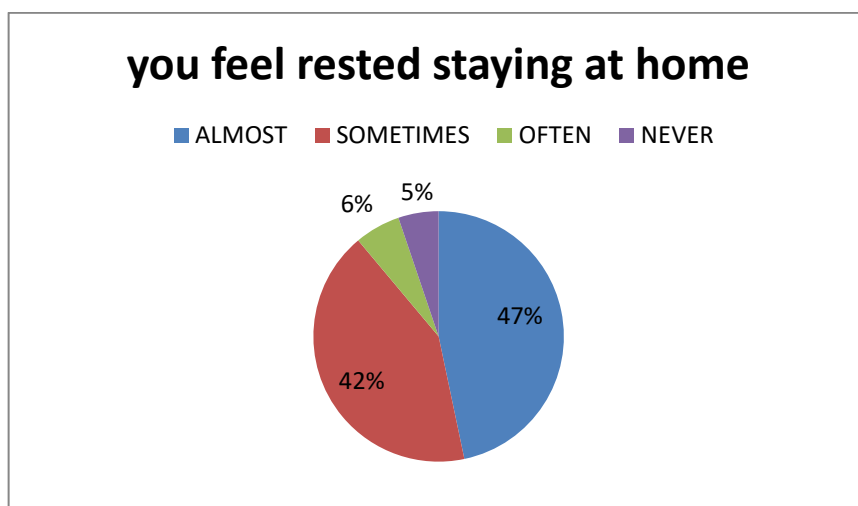
List of institutes

Educational institutions	Banks	Multinational corporations/ other companies
Guru Nanak Foundation Public School	Axis Bank	ZS Associates
Budha Dal Public School	Indian Bnak	Bharat Forge, Kalyani Technology
sri Aurbindo International School	Bank of Baroda	KIET
government Bikram College of Commerce	State Bank of India	Infoysis limited
Punjab Technical University	Indusind Bank	Atech
Patel Memorial National college	Punjab National Bank	Increff
Asian Educational Institute	HDFC ergo	Ayesa India pvt. Ltd.
Atharva institute of Management studies		wilsons
Punjab Agricultural University		jiit-Noida
Punjabi University		rcorm nagpur
Thapar University		Ericsson
D.Y.Patil Institute of Management and research		

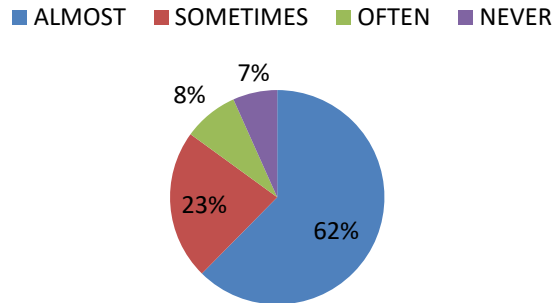
Jasdev Singh Sandhu group of institutes		
Army Public School		
Ryan International School		
Lucknow University		

QUESTIONS	ALMOST	SOMETIMES	OFTEN	NEVER
you feel rested staying at home	46.7	42.2	5.9	5.2
you feel that too many demands are being made on you during this time of pandemic	62.4	22.6	8.3	6.7
you feel irritable or grouchy	59.3	26.1	12.5	2.1
You feel there are too many things to do	50.2	39.7	7.9	2.2
You feel lonely or isolated during this time	16.2	38.5	24.2	21.1
You find yourself in the situation of conflict	52.7	14.7	9.9	22.7
You feel you are doing things you really like	25.9	34.8	19.3	20
You feel tired most of the time	12.6	47.4	11.9	28.1
You fear you may not manage to attain your goals due to the increasing panic of coronavirus	17	35.6	14.1	33.3
You feel calm by being at home or working from home	30.4	31.1	15.6	22.9
You have too many decisions to make	40	18.5	19.3	22.2
You feel frustrated by carrying this unusual new routine of life	37.8	16.3	8.9	37
You are full of energy	30.4	27.4	13.3	28.9
You feel tense for future	43.7	18.5	12.6	25.2
Your problems seems to be piling up	39.3	11.9	17	31.8
You feel you are in a hurry	8.9	38.5	19.3	33.3
You feel safe and protected by being at home and away from society	41.5	17.8	14.1	26.6
You already had many worries which are piling	52.6	13.3	16.3	17.8

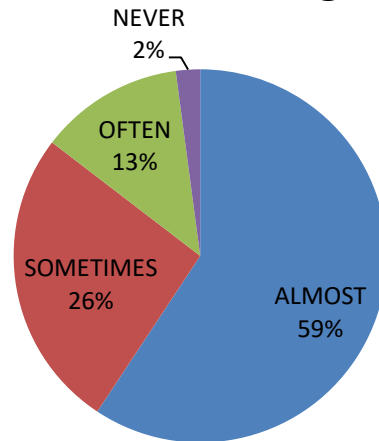
up in these times				
You are under pressure from other people and from family demands	34.1	11.9	11.1	42.9
You feel discouraged at times	59.3	16.3	11.1	13.3
You enjoy your alone time	26.7	27.4	20	25.9
You are afraid for your future	47.4	16.3	7.4	28.9
You feel you are doing things because you have to, not because you want to do them	11.1	46.7	14.8	27.4
You feel criticised or judged	19.2	44.4	12.6	23.8
You feel light hearted	23	35.6	24.4	17
You feel mentally exhausted	42.2	11.9	14.8	31.1
You have trouble relaxing yourself	7.4	40.7	14.8	37.1
You feel loaded down with responsibility	55.6	9.6	23	11.8
You have enough time for yourself	18.1	26.7	15.6	39.6
You feel under pressure from deadlines	35.6	13.3	17	65.9



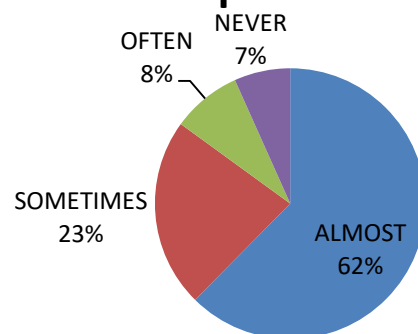
you feel that too many demands are being made on you during this time of pandemic



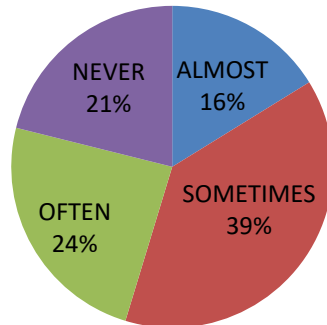
you feel irritable or grouchy



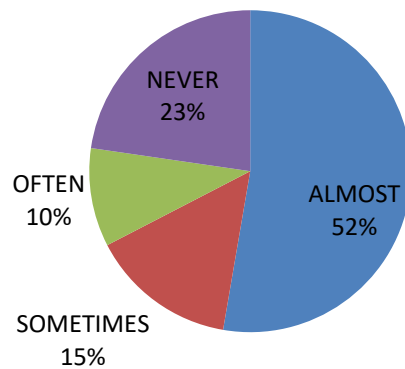
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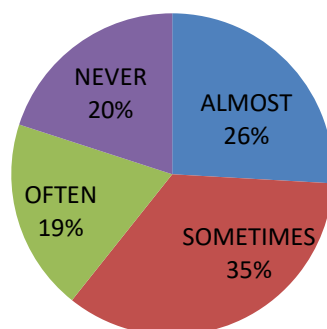
You feel lonely or isolated during this time



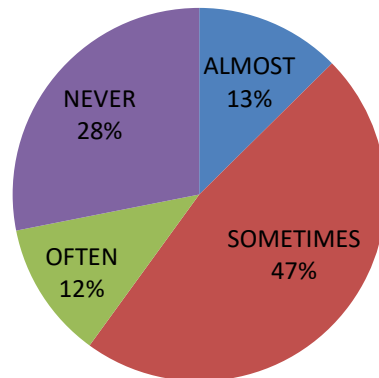
You find yourself in the situation of conflict



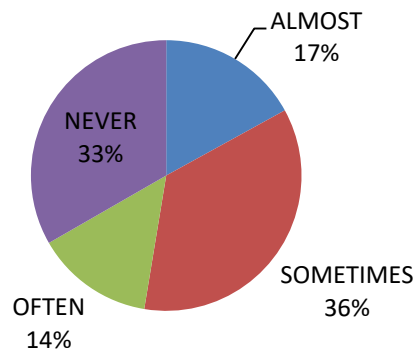
You feel you are doing things you really like



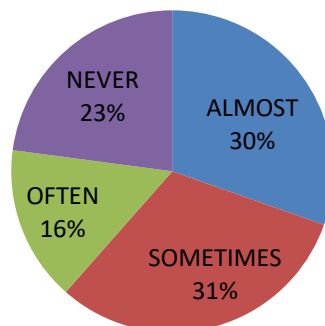
You feel tired most of the time



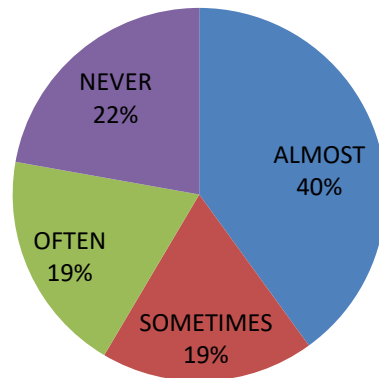
You fear you may not manage to attain your goals due to the increasing panic of coronavirus



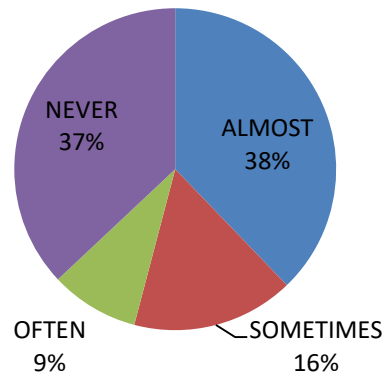
You feel calm by being at home or working from home



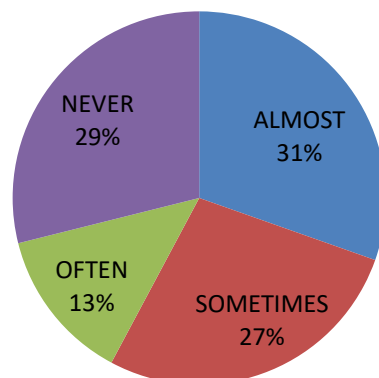
You have too many decisions to make



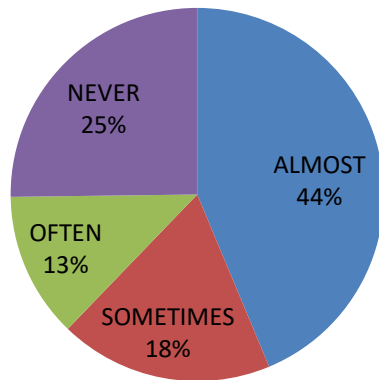
You feel frustrated by carrying this unusual new routine of life



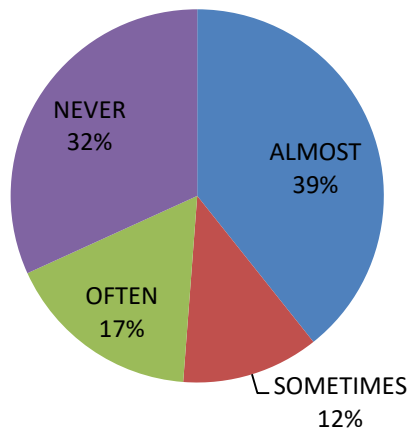
You are full of energy



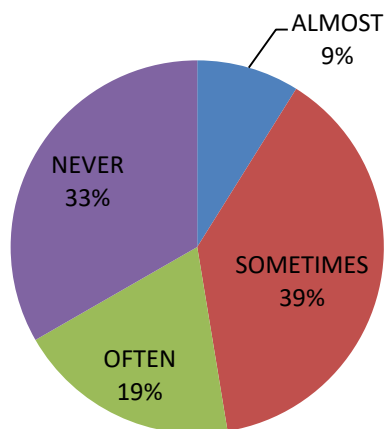
You feel tense for future



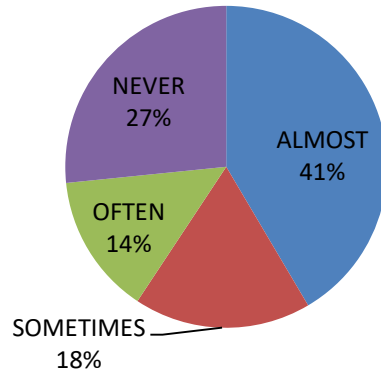
Your problems seems to be pilling up



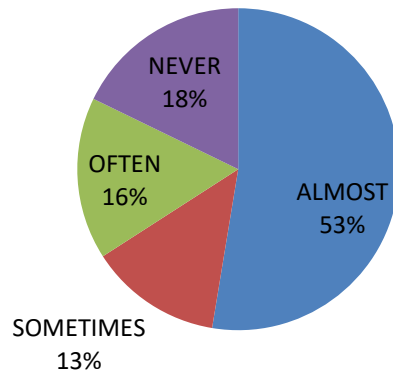
You feel you are in a hurry



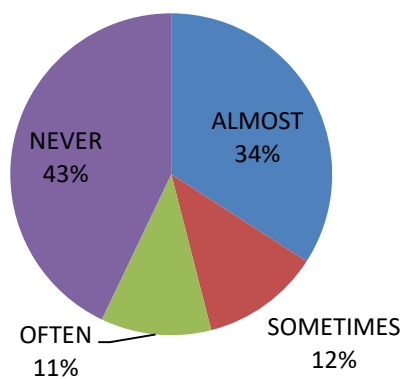
You feel safe and protected by being at home and away from society



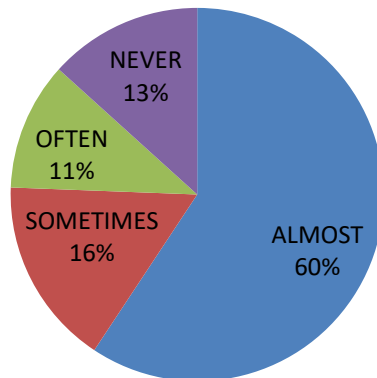
You already had many worries which are piling up in these times



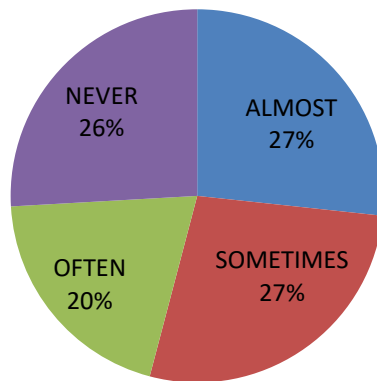
You are under pressure from other people and from family demands



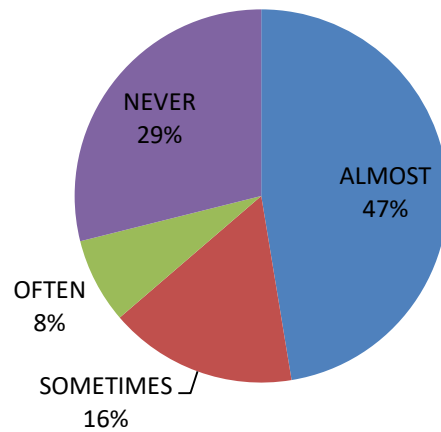
You feel discouraged at times



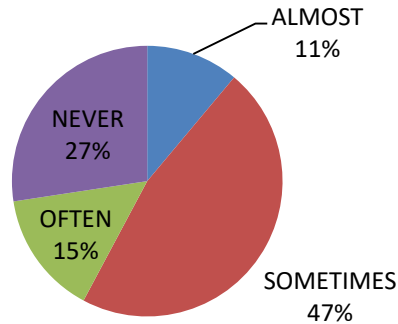
You enjoy your alone time



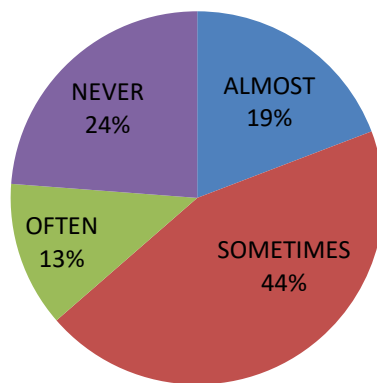
You are afraid for your future



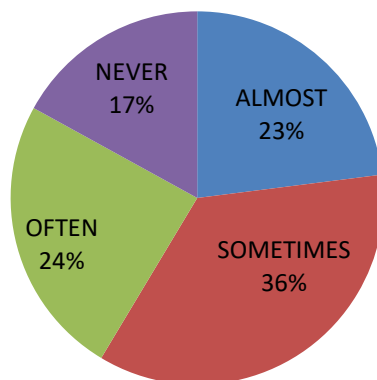
You feel you are doing things because you have to, not because you want to do them



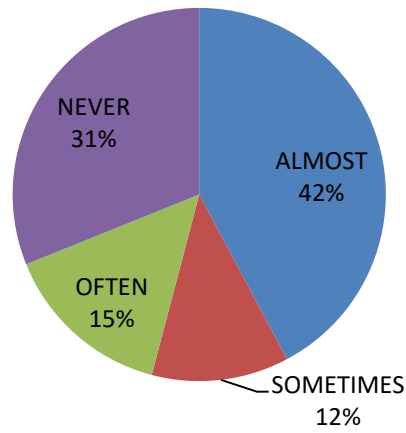
You feel criticised or judged



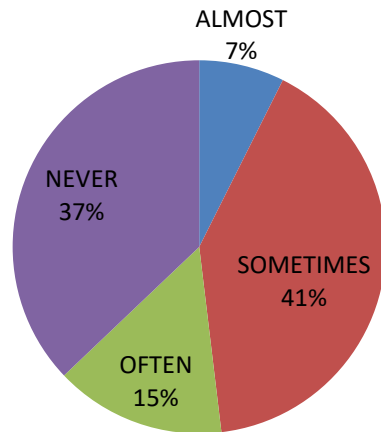
You feel light hearted



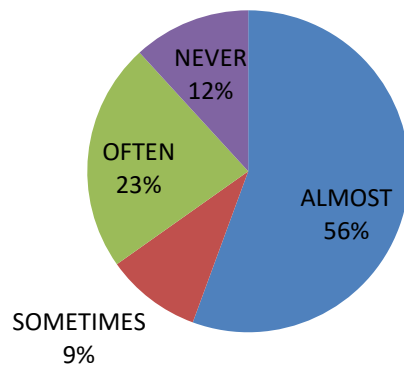
You feel mentally exhausted



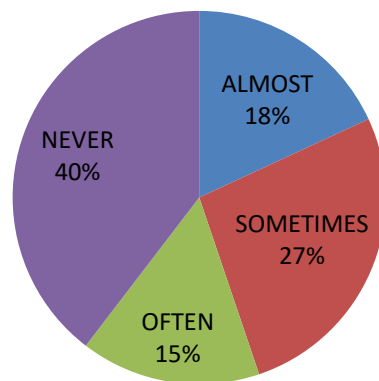
You have trouble relaxing yourself



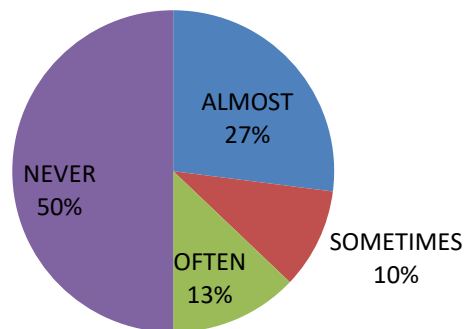
You feel loaded down with responsibility



You have enough time for yourself



You feel under pressure from deadlines



MEAN SCORES OF STRESS

SECTORS	Mean Scores of Stress
Banking sector	0.52
Educational sector	0.72
MNCs/other companies	0.64

Reasons for deteriorating mental health:

Every sector of the economy has an important role to play in the India's economy. Even during these hard times of covid-19 every sector has important role to play. However, these lockdowns have made the situations worse and every organization have to deal with different issues. Even the issue of mental health of their employees has become a matter of great concern.

Isolation from society, the inflow of bleak coronavirus-related information, the fear of contracting Covid-19 patients, the increasing economic recession and the increasing feelings of helplessness are all impacting people's mental health. . The connection between sleep and mental health is very closely linked to each other. Sleep disturbances during these times have also lead to widespread problems of mental health in individuals. The greater awareness and constantly thinking of the problems arising from awareness from social media platforms was increasing the distress. These are leading to widespread problems of stress, anxiety, depression and other mental health concerns. Whether individuals work from home or from banks, Covid-19 has brought fear, anxiety and stress in everyone's life. On an average the stress levels in the educational institutions was , Banks was

And in MNCs was . Many companies were quick to adopt the work-from-home model-using video-calling and virtual-meeting platforms, providing remote-working technology to employees and setting tasks and deadlines in practical ways. To keep operations going and give people a sense of purpose and achievement during this crisis is definitely a big positive. We humans are social creatures and social isolation can lead to feelings of restlessness, stress, anxiety and even anger. Remote working is allowing people to stay in touch with their office and co-workers, thereby reducing those feelings. Although the concept of virtual workplaces had been grown steadily over the years, no one was ready for a 100 per cent shift to remote working so suddenly. While some have managed to adapt to the abrupt transition remarkably well, others have struggled considerably with it. The personalised human touch that people were used to in offices was imperative to our work culture. To accomplish things as a part of a team gives a sense of belonging and a feeling that one's contributions are valued. The 'new normal' has taken away that human touch and made things a little too lonely and transactional for so many people out there.

Moreover, while video-calling has made work-from-home a viable possibility and a definite success, after weeks of having only virtual meets, Zoom fatigue is resulting in burnouts and low productivity. Respondents were of the view that video-calling and conferencing requires more focus than one-on-one interactions. Processing non-verbal cues, reading body language correctly and not having a natural rhythm to ease into conversations requires far more effort. Connection failures and response delays disrupt conversations can make the responder seem less sociable or less focused. For so many, remote working has reduced the time that one allocates to work, since it does not involve traveling to office and back. However, for many who are not those technology friendly, working hours have increased, as the total shift to virtual technology has reduced their efficiency and increased the time required to accomplish tasks.

Before the pandemic and the lockdown, we all strived hard to achieve the optimal work-life balance. So many people used to struggle to spend time at home. With families self-isolating, stories of quality time spent bonding with the family are warming the heart. Simultaneously, for many others the boundary between home and work is now blurred. Children are at home and need attention. In the absence of domestic help, people have to do their own cooking, cleaning and chores. For them, balancing the demands of the home with the pressures of one's job is proving to be quite stressful.

However, the bank employees feel that going at workplace was also creating stress for them as they constantly have fear of contacting the Covid-19 patients. They were developing obsessive Compulsive disorders along with the stress as they feel the requirement of washing and sanitizing hands after handling cash or other documents, every time. Though they believe their daily routines was more or less same but the working in such scenario was creating stress for them as well as their whole family.

- **Increasing Unemployment in the economy:**
 - a) Estimates show that around 67 percent of people lost their job after lockdown in the economy.

- b) The average employment reduced from 404 million in March 2019 to 282 million in April 2020, which means that about 122 million people have lost their jobs, including 27 million youth. (Centre for Monitoring Indian Economy)
- c) The below figure shows that the unemployment rates have rose from 6.6% to 26.2% from January 26 to April 19. These rates declined a little then again rose to 27% on May 3. Presently, 24% workforce is unemployed in the Indian Economy. This unemployment is caused by the shutdown of the businesses. From an estimated 78 million entrepreneurs and businesses in 2019-20, the Indian economy has approximately 60 million of businesses by April 2020. this widespread unemployment and lack of placement opportunities for the freshers who have completed their works and trainings are causing a concern about future among them.



Source: Statista 2020

Some examples are:

Uber has fired around 3700 frontline workers which were employed for a 3-minute zoom call

Meesho, recently developed app has also laid off 200 of their executives during these hard times

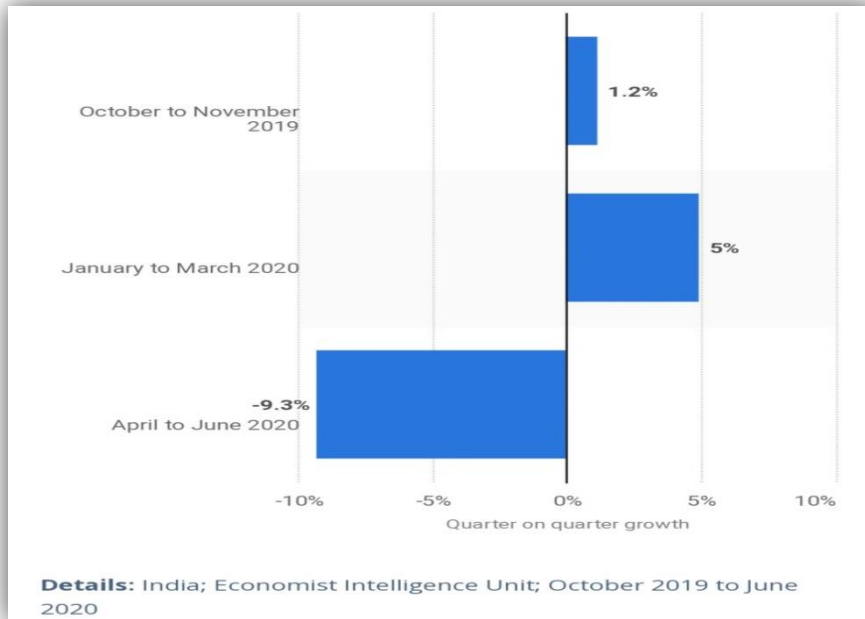
A New York based company, Global Technology Business Consultancy in Hyderabad has fired 20 employees on 20th March (A report from Huffigton Post)

490 IT employees of Bengaluru and West Bengal have lost their jobs (centre of Indian Trade Unions)

Ackro, an insurance based startup in India also fired 40-50 employees

The Quint, a new website asked it 45 executives to ask for leave without pay or else they will be fired on inadequate reasons.

- Delay in evaluations and pending promotions
- Decreasing growth rates and GDP: in India during the initial lockdown of 21 days a loss of \$4.5 billion was experienced on daily basis, which is continuously increasing. This is affecting the growth rates in the economy. In November 2019 India experienced a growth rate of 1.2% which increased to 5% in the start of the year but after coronavirus pandemic these growth rates went to negative. In June 2020, India experienced the growth rate of -9.3% (Economist Intelligence Unit of India, October 2019 to June 2020)



Source: Statista 2020

- Inadequate health and safety policies
- Inadequate employee support
- Insufficient participation in decision making process
- Lack of control over the work area
- Loss of family member during this period of pandemic

Suggestions or coping strategies:

- **Online Counselling:** online counselling should be given during this period of pandemic when huge numbers of people are suffering from mental health issues. Just as in Atmiyata, their volunteers (known as the Champions) give online counselling to the people suffering from mental illness. They also make short films and circulate them on smart phones to encourage positive thinking in the individuals. They even train other people for providing counselling in their communities, which are known as 'Mitra'.
- **Open Conversations** should be promoted specially during this need of hour when people are suffering from the mental illness. The future of the employees should be discussed at the workplace and they should be made ensure of their jobs and salaries in future. By conversating online collective discussions will even benefit the companies and the institutions to come out of the recession with new ideas
- **Awareness** about the mental health issues should be there. Some people are not even aware of the mental illness they are suffering from during these times. So people in leadership roles now have a responsibility of creating by organizing online workshops, seminars and training programs for their employees. They must also be able to red flag mental health concerns in people and help them cope with them.
- **Support:** if when the employees are aware of their mental health issues they feel afraid to share them with others at the workplace. They have a stigma that if other people will know about it, then it might have an effect on their job. Therefore, employees should be made sure that if they discuss their issues with others then it won't endanger their job.
- **Fixed routine and a structured life** style should be encouraged. When an employees know about its fixed routine then it can help him to balance its domestic needs with the professional ones.

- Free and compulsory internal campaigns by the companies. Confidential assessments and short term counselling should be given by the institutions themselves so that those who want assistance can get it without others knowing about it.
- No pay cuts or layoffs should be there. The companies which are going against this wave of pay cuts are Asian Paints. To boost the morale of their contractors they have transferred a sum of Rs40 crores in the accounts of their contractors. The company has also donated Rs 35 crores to Centre and state to boost their morale during these hard times. Such financially strong companies should help the needy people during the hard times so that we all can really stand together in this war against Corona virus, Covid-19.
- Music Therapies and Art Therapies should be used to reduce the stress.
- WhatsApp groups can be created for everyone to stay connected. These groups can become platforms for light-hearted chit-chat and the sharing of jokes, videos and experiences.
- Employees should also actively be encouraged to take collective breaks while they work and enjoy a cup of tea/coffee or banter with each other online, just as they did during coffee and lunch breaks in office.
- Employees can even join online Yoga or hobby classes together – any group activity that promotes bonding among them. This will help to eradicate the feeling of physical distancing which is leading to stress and depression among them.

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THE PERSPECTIVE OF THE TURKISH SOCIETY ON THE CLOSING OF MOSQUES AND MASJIDS IN THE PANDEMIC PERIOD

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ABSTRACT

The World Health Organization (WHO) officially declared the coronavirus, which started in Wuhan, China and spread all over the world, as a “pandemic”. Immediately thereafter, as in the whole world some measures were also taken to prevent the spreading of the epidemic in Turkey. Despite these measures in Turkey coronavirus cases first appeared on March 11, 2020 and the coronavirus-induced first death occurred on March 17, 2020. This situation made it necessary to take more stringent measures. One of these measures is to suspend prayers in mosques with congregation as of March 16, 2020. With the circular issued by the Directorate of Religious Affairs, it has stated that the religion of Islam does not allow practices that would endanger human life. In this context, it has been announced that it has become mandatory to suspend the daily prayers and Friday prayers in the congregation in all mosques and masjids across the country until the danger of the spread of the virus in question is eliminated. In a period of approximately two months from this date, mosques and masjids were closed to prayers collectively, and those who wanted to enter the mosque were turned away by security guards. As of Friday, May 29, 2020, hygiene, social distance, masks, etc. determined by the Scientific Committee on the condition that the rules are taken into consideration, mosque masjids have been reopened for mass worship. This study focuses on how the society approaches the issue of closing mosques and masjids during the period in question. For this purpose, 40 people with different age groups and educational backgrounds were interviewed, and data were collected using in-depth interview method. Thus, it has been tried to determine what meaning individuals attribute to the closure of mosques and masjids in daily life.

Keywords: Covid-19, Pandemic and Mosques, Pandemic and Worships, Religion during the pandemic.

I- INTRODUCTION

“Pandemic” means an epidemic that spreads internationally, has a high contagiousness and cannot be controlled. In this sense, the World Health Organization (WHO) officially declared the coronavirus disease that started in Wuhan, China and spread all over the world as a "pandemic" on March 11, 2020. Then, the World Health Organization (WHO) stated that every country can fight the pandemic and change the course of the pandemic by testing, treatment, isolation and mobilizing its people.

By this time, each country had already begun to take its own measures. But after WHO's announcement, measures continued to be taken more stringently. Some measures were also taken in Turkey. Despite all precautions, the first case of coronavirus in Turkey was detected on March 11, 2020 and the first coronavirus induced loss of life occurred on March 17, 2020.

Turkey also needs to be taken strict measures appeared to be in just these days as all countries worldwide. After the first evidence of coronavirus cases in Turkey, the government has decided to take more stringent measures. Upon this, it was taken by a series of decisions, especially by the ministries of health, tourism and trade, and announced to the public. Ministers drew attention to the importance of March and April in the implementation of the measures. In this context, the demand for tourism from abroad to Turkey last april on the postponement, postponement of all fairs, etc. within the country by the end of april.many decisions have been made. In addition, organizations where people came together as a precaution were also canceled.

One of the decisions taken to prevent the spread of coronavirus was related to the mosques and masjids where prayers were performed in the congregation. On March 16, 2020, the President of Religious Affairs announced that if prayers continue to be performed in congregation in mosques and masjids, the risk of the spread of the virus may increase and therefore, it becomes mandatory to interrupt prayers in mosques and masjids, especially Friday prayers, until the danger of the spread of the new type of coronavirus is eliminated.

As part of the Kovid-19 measures, the entrances of the mosques were closed on Friday. Security measures were taken in courtyards and squares. Those who wanted to enter the mosque were turned away by the security guards. After this date, mosques were closed to pray in congregation for about two months.

During this period, Muslims could not go to the mosque even in the "month of Ramadan" (24 April-23 May), which is one of the most important time periods for Muslims. In the mosque, they could not perform tarawih prayers and Friday prayers. In fact, they could not even perform the "Eid al-Fitr prayer", which is one of the prayers performed twice a year and is highly valued for Muslims.

As of Friday, May 29, 2020, hygiene, social distance, masks, etc. determined by the Scientific Committee. Provided that the rules are taken into account, mosques and masjids have been reopened for worship with the congregation in a LIMITED AND CONDITIONAL.

In this direction, some rules were determined by the relevant Ministries and the Directorate of Religious Affairs in order to perform prayers with the congregation and a circular was issued on the subject. The rules are clearly and detailed in the circular. Some of these rules are:

- 1- In mosques and masjids, only the noon, afternoon and Friday prayers will be performed together with the congregation and other prayers (morning, evening and night prayers) will be performed individually.
- 2- Citizens who are under the curfew (over 65 and under 18) and those with symptoms of illness will not come to the mosque.
- 3- Friday prayers cannot be performed in the mosque. Therefore, Friday prayers can only be performed in mosques with sufficient gardens / courtyards / open areas.
- 4- In order to keep common areas to a minimum, ablution hall, fountain and toilets will be kept closed. People will be able to come to the mosque, meeting their needs such as ablution and so on at home or at work.
- 5- Person (s) without a mask will not be allowed to pray in congregation.
- 6- People who will come to mosques and masjids will bring their personal prayer rugs with them.
- 7- Sunnah of prayers will be performed at home in order to keep the time spent in mosques and masjids as short as possible.
- 8- No preaching will be held in Friday prayers, and sermons sent by the Directorate of Religious Affairs will be read without any additions or deletions. It will be ensured that prayers are performed as soon as possible.
- 9- In order to implement all these rules and maintain order, a Friday Committee of at least five people will be formed and law enforcement personnel will be assigned.

Some of the conditions specified in the circular are included in this study. As it can be understood from here, prayer is allowed in mosques and masjids for only two of the five times. In addition, citizens over 65 and under the age of 18, who are under the curfew, will not come to the mosque. In short, we can say that as of this date, mosques were opened to worship with congregation on a limited and conditional basis.

This study focuses on how Turkish society approaches the issue of closing mosques and masjids and then opening them limitedly and conditionally, and how they perceive this situation.

II- METHOD OF THE RESEARCH

Qualitative research method was used in this study, which was conducted to understand and perceive the mentioned social reality, and the data were collected by in-depth interview technique. In-depth interview method is a technique in which open-ended questions are preferred and detailed answers can be obtained to deal with the subject in all its dimensions. In qualitative research, the researcher does not examine the research universe and social reality in order to reach generalizations.

Here, the data are collected by meeting face to face and one to one. Although the interview is mostly done face to face, it can also be done using different communication tools that can transmit sound and pictures instantly. It is tried to reach the feelings, thoughts and observations of the interviewee about the subject. In the interview, the real and in-depth meanings of the spoken subject can be revealed as well as its superficial meanings. Thus, the perspective of the interviewees about the subject of research is obtained. (Aslantürk, 1997:117; Kuş, 2012: 51; Gökçe, 1988: 86)

Approximately 40 people were interviewed in this study. However, this meeting was held video chat on social media platforms due to the pandemic process.

People of different age groups and with different educational backgrounds were selected in the interview. In addition, in the category of religiosity, we tried to reach different groups such as very religious, moderately religious, less interested in religion, and uninterested in religion.

III- FINDINGS OF THE RESEARCH

Two basic questions were asked to the interviewees. In one of these, they were asked whether they found it right to close mosques and masjids during the pandemic process and the reason for this. Secondly, they were asked whether they found the correct opening time of the mosques. Because when the mosques and masjids were partially opened, the danger of covid-19 was not completely eliminated.

To the people we interviewed, we asked a question in the form of “Do you find it right to close mosques and masjids for prayers during the pandemic process? Why?”

It is seen that the people generally welcomed positively the closure of the mosques to the congregation in this process. The views and justifications of some of the people who find mosques and masjids to be closed positively are as follows:

“What needs to be done has been done, it is fard to pray, but to perform in mosques is not fard. I think it is a good measure to prevent the disease from spreading.”

“I find it true, Worship is not only in mosques.”

“It is more logical for an individual to worship in his own home rather than risking public health.”

“Health first. We can also perform prayers at home. Spreading the epidemic is assumed as killing.”

“I think it's the right decision. Based on the fact that it is obligatory to protect our health, every environment in which we reduce social distance poses a risk for us.”

“Yes, it's the right decision. There is nothing more important than human health. Worship is already an individual responsibility. Closed mosques should not affect Muslims.”

“It was an appropriate decision. Because it is people who live and keep religion alive. If there is no human, there is no religion. Therefore, it is extremely important to protect the ‘human life’. In the time of our Prophet and his friends, similar epidemics occurred. Similar measures were taken then.”

“Not being able to go to the mosque does not mean that one cannot worship.”

“It is the right decision. Because the mosques are crowded and people do not obey the rules, I find such a decision to be correct but sad.”

As can be seen, it is understood that the individuals we interviewed find it appropriate to close mosques and masjids in a period of approximately two months during the pandemic process. The

reason for this is that prayers can be held not only in the mosque but also at home, they put forward opinions such as maintaining health is more important than praying with the congregation, etc..

As some of the individuals we interviewed expressed, epidemic diseases were also seen in the early periods of Islam.

Five major plague epidemics are mentioned in the time of the Prophet and his Companions. However, it is reported that the plague seen in the time of the Prophet was mostly experienced as a febrile illness and did not cause mass deaths. It is stated that the first epidemic disease that caused widespread death in Medina was experienced during the period of the first Caliph Omar. In this period, for example, it is reported that 25 thousand people died in Damascus (Okumuş; 2020: 272-281; Varlık, 2012: 175-177).

In addition, in 1066, a great plague epidemic occurred in Egypt and Andalusia, followed by a year of drought and famine. It is reported that mosques were locked for a certain period and prayers were not performed in mosques during this period (Okumuş; 2020: 363).

It is seen that there are very few people who think that it is wrong to close mosques during the pandemic process. Some of the opinions and reasons I got from them are as follows:

“I don't find it right. Mosques are not full except for Friday prayers. Necessary measures could be taken for Friday prayers.”

“I think it was a very wrong decision. There are already 15-20 people in mosque congregations in their daily prayers. Therefore, prayers could be performed within the rules of social distance. In addition, Friday prayers could be performed in open areas. We have many parks, beaches and open spaces ”.

“I don't find it right to be shut down everywhere. People could be told which mosques to go to and this process could be managed more intelligently.”

“I think mosques could be visited by following the rules and maintaining social distance. I think it's wrong ”

“In fact, it could be done with social distance, so worshiping God is the remedy for everything.”

As can be understood from the statements above, it is seen that there are some who find it wrong to close mosques and masjids during this period, albeit very little. The reason for this was that the number of people who came to the mosque during the time prayers was low and that prayers such as the Friday prayer could be performed very comfortably in open areas.

1- When viewed in terms of opening timing, two different groups emerge.

The date on which the decision to open the mosque as part of Covidien-19, cases and deaths in Turkey were continuing, although still slightly reduced. At that time, the average number of cases was around 1,000 and the number of deaths was between 25-30. For example, on May 28, the daily number of cases was 1,182 and the number of deaths was 30. On May 29, the daily number of cases was 1,141 and the number of deaths was 28.

In addition, with the decision taken by the government, some businesses and venues such as barber, hairdresser, beauty salon shopping mall started their activities on May 11, 2020, provided that some measures are taken within the framework of the normalization plan. Mosques were still closed at that time. In this sense, it is seen that they compare mosques with shopping malls when asked to keep mosques closed while the risk of Covid-19 contamination is still not over. In this sense, we come across two groups again. However, the opinion that mosques should now be opened is gaining importance.

a) Mosques should be opened now, those who say it is even late and their reasons:

“Even shopping malls were opened, it is wrong to keep mosques still closed.”

“It is right to remain closed while all social activities are stopped. However, when the situation normalized, mosques should have been opened by taking the necessary measures, not shopping centers.”

“First of all, I do not find it right to open shopping centers instead of mosques. On the contrary, our mosques had to be open and we had to ask for repentance and prayers.”

b) Those who say that the opening of mosques is still early:

“I think some more restrictions should be extended. because when people pray in mosques, they inevitably get close. Rules may not be followed.”

IV- CONCLUSION

Although it is not possible to generalize the results of this qualitative research conducted with the in-depth interview technique to the universe, it can be said that it sheds light on the views of the Turkish society. In this context, it is seen that Turkish society generally welcomes the closure of mosques and masjids to worship with the congregation warmly during the pandemic process.

However, it can be said that this positive view has changed a little after some businesses such as shopping malls, barbershops and beauty salons started to operate although the mosques were closed.

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COVID-19 SÜRECİNİN ÜREME SAĞLIĞI ÜZERİNDEKİ ETKİLERİ

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1. GİRİŞ

COVID-19 pandemisinin toplum üzerinde ekonomik, sağlık, sosyal ve kişisel boyutta olmak üzere birtakım etkileri görülmektedir. Bu süreçten üreme sağlığı hizmetleri de etkilenmiş olup, tüm dünyada ciddi potansiyel riskler oluşturmuştur (Guttmacher Institute, 2020). Özellikle gelişmekte olan ülkelerde gebeliği önleyici ürün ve hizmetlerin sağlanmasında uzun vadeli aksaklıkların yaşanmasına sebep olmuştur. Kadınların kontrasepsiyon ve küretaja erişiminin sınırlandırılması, kadınların bedenleri ve yaşamları hakkında özerk karar verme haklarının engellenmesi ve neticede istenmeyen gebeliklerin güvenli olmayan ortamlarda gerçekleşmesi gibi diğer ciddi sorunlar ortaya çıkmaktadır (United Nations Population Fund (UNFPA), 2020; Halk Sağlığı Uzmanları Derneğinin (HASUDER), 2020).

COVID-19 sürecinde bazı ülkelerdeki hükümetler ve politikacılar kadınların üreme haklarını daha da kısıtlayan olumsuz adımlar atmıştır. Litvanya'da Sağlık Bakanlığı, küretaj hizmeti almak isteyen kadınların karantina sürecinde, kararlarını yeniden düşünmeleri ve gözden geçirmeleri gerektiğini açıklamıştır. Polonya'da da küretaj hizmetleri başta olmak üzere, kadınların sağlık hizmetlerine güvenli erişimi zor hatta neredeyse imkânsız hale getirilmiştir. Romanya'da acil olmayan prosedürleri askıya alma kararının uygulanması nedeniyle kadınların talebi üzerine küretaj yapılmamakta ve kadınların üreme özgürlüğü engellenmektedir. Buna karşılık İtalya'da ise, küretaja pratikte erişimin zor olması ve özellikle bunu sağlamak isteyen sağlık profesyonellerinin yetersizliği olsa da küretajın ara verilebilecek bir durum olmadığını açıklayan rehberler yayınlamıştır (International Planned Parenthood Federation (IPPF EN) ve European Parliamentary Forum (EPF), 2020).

COVID-19 salgınında Avrupa'da birçok cinsel ve üreme sağlığı merkezleri kapanmış veya faaliyetleri kısıtlanmıştır. Kliniklere başvuran hasta sayısında ve sıklığında ciddi düşüşler görülmüştür. Belçika'nın Brüksel ve Valenya eyaletlerinde üreme sağlığı ve aile planlaması danışmanlık merkezlerinin açık olmasına karşın ziyaretlerde %80 oranında bir azalma olmuştur. İrlanda'da yürütülen CYBE tarama merkezinden iki tanesi kapatılmış, rutin smear testi ve semptomatik olmayan CYBE tarama testleri; İsviçre'de, CYBE danışmanlığı ve tarama testleri; Polonya'da CYBE ve HIV tarama, smear testleri ve jinekolojik ziyaretlerin hepsi azalmıştır (IPPF EN ve EPF, 2020).

Ebola virüsünün yayıldığı sırada sorunlara yönelik yapılan uzman görüşlerine göre; COVID-19 salgını sürecinde sosyal mesafe ve bulaşmayı önlemek için alınan diğer tedbirlerin, kadınların gebeliği önleyici yöntem kullanmaya devam etme olanaklarını etkileyeceği öngörülmektedir. Düşük ve orta gelirli 114 ülkeden toplam 47 milyon kadının modern gebeliği önleyici yöntemlere erişiminin engellenebileceği belirtilmiştir. Karantinanın 6 ay sürmesi ve sağlık hizmetlerinde ciddi aksaklıklar yaşanması durumunda, fazladan 7 milyon istenmeyen gebelik vakası görülebilir. Karantinanın devam ettiği her 3 ay için, 2 milyon kadının daha gebeliği önleyici modern yöntemlere erişiminin engelleneceği vurgulanmıştır. Aile planlaması yöntem kullanımının azalması, 3 aylık asgari düzeyde aksaklık sonucunda 325.000 istenmeyen gebelikle sonuçlanacağı belirtilmiştir (UNFPA, 2020).

Kanıtlara göre, kadınların doğum kontrol, güvenli küretaj ve küretaj sonrası bakım hizmetlerine erişiminin engellenmesi ile anne ölüm oranlarının arttığı da bilinmektedir (MSI, 2020; Sochas et al., 2017).

Pandemi sürecinde, üreme sağlığı hizmetlerinde olumlu etkilerde görülmektedir. Belçika, 18-25 yaş arası kadınlar için doğum kontrol haplarını ve bütün kadınların da acil kontraseptif hapları tamamen ücretsiz karşılayacağı bildirilmiştir (IPPF EN ve EPF, 2020). İtalya ve Fransa'da Sağlık Bakanlıkları tarafından cinsel ve üreme sağlığı hizmetlerinin aksamayacağına, üreme ve cinsel hakların korunacağına dair açıklamalar yapılmıştır. Fransa'da, COVID-19 enfeksiyonunun hem gebe hem de sağlık çalışanları açısından önemli bir risk oluşturması nedeniyle kadınların, kontraseptif ilaç reçetelerini yenilemek zorunda kalmadan veya tele-tıp aracılığıyla reçetelerinin sağlanarak acil kontraseptif ilaçların temin edilebileceği belirtilmiştir. Bununla birlikte, gebeliğin sonlandırılması için gerekli olan yasal sürenin yedi haftadan on dört haftaya uzatılması, evde tıbbi düşük haplarının dokuzuncu haftaya kadar tele-tıp aracılığı kullanılması yasallaştırılmıştır (Le ministre des Solidarités France, 2020; Ministero Dello Salute of Italy, 2020; IPPF EN ve EPF, 2020). İskoçya'da, gebeliğin on ikinci haftasına kadar evde tıbbi düşük yapılmasına izin verilmiştir. Aynı şekilde Galler'de de alınan bu kararlar aile hekimlerine veya doğum kontrol kliniklerine telefonla veya tele-tıp uygulamalarıyla ulaşan kadınlara evde tıbbi düşük paketi içerisinde gerekli malzemelerin (gebelik testi, ağrı kesici, sonlandırma sonrası kullanacağı doğum kontrol hapları) posta aracılığı ile evlere ulaştırılacağı duyurulmuştur (Health and Social Care of Scotland, 2020; Minister for Health and Social Services of Wales, 2020). İspanya (Katalonya) ve Almanya'da, küretaj öncesinde zorunlu danışmanlık oturumunun telefonla veya görüntülü sohbet yoluyla yapılmasını sağlanarak bireylerin üreme sağlığı hizmetlerine erişimlerini kolaylaştırma yönünde adımlar atılmıştır (IPPF EN ve EPE, 2020; Council of Europe, 2020). Almanya'da üreme sağlık hizmetleri salgında ertelenmemiş, sunulmaya devam edilmiş, fakat arada önlemlerin yetersizliği nedeniyle gecikmeler bildirilmiştir (IPPF EN ve EPF, 2020). Türkiye'de ise covid-19 salgın döneminde kontraseptiflere erişimin kolaylaştırılmasına yönelik bir gelişme bulunmamasına karşılık evde tıbbi düşük yöntemi ile ilgili Sağlık Bakanlığı Bilim Kurulunun saha çalışmaları devam etmektedir (HASUDER).

Sonuç: Bütün dünyayı tehdit eden covid-19 pandemi sürecinde de üreme sağlık hizmetlerinin erişiminde birtakım değişikliklere gidilmiştir. Bireylerin ve toplumun sağlığını uzun vadede etkileyecek olan üreme sağlık hizmetlerinin kontrollü bir şekilde yürütülmesi gerekmektedir. Pandemi sürecinde, bireylerin aile planlama yöntemlerine ulaşımının sağlanması, izole edilen merkezlerde danışmanlık, küretaj gibi hizmetlerin yürütülmesine devam edilmesi, uzaktan eğitim ile danışmanlıkların yapılması gibi uygulamalar uzun vadede oluşabilecek halk sağlığı sorunlarının önüne geçebilmek için önerilmektedir.

Anahtar Kelimeler: COVID-19, üreme sağlığı, kadın sağlığı

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