



**BEYKENT
UNIVERSITY**

**BEYKENT 3RD INTERNATIONAL
HEALTH SCIENCES RESEARCH
DAYS CONGRESS**

**THE
FUTURE
IS NOW!**

BEYKENT 3TH INTERNATIONAL HEALTH SCIENCES RESEARCH DAYS CONGRESS

22-25 SEPTEMBER 2021 / ONLINE

ABSTRACT BOOK

Edited by

Prof. Dr. Aysegul Yildirim Kaptanoglu

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YAYIN HAKLARI

Bu kitabın tüm yayın hakları saklıdır.

Tanıtım amacıyla, kaynak göstermek şartıyla yapılacak kısa alıntılar dışında yayınevinden izin alınmadan çoğaltılamaz, yayınlanamaz ve dağıtılamaz.

Beykent 3th International Health Sciences Research Days Congress

22-25 September 2021 / Online

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KEYNOTE SPEAKERS

Prof. Yusuf Celik, Hacettepe University, Ankara / Turkey

Gabriel Catan, The World Bank, USA

PGCert Hassan Salman Mirza, Sultan Qaboos Hospital, Muscat / Oman

Prof. Metin Ates, Arel University, Istanbul / Turkey

Assoc. Prof. Memnun Seven, University of Massachusetts Amherst, USA

MSc Sara Torcato Parreira, CUF Infante Santo Hospital, Portugal

Prof. Arzu Ari

Prof. Belgin Erhan

Dr. Dora Pachova

PhD. Evangelos Fradelos, University of Thessaly, Greece

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Asst. Prof. Ersen Aloglu, Hacettepe University, Ankara / Turkey

Prof. Areti Tsaloglidou

Prof. Dr. Lambrini Kourkouta

Prof. Oguz Ozyaral

Prof. Dr. Mehmet Oguz Polat

Huseyin Karadayi

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Physiotherapist Stefano Frassine, Italy

Life Coach Desdina Yakar, Germany

Prof. Dr. Hakan KAR (Mersin Üniversitesi, Tıp Fakültesi, Adli Tıp Anabilim Dalı)

WELCOME TO BHSRDC 2021

Dear Colleagues;

We are honored to announce that the Beykent 3th International Health Sciences Research Days Congress will be held at online between September 22-25, 2021 and invite you to this scientific meeting.

Beykent 3th International Health Sciences Research Days Congress provides an ideal academic platform for health researchers to present the latest developments, research findings, ideas and applications about all aspects of health science and health culture. The purpose of this conference is to come together with scientific studies scholars working in different health care disciplines, to exchange knowledge and experiences and thus to prepare the ground for multidisciplinary health care studies. The conference will bring together leading health academic scientists, researchers and scholars in the domain of interest from around the world.

You are kindly invited to participate and take advantage of the opportunity to present your unpublished abstracts or/and full length health scientific papers.

We invite you to the scientific program Beykent 3th International Health Sciences Research Days Congress with the your valuable contributions. Your submissions will be most welcome and your particular contributions highly appreciated. The hosts shall spare no effort in making your participation scientifically rewarding as enjoyable as possible. We are confident that you will carry pleasant memories of this occasion.

Kind Regards...

Prof. Dr. Aysegul YILDIRIM KAPTANOGLU
Congress President

SCIENTIFIC PROGRAMME**WEDNESDAY 22 SEPTEMBER 2021**

TIME	THEME	SPEAKERS
10:00-12:00	Opening Ceremony	• Prof. A. Murat FERMAN “Rector of Beykent University, Turkey” • Prof. Turgut OZKAN “Rector of Doğuş University, Turkey” • Prof. Derman KUCUKALTAN “Director of İzmir Kavram Vocational School, Turkey” • Prof. Aysegul KAPTANOGLU “Dean of the Faculty of Health Sciences, Beykent University, Turkey”
12:00-13:00	Lunch Time	
13:00-14:30	Healthcare Management in the Shadow of Pandemics Chair: Prof. Aysegul KAPTANOGLU “Beykent University, Turkey”	
	The Experience And Lessons For Healthcare Management During Covid-19 Pandemics	Prof. Yusuf CELIK “Marmara University, Turkey”
	The Impact of Covid-19 Pandemic on Education	Asst. Prof. Areti TSALOGLIDOU “International Hellenic University, Greece”
	Mental Health Problems During Covid-19 Pandemic	Dr. Hassan MIRZA “Sultan Qaboos Hospital”
		Prof. Metin ATES “Arel University, Turkey”
15:00-16:30	Nursing in the Shadow of Pandemics Chair: Assoc. Prof. Esra KARACA CIFTCI “Beykent University, Turkey”	

The Effects of the COVID-19 Pandemic in Nursing Education; Challenges and Opportunities	Assoc. Prof. Memnun SEVEN "University of Massachusetts Amherst, USA"
The Impact of Covid-19 Pandemic on Cancer Care	MSc. Sara Torcato Parreira "European Oncology Nursing Society, Portugal"
Child Psychology During the Pandemic Period	Clinical Psychologist Reyhana SEEDAT
The Effect of Child-Centered Play Therapy on Anxiety	Exp. Psychological Counselor Nese Cingisiz Kinacilar
The Review of Psychotherapist Role and Psychotherapy Processes in The Context of Psychological Support and Psychology Ethics in TV Series.	Asst. Prof. Ezel Avci

THURSDAY 23 SEPTEMBER 2021

TIME	THEME	SPEAKERS
09:30-11:00	<u>Chair:</u> Lec. Behice Belkis CALISKAN "Beykent University, Turkey"	
	Covid-19 Pandemic and Domestic Violence	Prof. Lambrini Kourkouta "International Hellenic University, Greece"
	Health Management Interview	Prof. Oguz OZYARAL "İstanbul Rumeli University, Turkey"
	The Simulated Surgery Goes Virtual	Dr. Samantha SCALLAN "University of Winchester, England"
12:30-13:30	Lunch Time	
13:30-15:00	Food Science & Nutrition in the Shadow of Pandemics <u>Chair:</u> Prof. Nazan AKTAS	

	"Selçuk University, Turkey"	
	Understanding Diet-Related Disparities During The Pandemic	Asst. Prof. Zeynep Begum KALYONCU "Atılım University, Turkey"
	Acceleration of Digital Health in the Covid-19 Pandemic: Rethinking Digital Tools for Primary Care Transformation	Gabriel Catan "The World Bank, USA"
	The Role of The Food Industry in The Era of The Covid-19	PhD Lec. Duygu AGAGUNDUZ "Gazi University, Turkey"
	Nutrition in Covid-19 Pandemic Era	PhD Lec. Konstantinos KOUKOURIKOS "International Hellenic University, Greece"
15:00-16:30	Physical Therapy and Rehabilitation in the Shadow of Pandemics Chair: Prof. Demet UCAR "Beykent University, Turkey"	
	The Transformation Process of A Training and Research Hospital Into A Pandemic Hospital	MD. Selcen UCAR "Şehit Prof. Dr. İlhan Varank Training and Research Hospital, Turkey"
	Covid-19 and Spinal Cord Injury	Prof. Belgin ERHAN "İstanbul Medeniyet University, School of Medicine, PMR Department Turkey"
	Growing Up in A Pandemic World	MD Dora PACHOVA Director of Center for Health and Education "EDICTA", Bulgaria Education Coordinator of European Committee for Homeopathy
	Compassion Fatigue in Frontline Nurses During The Covid-19 Pandemic	Asst. Prof. Evangelos Fradelos Nursing Department of University of Thessaly Larissa, Greece
16:30-17:30	Workshop:	MFA Hayal POZANTI "USA"

FRIDAY 24 SEPTEMBER 2021

TIME	THEME	SPEAKERS
10:00-12:00	Doğuş University Chair: Lec. Begum GUL KARAKAS “Doğuş University, Turkey”	
	Effect of Covid-19 Pandemic on Genetics Evaluation Center	Exp. Molecular Biologist Huseyin KARADAYI “Genetiks Genetic Disaes Evaluation Center, Turkey”
	Standardization and Handicaps of Branching	Asst. Prof. Yahya OZEL “Doğuş University, Turkey”
		Prof. Despina SAPOUNTZI-KREPIA “Frederick University, Cyprus”
12:30-13:30	Lunch Time	
13:30-15:00	Chair: Asst. Prof. Yasemin KARAASLAN “Beykent University, Turkey”	
	The Impact of Covid 19 Pandemic Process on Medical Education	Prof. Bekir Ugur ERGUR “Univesity of Kyrenia, Cyprus”
	Improving Nursing Education in Covid-19 Pandemic Process	PhD Lec. Nurten ALAN “Dokuz Eylül University, Turkey”
	Diabets and Covid-19	PhD Pavlina NIKOLOVA “Plovdiv University, Bulgaria”
15:00-15:30	Time Break	
15:30-16:30	Nursing in the Shadow of Pandemics Chair: Assoc Prof. Esra KARACA CIFTCI	

	"Beykent University, Turkey"	
	Medicolegal Autopsy During Covid-19 Pandemia	Prof. Hakan KAR "Mersin University, Turkey"
	Nursing Care in Calm and Calamity	Prof. Ayhan Aytekin LASH "Northern Illinois University, USA"
17:00	Current and Safe Vaccines in the World	Dr. Richard Peet "George Mason University, Bioscience Strategist, USA"

SATURDAY 25 SEPTEMBER 2021

TIME	THEME	SPEAKERS
09:30- 11:00	Chair: Prof. Aysegul KAPTANOGLU "Beykent University, Turkey"	
	Oral and Dental Health in the Pandemic Process	Lec. Begum GUL KARAKAS "Doğuş University, Turkey"
	Health Management Interview 2 with Prof. Oguz OZYARAL	
11:00- 11:45	Workshop: Running an OSCE Virtually	STL Anwar KHAN "Health Education North East and Central London, UK"
11:45 12:30	Workshop: Music in Pandemic	Pianist Elif ALLENFORT USA
12:30- 13:30	Lunch Time	

13:30-15:00	Doğuş University <u>Chair: Asst. Prof. Yahya OZEL</u> “Doğuş University, Turkey”	
	Negative Effects of Isolation	Life Coach Desdina YAKAR “Germany”
	Pregnancy Care in Pandemic	Prof. Rehat FAIKOGLU “Beykent University, Turkey”

SCIENTIFIC PROGRAMME (Channel 2)**WEDNESDAY 22 SEPTEMBER 2021**

TIME	THEME	SPEAKERS
13:00-14:30	<u>Chair: Lec. Gozde MASATCIOGLU</u> “Doğuş University, Turkey”	
	Meta-Analysis Training	Prof. Mahmut AKBOLAT “Sakarya University, Turkey”
15:00-16:30	Heathcare Management in Pandemics <u>Chair: Asst. Prof. Ismail SECER</u> “Beykent University, Turkey”	
	The Effect Of The Covid-19 Pandemic On Society And Hospital Functions	Prof. Sedat BOSTAN “Ordu University, Turkey”
		Prof. Musa OZATA “Ahi Evran University, Turkey”
	Smart City / Smart Health Apps	Assoc. Prof. Taskin KILIC “Ordu University, Turkey”
		Prof. Yunus Emre OZTURK “Selçuk University, Turkey”

THURSDAY 23 SEPTEMBER 2021

TIME	THEME	SPEAKERS
09:30-11:00	<u>Chair: Asst. Prof Süheyl POZANTI</u> “Beykent University, Turkey”	
	“Knowledge and Attitudes Towards The Treatment of Cancer Pain - A Study Among Doctors and Nurses From Northwestern Bulgaria”	Assoc. Prof. Nikolai YORDANOV “Medical University – Sofia; Affiliation – Vratsa”
		Assoc. Prof. Lyubomir KIROV “Sofia University, Bulgaria”
	Health Literacy in the Pandemics and Changing Health-Related Behaviour	Prof. Selma ALTINDIS “Sakarya University, Turkey”
11:00-12:00	Workshop:	Ali Fuat GUVEN “USA”
12:30-13:30	Lunch Time	
13:30-16:00	<u>Chair: Prof. Aysegul KAPTANOGLU</u> “Beykent University, Turkey”	
	Attitude And Use Of Alternative Methods By Patients In Bulgaria	Dr. Yordanka STAIKOVA-PYROVSKA ‘Sofia University, Bulgaria’
	Patients with LUTS during the COVID-19 pandemic – the most common diagnosis- BPH	Dr. Dimitar KALINOV ‘Medical University-Plovdiv, Bulgaria’
	Male Reproductive Health And SARS-COV-2: What General Practitioners Should Know And Do	Dr. Todor GORANOV ‘Medical University-Plovdiv, Bulgaria’

	Craniocervical Fractures In Elderly Patients - Etiology, Diagnosis, Treatment Option And Clinical Results	Mihail Kalnev 'Medical University of Plovdiv, Bulgaria'
		Victor NOVAK PhD candidate AMDFA, BULGARIA,
	Challenges in Hospice Care During Covid-19 Crisis	Nina TOLEVA-NOWAK PhD candidate, UASG Sofia, Bulgaria
	Acute Myocardial Infarction in Covid19- A Case Report	Dr. Nevena IVANOVA 'Medical university, Bulgaria'
	Covid-19 Coronavirus And Perinatal Diseases	Prof. Larisa AGABABYAN "Samarkand University,Uzbekistan"
		Prof. Mo GIRACH 'MBA - Business Strategist, England'
16:00-17:30	Chair: Prof. Fevzi BALKAN "Beykent University, Turkey	
		Assoc. Prof. Mariana LYOCHKOVA 'Medical University of Plovdiv, Bulgaria'
		Assoc. Prof. Vanina MIHAILOVA-ALKALAI 'Plovdiv University, Bulgaria'
	The Wrong Communication Impact on COVID 19 Medical Management.	Prof. Rostislav KOSTADINOV 'Medical University of Plovdiv, Bulgaria'
	Covid-19 Hub - Information, Innovations And Implementation Of Integrative Research Activities	Assoc. Prof. Lyubima DESPOTOVA TOLEVA "Medical University-Plovdiv, Bulgaria"
		Primarius Lyubin SHUKRIEV 'President of A GP/FM SEE, Macedonia'
		Prof. Paul Kazunare Abe

		'Japan'

FRIDAY 24 SEPTEMBER 2021

TIME	THEME	SPEAKERS
09:30-11:00	Nursing Students Works Chair: Assoc. Prof. Esra KARACA CIFTCI, RA Cisem BASTARCAN	
	Investigation of The Effect of Nursing Students' Emotional Intelligence Level On Their Attitudes To The Distance Education Environments During The Pandemic Process	Ferda YILMAZ
	Determination of Individuals' Anxiety Levels And Attitudes To Violence During The Pandemic Process	Aleyna UCANBELEN
	Evaluation of the Effect of the Pandemic Process on Nursing Education	Kemal SAY
	Relationship of Covid-19 Pandemic Process with Anxiety and Depression Levels of Pregnants	Eda DURMAZ
	Determining Women's Thoughts Of Conceiving And Affecting Factors During The Covid-19 Pandemic Process	Helin KARAKUS
11:00-12:00	Workshop: One Million Books Child and Pandemics	Pre- K Teacher Derya SIRIN 'Montclair State University USA'
12:30-13:30	Lunch Time	

SCIENTIFIC PROGRAMME (Channel 3)**WEDNESDAY 22 SEPTEMBER 2021**

TIME	THEME	SPEAKERS
13:00-14:30	Physiotherapy And Rehabilitation Abstract Paper Presentations	
	Chair: Lec. Ozge TAHRAN	
	Investigation of The Change in Respiratory Functions And Exercise Capacity Levels in Patients Undergoing Open Heart Surgery: The Pilot Study	Yasemin SAHBAZ, Tulin OZALHAS, Ipek YELDAN, Ihsan BAKIR
	Carpal Tunnel Syndrome and Physical Therapy- Scooping Review	Fatih OZYURT, Cihan Caner AKSOY, Ismail OZSOY, Caner KARARTI
	Investigation of The Early Results of Patients Who Had Simultaneous Bilateral Total Knee Replacement Surgery During the Covid-19 Pandemic Period: The Pilot Study	Nezih ZIROGLU, Yasemin SAHBAZ
	Telerehabilitation in Stroke Patients	Onur Salman KORTELLI
	Telecardiac Rehabilitation in The Covid-19 Pandemic	Hilal Ulku DOGRUYOL
	The Impact Of The Covid-19 On The Cardiovascular System	Aysegul SAHIN
	A Drop Foot Case due to Herpes Zoster Infection During the Covid 19 Pandemic Period	Ozge TAHRAN
	Investigation of Technological Rehabilitation Approaches Used in Rehabilitation of Individuals Who Have Total Knee Arthroplasty Applied in the Covid-19 Pandemic	Yasemin KARAASLAN , Mehmet Eren UCUZOGLU

16:00-16:30	Abstract Paper Presentations Chair: Asst. Prof. Hatice DILEK DOGAN	
	Changes Of Eating Habits With COVID-19 Pandemic And The Effect of Emotional Eating on The Process	Nese YAKSI, Merve TURKMEN
	Evaluation of the Relationship Between Mediterranean Diet Quality Index and Anthropometric Measurements in Children and Adolescents	Esra TUNCER, Alev KESER, Emine Nuket UNSAL, Sevinc ODABASI GUNES, Onur AKIN
	Intuitive Eating and The Relationship Between Intuitive Eating and Health	Dilek SIVRI, Ulku DEMIRCI
	Healthcare Professionals' Awareness Of Violence Against Women	Pelin ZIVDIR
	The Effect Of Covid-19 Fear On Sleep Quality in University Students	Cevriye OZDEMIR, Hamiyet KIZIL
	The Importance Of Telemedicine Applications Increasingly Widespread With Covid-19	Fatma Meltem YURTSEVEN
	The Discourses Of Cancer Patients About Cancer Disease	Aslı KAYA, Yasemî Nurbanu KAYA
	Interaction Anxiety in Covid-19 Pandemic	Ozlem ANUK Simge MURCAK Gizem AYDOGDU

THURSDAY 23 SEPTEMBER 2021

TIME	THEME	SPEAKERS
09:30-12:30	Nursing Abstract Paper Presentations Chair: Asst.Prof. Yasemin Eda TEKIN	

	A Public Health Issue: Reducing the Effects of Elderly Social Isolation with the Use of Technology in the Covid-19 Epidemic	Fatma SAVAN
	Do Robots Used In Healthcare Replace The Nurse?	Kubra DIRI, Melek DEMIRAL, Hamiyet KIZIL
	Evaluation of The Covid-19 Vaccination Status of Healthcare Workers	Zuhal EMLEK SERT, Sevcen TOPCU
	Knowledge and Approaches of Emergency Nurses on Elderly Abuse	Aysegul ABDULLAYEV, Ayse DOST
12:30-13:30	Lunch Time	
13:30-15:00	Nursing Abstract Paper Presentations Chair: Asst.Prof. Aysegul ABDULLAYEV	
	Investigation of Nurses' Care Behaviors for Individuals with Infectious Diseases	Melek DEMIRAL, Kubra DIRI, Hamiyet KIZIL
	Few Decision Most Damage: Cytokines	Yagmur ARTAN, Aynur TUREYEN
	Health Risks Related to Using of Personal Protective Equipment Among Nurses During COVID-19 Pandemic	Sevcen TOPCU
	Hypertension, Covid-19 And Nursing	Amine TERZI, Aynur TUREYEN
	Investigation of Nurses Perceptions of Spirituality and Spiritual Care	Mujgan SOLAK
	Investigation of Nursing Postgraduate Theses related to Breast Cancer in Turkey	Sevval BOSTANCI, Ayse AKALIN
	Investigation Of Nursing Studies On Tele Health Practices In Turkey Between 2010-2020	Sema Nur YAMAN CELIK, Aylin DURMAZ EDEER
	Surgical Nursing During the Covid-19 Pandemic Period	Yasemin Eda TEKIN
15:00-16:30	Nursing Abstract Paper Presentations Chair: Asst.Prof. Seda Tugba BAYKARA MAT	
	Management of Nursing Services After the Pandemic	Yasin CETIN

	Mental Problems Experienced By Pregnant Women During The Covid-19 Pandemic Period: A Systematic Review	Cisem BASTARCAN, Eda DURMAZ, Helin KARAKUS
	Mental Problems of Nurses in COVID-19 Pandemic	Cicek EDIZ, Derya YANIK
	Psychological Hardiness, Life Satisfaction and Virtual Environment Loneliness Among Nursing Students During The Covid-19 Pandemic	Yesim CEYLANTEKIN, Hamide Nur CEVIK OZDEMIR, Dilek OCALAN, Ibrahim KILIC
	The Relationship Between Personal Protection Behaviors And Fear Levels Of Healthcare Professionals Who Get Covid-19 Vaccine	Seda Tugba BAYKARA MAT, Cisem BASTARCAN, Okan Anil AYDIN, Kadir CALISKAN
	The Relationships Between Psychological Resilience, Perceived Stress and Anxiety of Nursing Students During The COVID-19 Pandemic Process	Hamide Nur CEVIK OZDEMIR, Pakize OZYUREK, Ibrahim KILIC

FRIDAY 24 SEPTEMBER 2021

TIME	THEME	SPEAKERS
09:30-12:00	Medicine Abstract Paper Presentations Chair: Assoc.Prof. Mehmet AKMAN, RA Eda BALCI	
	Assessment of Physicians' Awareness of Child Abuse and Neglect: A Qualitative Study	Melda KARAVUS, Seyhan HIDIROGLU, Alican SARISALTIK, Ilknur AYVAZ, Zekeriya Tugay DOGAN, Ugur AYDIN, Tetyana SYROTENKO, Sena ILHAN
	Balneotherapy And Hydrotherapy	Ezgi YARASIR, Suleyman Erhan DEVECI

	Covid-19 Infection From The Perspective Of Intern Doctors That Have Had Covid-19 Infection in A University Hospital in Istanbul	Sukran PEKER, Seyhan HIDIROGLU, Asya OZHAN, Ayca CINAR Merve UZUN, Rumeysa EREN, Melda KARAVUS
	Evaluation Of A School Of Medical Students' Attitudes Towards Violence Against Women in Istanbul	Selin DAVUN, Merve KURNAZ AY, Seyhan HIDIROGLU
	Empirical Antibiotic Treatment Of Uncomplicated Urinary Tract Infections in A Family Medicine Outpatient Clinic	Alpaslan MERT
	Predictive Value Of Bacterial Vaginosis in Preterm Labor	Cemil KARAKUS
	Intensive Care Restructuring in Covid-19 Pandemia	Sule OLGUN
	The Importance of Biochemical Screening in The Diagnostics of Anomalies of Congenital Development	Gulnara Sherbekovna ELTAZAROVA, Dildora Rakhimovna KHUDOYAROVA, Zarnigor Juliboy kizi DONABOYEVA
12:30-13:30	Lunch Time	
13:30-16:30	Medicine Abstract Paper Presentations Chair: Asst.Prof. Ulku DEMIRCI	
	Evaluation Of Gender Bias in Students Of A School Of Medicine in Istanbul	Merve KURNAZ AY, Seyhan HIDIROGLU, Cagan DENIZ, Isil CEBI, Dilara ENGİN, Isık KARABAKAL, Selin DAVUN, Melda KARAVUS
	Experiences And Psychosocial Problems Of Intensive Care Workers During The Covid-19 Pandemic	Hulya LEBLEBICIOGLU, Hamide Nur CEVIK OZDEMİR, Fatma NAIR AKTAS, Kazim SENOL
	Fear Of Covid-19, Resilience And Psychological Distress in White Collar Employees During The Covid-19 Pandemic	Merve KURNAZ AY, Sukran PEKER, Ammar DHAN, Durmus Bora CAGER, Oyku ZAIMOGULLARI, Salih

		CAGDASER, Semiye CAYANOGLU, Ahmet TOPUZOGU
	Prevalence Of Neck Pain in Drivers And Affecting Factors	Ezgi YARASIR, Mehmet Ali SEN, Edibe PIRINCCI
	Seasonality Of Suicide And Prediction Of Suicide Rates in The Following Years	Kubra YILDIZ, Ramazan Azim OKYAY, Adem DOGANER
	The Awareness Of Childhood Autism: A Qualitative Study	Selin DAVUN, Alican SARISALTIK, Pinar KAYNAR, Khadija ELTAIRA, Ghania Hemed SALIM, Ammar Al SALLOUM, Negar RASHIDI, Amira a Ahmad SALEH, Fadi AL MUSTAFA, Saif Husham Yousif BAYAZEED, Seyhan HIDIROGLU, Melda KARAVUS
	Virtual Reality Applications in Spinal Injury	Gurkan BERIKOL
	Vitamins in Immunity and Covid-19: A Review	Irem DURCEK

SATURDAY 25 SEPTEMBER 2021

TIME	THEME	SPEAKERS
09:30-12:00	Chair: Prof. Seher DENIZ OZTEKIN	
	Problems Faced By Nurse in the COVID-19 Pandemic	Busra INAC YILMAZ
	Psychological Effects of Covid-19 Pandemic on Our Health	Busra INAC YILMAZ', Nevin KANAN
	Overview of the Perioperative Period and Nursing in the COVID-19 Pandemic	Oyku KARA, Seher Deniz OZTEKIN

	A Review on COVID-19 Phobias of Nursing Students	Nuriye DEGIRMEN, Esra KILINC AKMAN, Sevgi GUR, Nevin KANAN
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	Perioperative Nursing Care of Liver Transplant Patients During COVID-19 Pandemic	Seher DENIZ OZTEKIN
	Views and Experiences of Psychotherapists on Online Therapies-A Qualitative Study	Ayşe Gulsen TEKER
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	An Investigation of The Perception of Covid-19 Pandemic on Society's Healthy Life Style Behaviors	Gizem KAMIS, Nurcan COSKUN US
	Burnout And Intention to Leave A Meta-Analysis Of The Relationship Between In Turkey	Okan Anil AYDIN, Mustafa Süheyl POZANTI, Aysegul KAPTANOGLU
	Cardiovascular Health Services And Health Literacy Among Immigrants in Europe: Addressing The Challenges And Opportunities During The Covid-19 Outbreak	Muhammet GUMUS, Sibel ORHAN
	Effects Of Covid19 Pandemic on Health Economies in Turkey, Usa And South Korea	Kubra BARIS, Funda ILGAR, Hasan Cem MERCAN
	Emotional Intelligence Of Health Institutions Employees	Sema DEMIR, Okan Anil AYDIN, Aysegul KAPTANOGLU, Ismail SECER
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	The Effects of Performance Evaluations on Employees in Health Institutions	Iclal YAVUZ
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PRESENTATIONS

PANEL PRESANTATION

P-01: The Impact of Covid-19 Pandemic on Education

Areti TSALOGLIDOU

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Abstract

Introduction: At the peak of the pandemic, schools in many countries worldwide have remained closed for more than a year in an effort to reduce the spread of COVID-19. This fact affected more than 168 million children. In addition, approximately 214 million children worldwide - or 1 in 7 - have lost three-quarters of their face to face learning as there was replaced by distance learning methods. The aim of this study is to present the effects of Covid-19 pandemic on education and to identify their implications for students and educators' everyday practice.

Method: An extensive review of the relevant literature was performed via electronic databases (Google Scholar, Mednet, Pubmed, Medline, the Hellenic Academic Libraries Association -HEAL-Link) and scientific journals (English and Greek) using relevant key words.

Results: Classroom teaching has been replaced by distance teaching and learning in two-thirds of the Higher Education institutions and Universities worldwide. The only exception to this was Africa where the transmission from classroom teaching to distance teaching and learning was really difficult and as a result at 24% of the Higher Education Institutes there teaching has been cancelled. The feasibility and the quality of the distance learning methods provided by the Higher Education Institutions were affected by three basic features: a. Technical infrastructure and accessibility b. Distance learning competences and pedagogies and c. The field of study.

Conclusions: The closure of schools has enormous consequences on education and well-being of children. Transitioning from traditional face-to-face learning to distance learning was an entirely different experience for the learners and the educators, who they had to adapt to a system that they were not prepared for.

Keywords: COVID-19, Pandemic, education, School closure, Distance teaching, Learning.

P-02 Mental Health Problems During Covid-19 Pandemic

Hassan MİRZA

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Abstract

Quarantines are one “of humanity’s oldest defenses against infectious disease” In response to the Black Plague pandemic in 1347-1348, Venice founded the 1st quarantine island, so ships arriving in Venice from infected ports were required to sit at anchor for 40 days before landing. This practice, called quarantine, was derived from the Italian words quaranta giorni which mean 40 days.

When scientific evidence is reviewed, high prevalence of symptoms of psychological distress and disorder are depressive symptoms, irritability, insomnia, post-traumatic stress symptoms, anger, exhaustion, nervousness/ numbness, fear/ guilt. All other quantitative studies only surveyed those who had been quarantined and generally reported a high prevalence of symptoms of psychological distress and disorder. Alcohol abuse/dependence symptoms among hospital employees exposed to a SARS outbreak, having been quarantined and having worked in a high-risk location were the two types of exposure significantly associated with these outcomes.

Pre-quarantine predictors of psychological impact are younger age, lower levels of formal educational qualifications, female gender and having one child. Stressors during quarantine are duration of quarantine, fears of infection, frustration and boredom, inadequate supplies and inadequate information. Longer durations of quarantine were associated with poorer mental health. Fears about their own health or fears of infecting others, those who were concerned tended to be pregnant women and those with young children. Confinement, loss of usual routine, and reduced social and physical contact. Four studies found that supplies from public health authorities were insufficient. Participants reported receiving their masks and thermometers late or not at all; food, water, and other items were only intermittently distributed. Participants cited poor information from public health authorities as a stressor, reporting insufficient clear guidelines about actions to take and confusion about the purpose of quarantine.

Evidence from elsewhere also emphasises the importance of authorities adhering to their own recommended length of quarantine, and not extending it. For people already in quarantine, an extension, no matter how small, is likely to exacerbate any sense of frustration or demoralisation. Ensuring that those under quarantine have a good understanding of the disease in question, and the reasons for quarantine, should be a priority. Officials also need to ensure that quarantined households have enough supplies for their basic needs and, importantly, these must be provided as rapidly as possible.

Keywords: mental health, covid-19, psychology

P-03 The Effects of the Covid-19 Pandemic in Nursing Education; Challenges and Opportunities

Memnun SEVEN

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Abstract

The COVID-19 pandemic and measurements taken to control the spread of the disease have forced nurse educators to reexamine how to educate nurses while maintaining patients' health and safety. Nursing faculty charged with preparing the next generation of nurses had to meet the challenges by thinking beyond the traditional classroom boundaries and clinic to co-create new ways of the teaching-learning mission of nursing education programs. Nursing education theoretical courses and clinical experiences were adapted to remote and virtual platforms. While theoretical courses were mostly offered remotely, clinical experiences and related requirements have been adjusted to leverage remote and virtual experiences with use of high-fidelity simulations. Although these rapid changes brought many challenges due to limited faculty experienced in remote teaching and lack of sources such as technology and support systems for faculty and students, it also brought opportunities to envision innovation, flexibility, and changes in program delivery. In this presentation, the challenges to transfer nursing education into virtual environments and the opportunities for the future of nursing education will be discussed.

Keywords: COVID-19, Nursing education, Nursing

P-04 The Impact of Covid-19 Pandemic on Cancer Care

Sara TORCATO PARREIRA

European Oncology Nursing Society, Portugal

Abstract

The COVID-19 pandemic has severely impacted cancer care, disrupting prevention and treatment, delaying diagnosis and vaccination, and affecting access to medicines. Since the pandemic began, the number of cancer diagnoses has decreased, foreshadowing a future increase in cases. COVID-19 has had a detrimental impact on every access milestone. One of them is research and development. Clinical trials have been delayed or put on hold. Clinical trial outcomes have been compromised. Charitable research funds have been reduced and private equity funds are expected to decrease. In May 2020, a global survey found that 19% of brain tumour patients could no longer enrol in clinical trials due to COVID-19. In July 2020, over 20% of global oncology trials were halted because of the pandemic, with breast, prostate and lung cancer trials impacted the most. Another negative impact of COVID-19 is "patient access". Screening programmes: Globally, 41% of nations (including several European countries) reported they had suspended their programmes in response to the pandemic. Reduction of hospital diagnostic capacity - The decline in cancer diagnoses is due to diagnostic tests being deferred, following a reallocation of scarce resources towards COVID-19. According to the World Health Organization (WHO), 55% of countries reported disruptions to their cancer services due to the pandemic. Disruptions to screening, diagnosis, treatment, and follow-up are apparent in many European countries. The COVID-19 pandemic and the experience with vaccine development have clearly shown us that when we come together, when we pool our efforts and resources, it is possible to make unprecedented progress. It requires the unique convening power of the EU, fixing goals, setting clear deadlines, committing the necessary funding and connecting the main actors through effective partnerships. Applying this approach to cancer can deliver effective results. By working as a team and combining efforts at national and EU level, we can overcome individual weaknesses, reduce fragmentation, and deliver a more effective and more equal response to cancer.

Keywords: Covid-19, Cancer, Pandemic

P-05 Health Management InterviewOguz OZYARAL
Rumeli University**Abstract**

The coronavirus (COVID-19) outbreak is having a significant impact on the lives and lives of people across the globe, especially after the World Health Organization declared a global pandemic in the second week of March 2020. A number of measures have been taken under the leadership of the public to reduce the effects of the pandemic in Turkey. In order to limit the effects of the virus, trips abroad were limited, restrictions were imposed on domestic travel, a curfew was imposed for citizens over the age of 65, and a distance education system was introduced instead of formal education in schools. For this reason, millions of people around the world have started to receive education through open and distance education. Due to this pandemic in the world, all education levels in Turkey have been suspended except for face-to-face education and open and distance education opportunities have started to be used for all students. In addition, almost all of the higher education institutions have started to publish online exam application principles by making preparations for conducting midterm exams online for associate and undergraduate programs. Due to the coronavirus (Covid-19) pandemic, students studying at associate, undergraduate and graduate levels can freeze their registrations in the spring semester of the 2019-2020 academic year, upon request; It has enabled the thesis defense and proficiency exams to be conducted with digital facilities such as video conference, provided that they are auditable and "on record". In addition, almost all higher education institutions have made preparations for conducting midterm exams for associate and undergraduate programs online by making preparations for online They started to publish exam practice principles.

Keywords: COVID-19, Education, Student Life

P-06 The Simulated Surgery Goes Virtual

Samantha SCALLAN

University of Winchester, Landon

Abstract

The simulated surgery assessment process are 12 cases at ten-minute intervals, typical /common GP presentations in UK, no physical examination of the patient – assessed during the clinical placement, instead, ‘findings’ are then given to the candidate and each case has dedicated examiner and role player. The simulated surgery assessment marking 5 assessment domains, each - 5 item checklist (= max score 25). Assessment is case specific 4/5 domains (information gathering, explaining the diagnosis/problem, eliciting ideas, concerns and expectations, clinical management), 5th – consultation skills (rapport and empathy, listening actively, patient-centered care, holistic approach and conducting a structured consultation). There are three possibilities for candidate; pass, borderline pass or fail. In simulated surgery assessment use since the January 2020 ‘diet’ (assessment event), usually 4 diets per year. Each diet lasts 3 days, accommodating 36 candidates. Prior to diet candidates is check /support technology, examiners /role-players are briefing and calibration. First day candidates undergo briefing, ID and room checks and examiners /role-players have briefing. Candidates receive a link to their own consulting room. Examiners /role-players move virtual rooms as a process. The aims of the evaluation were firstly to establish whether the virtual platform was fair and equivalent to the face-to-face assessment, secondly to establish whether the virtual platform was acceptable to candidates, administrators, role-players and examiners, and finally we want to gather feedback about the online mode of assessment. Data was collected scores and feedback by questionnaire. Performance of 170 candidates from 7 diets (July 2019-March 2021) studied. First 3 diets were face to face; final 4 virtual. Comparison of pass-marks, mean scores and reliability. We looked feedback from 4 virtual diets. 49 candidates (F=24; M=25). 89 examiners, role-players, administrators, marshalls. We generally feedback extremely positive and we were able to grip it on Brook Road heading of organization and management. Number of particular areas of a sign posted in the feedback and the preparation and reason were found to be extremely helpful. Candidate support by the administrative team to ensure and the process run smoothly. However, they did note that so we're missing aspects which was presented some challenges to the assessment. In conclusion assessing consultation skills using a virtual simulated surgery fair and equivalent to the face-to-face assessment. Assessing consultation skills using a virtual simulated surgery acceptable to candidates, administrators, role-players and examiners.

Keywords: Simulated surgery, face-to-face assessment, virtual simulated surgery

P-07 Acceleration of Digital Health in the Covid-19 Pandemic: Rethinking Digital Tools for Primary Care Transformation

Gabriel CATAN

The World Bank, USA

Abstract

Clients, providers, administrators and health system face multiple challenges to accessing, delivering and receiving high quality, equitable, patient-centered care. To achieve Primary Health Care (PHC) reimagination four paradigm shifts are needed. 1) From gate-keeping to quality, comprehensive care for all 2) From fragmentation to on patient centered integration 3) From inequities to fairness and accountability 4) From fragile to resilient health system. Digital health is an enabler for PHC transformation and how COVID has exposed this need. Digital transformation in primary care has occurred in incremental steps, but remarkable progress has been achieved over time. Experiences gained during the pandemic have proven useful for encouraging digital adoption, altering mindsets and learning lessons. Still given the complexities involved, further progress is likely to be gained through an ongoing process of evolution and adaptation rather than revolution and disruption. WHO classifications of digital health interventions by primary user. Clients, healthcare providers , health system managers, data services. This extensive range of interventions has big impact on the production, organization and use of the evidence base. Digital health assessments, strategies and roadmaps, conducting assessments to understand the challenges, bottlenecks, preferences and capacities is an important starting point. Digital health strategies and road maps are needed, linked to. Essential to ensure that regulatory framework and eHealth data standards are in place. Capacity building is essential to built cadres of well informed, effective leaders to help countries implement digital health systems. Prepare government staff to successfully lead and execute digital health transformation initiatives. Economic evaluation evidence for digital health interventions in published literature is very limited. There are unique considerations for conducting an economic evaluation to develop evidence useful for investment and decision making about a digital health intervention. Information system and the healthcare data that they curate, remain the backbone of digital health evolution. Health informatics- system approaches and health data exchanges- are more important than ever in the burgeoning world of digital health. Enhance and coordinate collaboration with other partners, in order to reduce fragmentation and create alignment around a government's owned strategy and directions.

Keywords: Digital health, Primary healthcare, Digital tools

P-08 The Role of the Food Industry in the Era of the Covid-19

Duygu AGAGUNDUZ

Gazi University, Faculty of Health Sciences, Department of Nutrition and Dietetics

Abstract

Coronaviruses are a large family of viruses that can cause illnesses in people and animals. Coronaviruses are known to cause respiratory tract infections in humans ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The New Coronavirus Disease (COVID-19), which was first identified in Wuhan Province of China in late December, spread rapidly around the world, causing a pandemic. This pandemic has not only been related to health, but also has caused social, environmental and economic impacts in many areas. In terms of food industry, the COVID-19 pandemic has brought up food security and food safety issues. Food industry and food producers tried to meet the demand for the stocking and increase, which occurred in the early days due to the effect of the pandemic. However, at this point, a serious food waste problem has started to come up. Especially some countries around the world where hunger is still on the agenda, have been more affected by the impact of the pandemic. In this regard, both in those fragile countries and in others, the food industry has important roles and responsibilities in meeting the increasing demand for some basic foods and reducing food waste (reducing packaging, teaching expiry dates, etc.). On the other hand, the issue of food safety emerges as another important problem of the pandemic period. Although it seems unlikely for people to get the COVID-19 virus from food or food packaging for now, it will be very beneficial for the food industry to take the necessary precautions in this regard. In this context, some hygiene measures are applied for the sales of food products in our country. However, in addition to this, it is extremely important for the food industry to have Food Safety Management Systems based on Hazard Analysis and Critical Control Point (HACCP) principles to manage food safety risks and prevent food contamination. Apart from all these, the food industry should make changes in the production technologies and formulations of foods related to the increasing obesity and some nutritional problems during the pandemic period, and if necessary, it should introduce novel innovative products to the market. The industry should also communicate more with consumers through various communication channels and provide more information about their activities during the pandemic period. The government should carry out these processes in cooperation with food / nutrition and health professionals and consumer organizations.

Keywords: COVID-19, Food industry, Food security, Food safety, Nutrition

P-09 Nutrition in Covid-19 Pandemic Era

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Abstract

Introduction: Covid 19 is an infectious disease caused by SARS-CoV-2 and is causing huge health problems and economic suffering all over the world. W.H.O declared Covid 19 a pandemic on 12 March 2020. Health authorities recommended social isolation and distancing as a measure to prevent the spread of the disease, which resulted in the adoption of unhealthy dietary habits, reduced physical activity and obesity. The present study evaluates the current status of research on the topic of nutrition as it relates to the COVID-19 pandemic. An extensive literary search of relevant articles for the period 2019-2021, was performed via Medline, PubMed and Google Scholar databases, using the following keywords: “COVID-19; lockdown; nutrition; physical activity; food”. It is clear that COVID-19 lockdown promoted unhealthy dietary changes and increased population’s body weight. In addition, obesity and low physical activity levels are risk factors of COVID-19 affection and physiopathology. In hospitalized COVID-19 patients presented malnutrition and deficiencies in vitamin C, D, B12, iron, omega-3, and medium and long-chain fatty acids highlighting the potential health effect of vitamin C and D interventions.

Conclusions: A healthy balanced diet, sufficient vitamin intake (with vitamin C, D), and an active lifestyle are strongly recommended as a preventive measure to the general population and of course Covid 19 patients. Nutritional support and rehabilitation exercise are needed to avoid muscle atrophy in COVID-19 hospitalized patients. They should be considered as a part of the therapeutic approach.

Keywords: Lockdown, Nutrition, Physical Activity and Food

P-10 Covid-19 and Spinal Cord Injury

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Abstract

With the emergence of the novel coronavirus (SARS CoV-2), the COVID-19 pandemic has swept the world and left us with serious concern for public health and need for significant modifications in healthcare operations all around the globe. These unprecedented times have been hard for everyone with or without disability, however we feel that there has been a serious lack of information geared specifically for SCI individuals. At the beginning of the pandemic our outpatient clinic activities have been limited, rehabilitation beds become repurposed for acute care needs, our colleagues get send to the emergency rooms or COVID-19 wards. During the pandemic the global and local health authorities in a way neglected persons with SCI and other disabilities. I want to emphasize the possible problems that SCI individuals have faced during this hard times. SCI individuals face increased health risks, they had limited access to care, uncertain availability of caregivers and medical supplies, difficulties meeting their basic needs, and may suffer more than others from the consequences of social distancing. The common problems that persons with SCI may have during COVID-19 pandemic are; Inaccessibility to hospitals or health care systems for their routine follow ups and treatments, social distancing, as it may not be feasible for those living with care givers, psychological distress due to quarantine measures, PPE usage, as many with UE dysfunctions may have a hard time putting on masks, shields, gloves on their own, need for new hygyne rules for those using wheelchair and assistive devices. Additionally, in order to prevent delays in diagnosis we have to take into consideration that SCI persons could present with atypical symptomology compared to the general population. SCI could be classified as a high-risk comorbidity for covid-19. Individuals with SCI develop a number of physiological changes that not only increase their risk of morbidity from COVID-19, but may also mask the presentation of an acute respiratory illness which in turn, can potentially delay the diagnosis of COVID-19. These changes include;

- respiratory problems (impaired cough) due to thoracoabdominal muscle weakness
- temperature dysregulation (poikilothermia)
- abnormal sensations at or below the neurological level of injury
- and systemic immunosuppression resulting from the injury

Especially those with higher levels of spinal cord injury, have a greater baseline risk of developing respiratory complications and infection-related complications due to altered respiratory tract physiology. In addition, elderly SCI individuals are also at higher risk of complications compared to their younger counterparts.

Keywords: COVID-19, Spinal cord, Pandemic

P-11 Growing Up in a Pandemic World

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Abstract

The health of children today is one of the biggest challenges of our time for all parents and all healthcare providers. Pediatricians working in Shaanxi Province, China have pursued the strategy of nurturing resilience in children and adolescents hit by the psychological consequences of the COVID-19 epidemic. There is data on many problems. (clinging, irritability, worry, inattention, fear for the health of relatives, sleeping disorders). Children aged 6 to 18 years were more likely to show inattention ($P = .049$) and persistent inquiry ($P = .003$). Clinging, inattention, and irritability were the most severe psychological conditions demonstrated by the children in all age groups. Homeopathic treatment can diminish or neutralize a lot of the stress in every stage of human life and improve mental and physical health. Homeopathy research is a relatively new field, so it's true to say that there are not a huge number of studies, but some evidence is very different from no evidence. Homeopathy is a holistic method – a broadening of the healing art. The basic law is “SIMILIA SIMILIBUS CURENTUR”. This Homeopathic principle could be regarded as similarity in frequencies of the healing agents and the pathological processes. Homeopathy can be applied as a single method or support any other holistic or allopathic method. Choosing homeopathy and other holistic methods as first line of treatment in inflammatory diseases will diminishes the use of antibiotics. Parents, pediatricians, psychologists, social workers, hospital authorities, government and non-governmental organizations have important roles to play to mitigate the psychosocial ill-effects of COVID-19 on children and adolescents. To provide the basic amenities, social security, medical care, and to minimize the educational inequities among the children of the different strata of the society are foremost priorities. In order to grow up healthy children we need to take care of the whole family. Holistic approach, Homeopathy and Family Dynamics.

Keywords: Homeopathy, Holistic approach, Family Dynamics

P-12 Compassion Fatigue in Frontline Nurses During the Covid-19 Pandemic

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Abstract

Introduction: The COVID-19 pandemic which started in December 2019 in Wuhan (China), has severely affected the global economy, and imposed a devastating impact on all aspects of life globally. The pandemic has also cost the lives of millions of people leading affected family members to feelings of grief. Amidst this dramatic landscape, frontline nurses come to provide compassion, which according to Merriam-Webster can be defined as sympathetic awareness of another's distress combined with a desire to alleviate it. Healthcare workers on the front lines of the COVID-19 pandemic faced a wide range of stressors and unprecedented pressure which put their physical, mental, and social well-being at risk. This situation created by the pandemic elicited different emotional responses among frontline nurses, with others reporting negative and others positive feelings and emotions. It has been found that the COVID-19 pandemic has created a significant psychological, professional, and moral burden for intensive care staff who should be viewed as second victims of the pandemic. The results of a Spanish study showed that the score of compassion satisfaction was moderate/high while burnout and compassion fatigue were moderate in the frontline nurses, with age being significantly and negatively related to professional quality of life. According to another Greek study, almost one in four (23%) of participant nurses working in covid-19 clinics reported high compassion fatigue while 77% were found to have high potential for compassion satisfaction. Protective factors included adequate preparation/education, clear and accountable leadership, and team sharing of feelings, experiences, and responsibilities during the transition in the COVID-19 unit. The findings of a Korean study showed that 51,6% of respondent nurses experienced moderate Compassion Satisfaction, 23,3% moderate secondary traumatic stress and 34,2% moderate burnout levels compared to 49,3% and 40,2% who experienced low secondary traumatic stress and burnout levels respectively. Also, according to a Philippines study, increased compassion fatigue was associated with poorer nurse-reported quality of care, lower job satisfaction and higher organizational turnover intention. The same study also showed that resilience fully mediated the relationship between compassion fatigue and quality of care and partially mediated the relationship between compassion fatigue and both job satisfaction and organizational turnover intention.

Conclusions: As several studies showed, in a health crisis situation, the levels of compassion fatigue and burnout remain similar to those reported in studies prior to the crisis, while the levels of compassion satisfaction improve, especially among nurses. Regardless of this crisis situation, long-term interventions, at individual and organizational level, are needed in order to improve compassion skills among healthcare staff and to alleviate emotional distress at different levels. Only by knowing themselves, their weaknesses, their abilities and their limits can nurses wisely take care of themselves and serve the suffering person with sensitivity.

Keywords: Fatigue, Frontline Nurses and Healthcare Works.

P-13 Effect of Covid-19 Pandemic on Genetics Evaluation Center

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Abstract

Radical decisions were taken with the effects of the pandemic in Turkey. There are social, economic, political, education, administrative, legal, military and cultural effects. Education suspended in primary secondary and high schools. Spring semester classes cancelled in all universities and exams postponed. Congregational prayers suspended in mosques and masjids. All restaurants, cafes, museums, classrooms, courses, shopping centers, hotels barbers, hairdressers and beauty centers coffee houses, sports halls, concert venues, night clubs, association clubs and wedding/engagement halls temporarily closed. All football leagues in the country postponed and all sports competitions canceled until further notice. All airline companies, especially Turkish Airlines terminated all international and domestic flights until further notice.

There are also effects of the pandemic dicisions and restrictions on Turkish economy. Many arrangements were made and support packages were announced in order to minimize the economic effects of the pandemic. Flexible working system introduced with minimum personnel in the private and public sectors. The Ministry of Treasury and Finance reduced, postponed or waived taxes on many items. In accordance with the law, the Ministry of Family, Labor and Social Services imposed a three month dismissal ban on employers. All these decisions and restictions couldn't avoid the devastating economic effects of Covid 19 in Turkish economy; human deaths, unemployment increase, welfare loss, budget deficits and public debt increase, social deterioration in security institution finances, current account deficit increase, official reserve decrease and exchange rate increase.

Covid-19 changed many things in people's lives. Many companies bankrupted many had new opportunities. What Genetiks did during this period with ups and downs are; established new qualified tests in the laboratory, new cancer tests are added, despite the decrease in test numbers new and more valuable tests increased the company turnover, kept the number of infected to a minimum by keeping the safety of laboratory personnel at the highest level.

Keywords: covid-19, genetics, effects of pandemic

P-14 Standardization and Handicaps of BranchingYahya ÖZEL
Dogus University**Abstract**

What is Standardization? It can be taken as a sample or as a basis, measure, measured.

What is Branching? Deepening in a certain field, having extensive knowledge; branching To receive special education, specialize, specialize in a certain subject

Infections? Infections usually result from the interaction of the host with pathogenic microorganisms (pathogens). If a pathogenic microorganism has entered, localized and reproduced in a body, that individual has an infection.

Corona Virus is a disease, a threat, but also a warning for Humanity that fundamentally shakes its life on earth.

Major illness!! Herald of what? Is it a warning? Is it the beginning of the end? Is it the beginning of a different life? Is the cause a laboratory-based attack? Is it a natural contagion? Does Etiology Matter? Is it the wrong choices we make, forgetting our life purpose?

Standardization on the basis of principles is ok. At what stage are standardization and protocols required? but is it actually misapplied?

Unfortunately, every human being who can benefit from the blessings of modern life, which we call humanity and civilization, is unfortunately exposed to the same effects.

Do not get it wrong, standardization and branching, specialization are of course essential. The problem is in the application. It should be based on standard principles. In order to do a job better, specialization is necessary. Today, uniform rather than standard principles, to the product. In branching, it causes problems when it comes to having knowledge about the field it is related to.

Why are we saying this? In the world, human is not a living being alone, he can see himself as the absolute power of the world and even the universe. However, it is certain that animate and inanimate beings exist and are in constant interaction.

When human disrupts this balance, it actually creates the ground for diseases. Many factors must come together for an infection to occur. Influencer, Appropriate environment.

Covid 19 disease. It has affected the whole world and is fighting. If you pay attention today, it is such a great war that unfortunately, when people are struggling with it and dealing with its treatment, is the same sensitivity shown about why it occurs?

Sometimes the war can be so fierce that we are slow to take the necessary measures to avoid such disasters in the future.

The genetic change varies according to the type of living thing. There are many factors that are effective here. While this change occurs very rapidly with the mutation of microorganisms, this change is much slower in living things that host many systems such as Humans. The effects of the mutation on life gain importance here. Because some mutations facilitate survival, while others result in death.

At this point, nature acted justly. The mind of human, his power to produce, in addition, the rapid growth and adaptability of microorganisms.

Keywords: Standardization, Handicaps of Branching, Covid 19, Infection

P-15 Diabetes and Covid-19

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Abstract

Diabetes influences the severity and outcome COVID-19. COVID -19 influences control and complication of diabetes. It is not proven whether diabetes or its complications might directly increase the risk of becoming infected with SARS-Cov-2. But we know very well that diabetes is string risk factor for severe COVID cases. Even the earliest report from Wuhan noted a higher prevalence of diabetes among severe cases of COVID-19. A high prevalence of diabetes was also noted in reports of COVID-19 hospitalizations in Italian populations. The increased age, male gender, hypertension and increased Body Mass Index (BMI) are connected with more severe COVID-19. Type 1 diabetes is connected with more severe COVID-19. Medications also influence COVID-19 severity. For example, metformin is connected with less severe COVID-19. Worse diabetes control connected with more severe COVID-19. Diabetes neuropathy could play a more important role in the loss of capacity of regulate immune response. Current data show significant association between autonomic nervous system dysfunction and reduced diffusing capacity of the lungs for carbon monoxide (DLCO) in type 1 diabetes. Diabetic autonomic neuropathy could damage regulation of pulmonary bronchomotor function and autonomic control of ventilation. Some studies suggest that telemedicine could be beneficial and lead to unchanged/improved diabetes control during lockdown. Recent studies suggest that telemedicine could be beneficial and lead to unchanged status of complications during lockdown. Comparison of telemedical vs standard outpatient monitoring in the care of patients with diabetes foot ulcers. In conclusion crucial role of primary care via patient education, self-care and telemedicine is important the control diabetes.

Keywords: Diabetes, COVID-19, pandemic

P-16 Nursing Care in Calm and CalamityAyhan AYTEKIN LASH
Northern Illinois University**Abstract**

As the world tackled the largest public health calamity in more than a century, the true value of nursing began to become obvious to the politicians and the public. Even in calmer times American nurses work hard physically and emotionally managing at least 8 patients, doctors of these 8 patients, their families, along with the ever-changing technology, while also coordinating patients care with other departments. Hence, even during calm times, some American nurses got burned out and several left nursing for other jobs. In America, there never was a calm time for nurses. Now imagine how happens when a calamity such as the COVID-19 pandemic sweeps through America like a wild fire. Center for disease Control reports by September 2021, 24 million Americans contracted COVID, and 680 million of them died. With this calamity, the need for well-educated nurses became very acute. However, there were not enough nurses to take care of thousands of critically ill patients. Hospitals became overwhelmed. In August 2021, the calamity got worse as delta added 4.2 million newly infected people. This second calamity, created a historic nursing shortage. As infection increased, many nurses left their jobs fearing death from an unending spread of infection by unvaccinated people. Hospitals began to pay nurses 150/hour, (During calm times the best pay for a registered nurse was barely \$40/hour) even offering \$40.000 sign-in bonus to keep nurses from leaving. This created a problem for less wealthy hospitals as nurses moved to better paying hospitals for the same work. In September Mississippi had 2000 less nurses than they did last year. Even under these calamitous circumstances, American nurses remained by their patients' bedside. Some hospitals forced nurses to work 12 hours a day. There were also shortages of masks, protective clothing, disinfectants, even gloves. Many nurses slept on the floors of their locker rooms rather than spread the disease. Many became exhausted and some got infected and 1600 nurses died. During the COVID pandemic, the only connection between isolated patients and their families were the nurses; Nurses would help patients do facetime with their families, walk patients to windows so they can see each other, quite often nurses were the only ones who would provide human touch before COVID patients died.

Keywords: Nursing care, calamity, COVID-19

P-17 Oral and Dental Health in the Pandemic Process

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Abstract

Coronavirus disease (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has become a major public health problem worldwide. The World Health Organization has first declared the new coronavirus epidemic as a “public health emergency of international concern” and afterwards a “pandemic”. First case in Turkey is traced back to 11 March 2020, when the Ministry of Health and the Advisory Scientific Committee started working to safeguard public health. SARS-CoV-2 enters cells through ACE2, the same host cell receptor, but has a higher binding affinity compared to SARS-CoV. Once entering the mucosal epithelial cells, SARS-CoV-2 becomes abundant in the saliva and nasopharyngeal secretions of affected patients. The transmission routes of this viral infection, are direct contact, droplet and aerosol delivery. According to the data obtained from COVID-19 case series; the disease may have early symptoms such as loss of taste, loss of smell and dry mouth before typical symptoms of fever, dry cough, and fatigue. This supports the hypothesis that the first port of entry of the SARS-CoV-2 virus is the upper respiratory mucosa. Dentists therefore play a vital role in the early diagnosis and preventing transmission of COVID-19. This presentation aims to provide a comprehensive protocol regarding infection control and patient management for dentistry practices.

P-18 Running an OSCE Virtually

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Abstract

The primary purpose of the tripos of assessments for the I&R scheme is to identify those whose level of skills is below an acceptable standard for inclusion in the I&R scheme. The inclusion of the tests in the selection process encourages candidates to consider the appropriateness of their application to the I&R scheme and encourage candidates to revise their clinical knowledge in advance of the scheme. The 'face validity' of the I&RSS is good. Palettes of cases for each sitting selected to provide a variety of contexts and challenges. Feedback about a case from the assessor and role-player is collected each time it is run. The cases are typical presentations encountered in general practice. The role player responds to doctor's consultation style but will need facilitation to tell their whole script; will not deliberately conceal vital information. The examiner in the background to see the interaction between candidate and role-player. Candidates advised to avoid eye contact with them. The examiner will not intervene unless it is essential, and will leave with the patient at end of consultation. All the examination findings are given and there is no need to request for a chaperone. Reasons for dropping physical examination in the simulated surgery are we don't do it well. Quality assurers look at how the cases perform, the consistency of the role-player and the justification of the marks by the assessor. The five areas (or domains) in which performance will be assessed in the simulated surgery are shown as follows: first gathering medical information second eliciting the patient's concerns third explaining the diagnosis forth managing the problem fifth effective consulting. After each consultation, brief comments are about the doctor's performance are recorded by the observer and the role-player. These are compiled so that each candidate receives a sheet with feedback from 10 role-players and 10 observers. Feedback to be positive and/or constructive with suggestions for improvement. Calibration essential - familiar with each other and the scenario. Could offer assessments based at the examination center to allow examiners and role-players to work together on a circuit but at the same time offer candidates a choice of face-to-face or virtual assessment. Simulated surgery can be adapted to run virtually and shown to are equivalent both in terms of acceptability and other parameters of quality assurance of examinations. Developing virtual assessments would help emergence of literature around remote assessment given the "genie" is out of the bottle.

Keywords: Simulated surgery, medical information, role-player, examiner, candidates

P-19 Meta-Analysis Training

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Abstract

Meta-analysis is a method that combines the results of multiple independent studies on a specific subject and statistical analysis of the research findings. In a word, meta-analysis is the analysis of the results of previous studies. More specifically, it is a method used to bring together the results of earlier studies consistently and compatibly (Cohen & Manion 2001). In this sense, meta-analysis is a robust literature analysis method that combines and interprets the results of many studies in a meaningful way.

The field of interest of meta-analysis is generally the studies carried out in health and aiming to explain causal relationships. However, the method can also be applied to different fields such as non-causal relationships, descriptive studies, research on the validity and reliability of diagnostic procedures, statistical models, results tables, and cost-effectiveness studies (Nelson, 2014; Abrahamson & Abrahamson, 2001). The main advantages of the method can be listed as performing subgroup analyses to investigate the effect and safety of a treatment, explaining missing data by observing at an individual level, combining the findings of different studies and increasing consistency between studies (Thomas et al., 2014; Riley et al., 2010). On the other hand, various criticisms have been directed towards meta-analysis. The main criticisms directed to meta-analysis are to not appropriate scientifically combine the data obtained by using different measurements from very different variables and a wide variety of samples, to be not reliable to combine the results of very good studies with those that are not good and to depend on the results of previously published studies.

There are different methods for meta-analysis in the literature. Techniques are generally chosen according to the characteristics of the research. However, the procedures to be implemented go through qualitative and quantitative processes (DeCoster, 2004; Dickersin & Berlin, 1992). In the first of these processes, qualitative evaluations are made. Before moving on to quantitative analysis, it is vital combining to the results of research conducted in different places and times to make parameter estimation, using various statistical methods depending on the way the studies are presented, the types of findings, and preferred statistical model (Lau et al., 1997). For this reason, it is necessary to combine the collected data correctly to produce correct results in this process. After this stage, statistical model selection is made. Statistical models consist of two models, the fixed effect model and the random-effects model (DeCoster, 2004; Olkin, 1999). The fixed-effects model is based on the assumption that all collected studies predict exactly the same effect. Fixed effect models assume that the variance between study results is due to interrelated data (Suttons et al., 2000). For the fixed effects model, the meta-analytical approach to ANOVA and the meta-analytic approach to Regression are used to model inter-study variability (Lori, & Vaske, 2008). In this method, it is assumed that the variation of the effect size is due to the sampling error. Narrower confidence intervals can be obtained. Since the variance component between studies is not taken into account, clear information about the homogeneity of the studies cannot be obtained. Small studies have lower sensitivity compared to large studies (DeCoster, 2004; Olkin, 1999). The random-effects model is another statistical model that is widely used when fixed effects model assumptions are not met. The model predicts that it is more accurate to make an evaluation by considering the variance within the studies and the variance between studies (Suttons et al., 2000). It is assumed that the difference in effect size is due to both sampling error and variations in the universe (Olkin, 1999). Moments method and Maximum similarity method are used to obtain random variability estimation (Lori, & Vaske, 2008).

The final stage of meta-analysis is to publish a high-quality report. In this context, PRISMA (Preferred Reporting Items for Systematic Reviews and Meta Analyses), MARS (Meta-Analysis

Reporting Standards), and MOOSE (Meta-analysis of Observational Studies in Epidemiology) can be used, which provide useful tools for preparing high-quality systematic review reports with meta-analysis.

Although meta-analysis is seen as a simple method to implement; In order to obtain accurate results, it is necessary to conduct a systematic study. In this context, it is important to carefully select and examine the studies that will participate in the analysis, use the appropriate statistical model, and report the results of the analysis correctly.

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P-20 The Effect of the Covid-19 Pandemic on Society and Hospital Functions

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Abstract

The fight against the COVID-19 pandemic, which has started from China and engulfed the whole world and Turkey, continues. As a result of the measures taken so far, the epidemic in Turkey continues under control. But there is always the possibility of getting out of control. Under these conditions, it is important to know the approach of the society to the event and to review the plans accordingly and to make innovations in practices. Turkish society has shown extreme sensitivity to the pandemic. It has been seen that there is a small group of men with cynical attitudes. It is serious about complying with the measures to protect from the pandemic. The society cares about washing and cleaning hands, maintaining social distance and staying at home. There are observations that he behaves in accordance with the rules in his society. It trusts the authorities, health system and hospitals, the correctness of the decisions taken by the state in the fight against the pandemic, and pays attention to the informing of the media channels and the correct implementation of the decisions. Fighting the COVID-19 pandemic is a long and grueling process. In the process, it is necessary to maintain patience, fortitude, positive communication and to meet basic needs without any problems. It is very important for the society that stays at home and goes out of their daily routines to maintain their patience and survive psychologically and economically. As time passes, social attitudes may change. For this, the authorities should maintain their transparent and informative attitudes in order to protect and increase social trust, and the media should broadcast by taking into account social psychology. The most important thing is to provide information or practices in a way that will increase the confidence of the society about economic measures. It was determined that approximately one third (34.5%) of the individuals experienced anxiety symptoms and nearly half (48%) had depression symptoms during the pandemic process. Individuals have declared that they can only go to the hospital when they have a serious illness (3,49) or when they have an emergency (3,6). It has been understood that there is a strong linear relationship between anxiety and depression. However, it was understood that the increase in the anxiety and depression levels of the individuals affected their "intention to go to the hospital" linearly at a very low level. In order not to harm acutely developing health problems and chronic patients, it should be ensured that individuals benefit from health services when needed. Otherwise, while trying to be protected from COVID-19, it will be possible to suffer from health problems that are postponed. Disrupting the control and treatment of chronic patients will lead to the progression of their diseases. Individuals and the health system will bear serious health risks. While fighting COVID-19, other health problems and patients should not be forgotten. Authorities should continue to struggle with sustainable strategies, policies and practices in order to achieve the success of the measures taken. It is necessary to make the positive support given by the society to the fight against the pandemic sustainable. Academically similar studies should be carried out at regular intervals to follow the change, and by publishing them quickly, the authorities should contribute to the review of planning and practices.

Keywords: COVID-19, Hospital Functioning, Pandemic

**P-21 Knowledge and Attitudes Towards the Treatment of Cancer Pain - a Study
Among Doctors and Nurses From Northwestern Bulgaria**

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Abstract

Introduction: The World Health Organization (WHO) is sounding that cancer is a global pandemic. More than 75% of cancer patients consider pain as their most important complaint and the symptom they feared most. Complex reasons for poor pain control are insufficient knowledge, poor training, inability to assess pain, fear from legal prosecution, misbeliefs, myths, opioid phobia, lack of support, poor compliance to treatment. Aims of the investigation to investigate and analyze knowledge and attitudes toward cancer pain management of healthcare providers, physicians, healthcare specialist), to identify barriers to better cancer pain management and to investigate and assess the effect of education about cancer pain and pain management on healthcare providers.

Methods: We investigated 119 physicians from different medical specialties and place of practice and 248 healthcare specialists (nurses) working in different healthcare facilities who routinely provide care for cancer patient. We also investigated 29 undergraduate nursing students practicing their training in comprehensive cancer center and 16 teachers and educators in nursing and healthcare from Medical University, Sofia. We used two types questionnaires; physicians' knowledge and attitudes and healthcare providers' knowledge and attitudes.

Results: The 31,1% of physicians are male 68,9% are female. Their work time experience 37% under 20 years %63 over 20 years. Their number of cancer patients seen per year 65.6% less than 30 patients 25.2% over 30 patients and 9.2% do not treat cancer patients. The 0.9 % of healthcare professionals are male 99.1 % are female. Their work time experience 51.4 % under 20 years %48.6 over 20 years. The results after the training show a significant improvement in the knowledge of the respondents, between 15.9% and 64.9% observed in 11 out of 13 statements.

Conclusions: Knowledge and attitudes of interviewed physicians of Northwest Bulgaria in the field of pain treatment are insufficient no matter of working experience and medical specialty. Shown results are worse compared to results shown by physicians in a similar study in British Columbia in Canada. The knowledge of the health care specialists is incomplete and sometimes wrong.

Keywords: Cancer, pandemic, patient

P-22 Health Literacy in the Pandemics and Changing Health-Related Behaviour

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Sakarya University

Abstract

As we know, With the opportunities afforded by technology, it has become much easier and faster to access information that affects the society and the behaviour patterns of individuals. The speed of access to information continues to increase day by day with the development of media and communication technologies. As societies use these technologies more, the impact of the information they reach increases. So, considering that the information they reach may have positive or negative social and individual effects on them, it will be extremely important to consider “health literacy”, which enables the critical examination of the information and determines the way it is applied to life.

We have experienced a pandemic (COVID-19) that brings with it various health problems and new behavioral changes. All around the world like our country (Turkey) has also been affected by the pandemic, both economically, socially, culturally, and in terms of health and health services.

In times of a pandemic like this, it is strongly required an improved health awareness, in other words, health literacy, which will lead to improved individual and social behaviors.

Health literacy (more specifically, health media literacy) is especially needed in outbreaks such as the current one, in order to prevent diseases, promote health and stay healthy, improve health, and access information on the use of health services.

It is extremely important for the society or the individual to gain competence so that outbreaks can be better understood and evaluated. However an important point to be emphasized here is that it is not enough to have knowledge, it is also necessary to provide an awareness that will lead to behavioral change.

As a result; in order to survive a pandemic with minimum damage, the problems encountered during the pandemic need to be dealt with in a comprehensive way. This requires many stakeholders (media, health institutions, health professionals and educators, businessmen, public institutions, academic institutions, etc.) to act together. The societies also have great responsibilities in order to achieve the desired results. However; they must reach a certain level of health literacy to drive themselves to the right behaviors.

P-23 Attitude and Use of Alternative Methods by Patients in Bulgaria

Yordanka STAĬKOVA-PYROVSKA

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Abstract

Introductions: This scientific report presents part of the data from a study, which is the basis of a dissertation on Alternative/complementary medicine (CAM) in general practice. The study aims to understand the attitudes and use of various alternative therapies by patients and GPs in Bulgaria. CAM has become extremely popular among the population in recent decades worldwide. Its use varies from one-third to one-half of the population. CAM is also used by many physicians and therapists (20% in the United Kingdom, 65% in Germany and 73% in Japan). General practice is becoming a key element in the practice of CAM, with its integration going hand in hand with its acceptance by GPs. Thus as well as the lack of data for our country on these therapies led to this study. Data are collected 247 patients from pre-hospital care in two year (March 2015- January 2017). The methods of the study is socio-survey method, statistical data process using software packpage IBM SPSS Statistics V. 19.0. Patients are 37,3% men and 63,8% women and 38,4% are under 30 years old, 6% over 65 years. Most of the patients live in urban areas, 50% have permanet job, the others are unemployed, students and retired, 36,4% have higher educations and 34% are with more than one choric disease. Frequently ill patients are 10%, half of the patients are defined as relatively healthy. There are significant relationship between patients at 30-44 years use more CAM and less in 18-29 years, patients with higher education are interested in and apply more CAM than those with lower education and patients with a higher number of diseases have a greater interest in CAM. 70,9% of patients opinion CAM are relatively safe. Also, CAM should offer according to 45.7% of patients to be a doctor trained in it, 15,8% of patients to be their GP patients' interest in CAM increases when it is offered by GP, as well as their constent to even pay extra for this service, 28,3% reported that their doctor had offered them CAM treatment, only 7.7.% of patients to referre for treatment or consultation to alternative therapist. Patients trust in the doctors increases when doctors practices and offers patients in CAM and 44.5% share with doctors when they use, interested in and practice CAM. When patients are education, they share more often with their doctors when use CAM. Patients of 65.6% trust that their GP will increase when they practice CAM (have secondary or primary education).

Conclusions: Patients who use CAM are 45 years old, highly educated, employmend or unemployemd, who are more seriously end often sick are interested and apply more CAM and who use alternative method are more likely to share with their GPs. Most of patients think CAM to be relatively safe and more than half of patients have a accepting attitude to CAM. More than half have practiced some alternative method in the last year. The GPs which offer and trainee of these methods increases the trust in relationship doctor-patients. The result of these study supply many aspects of CAM in general practice, the field of science, education and medicine.

Keywords: CAM, GPs, Alternative Medicine and Alternative Therapies

P-24 Patients with LUTS during the Covid-19 pandemic – the most common diagnosis- BPH

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Abstract

Introductions: The COVID 19 crisis has drastically affected the volume and treatment capacity of various diseases worldwide. In the Early months of the COVID-19 pandemic, it imposed significant changes In the Early months of the COVID-19 pandemic, it imposed significant changes and challenges on the world's healthcare industries, affecting urological elective procedures to treat lower urinary tract symptoms and procedures such as benign prostatic hyperplasia (BPH). In a study conducted in 2020 among 2494 urologists from 76 countries, BPH is positioned as one of the lowest priorities of non-oncological procedures. This means that 80% of the surveyed urologists postpone the procedures for BPH until the pandemic is over. According to another study, it is estimated that approximately 2.5 million urological benign surgeries were canceled at the peak of the COVID-19 crisis. Therefore, after a pandemic, if the parties increase their surgical volume by 20%, then it will take almost a year (45 weeks) to normalize the number of surgeries. It should be noted that the delay in the treatment of BPH during COVID-19, was necessary at the request of patients who refuse to visit the Hospital for fear of infection, as well as due to their inability to visit GPs for consultation. Main reasons for reduced priority in the treatment of BPH; proposed guidelines for COVID-19 by the WHO, proposed guidelines for COVID-19 by the WHO and there is a potential risk of splashes and aerosols during the procedure.

Conclusions: Whether these changes will become standard practice once the pandemic subsides remains questionable. However, new doors have opened for laser treatment of patients with BPH. Laser treatment can be easily adopted by surgical centers and other outpatient facilities that are not focused on patients with COVID-19.

Keywords: BPH, Patients with LUTS and Covid-19

P-25 Male Reproductive Health and SARS-COV-2: What General Practitioners Should Know and Do

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Abstract

General practitioners should know about the impairment of male reproduction. Men have a higher mortality rate from COVID 19 than women, because there are more comorbidities and risk factors in men than women. Hypertension, smoking are some of them. COVID-19 damages some organs. Such as heart, kidney, liver and testis. There are several hypotheses about the impairment of the testis and decreased fertility during COVID-19 pandemic. One of the these hypotheses is related to inflammation of testis. Second hypothese is linked to decreased testosterone level. Third hypothese is that some medications which are used in COVID-19 infection can damage testis. Because of these reasons further studies are needed.

Keywords: Covid-19 pandemic, reproduction, men's health

P-26 Craniocervical Fractures in Elderly Patients - Etiology, Diagnosis, Treatment Option and Clinical Results

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Abstract

Craniocervical region consists of Occipital condyles, the Atlas (C1) and Axis (C2), their joints and ligaments. The Atlas fractures represent 25% of the fractures in craniovertebral region and are 2-13% of all cervical fractures. The Dens fractures are about 5-15% of all spinal traumas and this percentage increases in elderly patients. Dens fractures could result in atlantoaxial instability. In the diagnosis, X-Ray, computerized tomography and magnetic resonance imaging are used. In the conservative treatment, Miami J collar, Philadelphia collar, Halo brace and SOMI brace are used. Besides, in some cases, operative treatment can be necessary.

Keywords: Craniocervical fractures, brace, operative treatment

P-27 Challenges in Hospice Care During Covid-19 Crisis

Nina TOLEVA-NOWAK

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Abstract

Introduction: Bulgaria - 3rd stage hospice and palliative care (End-Of-Life Observatory); The palliative care is not recognized and not accredited as medical and scientific special. The long-term and palliative care for the patients are often neglected and reduced only to the terminal care. A pile of problems emerged-social distancing, extensive testing, lack of medication, accessories, personal protective equipment. Identifying the struggles and the problems the hospice facilities face during the pandemic crisis and the state of emergency. The objectives of these study are to map the medical infrastructure, to explore the social aspect of long-term and palliative care in those challenging times, to explore the difficulties for the medical personnel and to identify the main problems for the hospice facilities. Data are collected in depth interviews and questionnaire. Due to the pandemic and the excessive amount of work at the hospice facilities some of them wanted to be included in the research, but apologized for the delay. In analysis of data, it found that most of participants answered as (75%) difficulties in organizing daily activities, they not encounter supply difficulties (57%), they use personal protective equipment for the visitors (75%), ban on visits by outsiders (75%), they temporarily stopped providing hospice services for non-admission of new patient (62,5%), they encounter to lack of qualified personnel (68%), yes or no, they have infected and sick patients (50%), patients do not answer to in the hospice vaccinated (50%), yes, they used modern technology to make a connection between patients and their relatives (50%). Question of 'What were the biggest challenges for you and your work in the context of the covid crisis?' answered as being obeying the restrictions, protecting the health of patients, protecting the health of the staff, irritability in patients and their relatives caused by social distance and isolation, irritability in patients because of the restrictions, especially the lack of going outside, the need to perform a regular covid tests for the staff, the refusal for acceptance into the hospice without negative covid test, restrictions for visits, the rising prices of materials and medicines, the lack of medical staff (mostly nurses) and to stop the spread of covid among the staff and the patients and to protect the health of the non infected ones. They said that not change in the organization of work in the conditions of the ongoing covid crisis and the only suggestion was for mandatory vaccination for the hospice workers,

Conclusion: Participants want send to their relatives / colleagues / society. They said that be vaccinated, be discipline, obey the measure and let us all be responsible for the covid crisis, for the health of others and let's not neglect the situation and get vaccinated.

Keywords: Hospice Care, Palliative Care and Covid-19 Pandemic

P-28 Acute Myocardial Infarction in Covid-19: A Case Report

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Abstract

Introductions: COVID-19 (SARS-CoV-2 virus) is a novel coronavirus emerged in Wuhan, China in December 2019 and became pandemic in March 2020. It has changed the human history and is still a challenge for doctors, healthcare systems, science and global economics. COVID-19 symptoms are nonspecific and their severity can vary. Mainly affects the respiratory tract from mild symptoms to bilateral pneumonia and acute respiratory distress syndrome. Most common are fever, dry cough and tiredness. Angiotensin-converting enzyme 2 receptors (ACE2) constitute the virus gateway expressed in the surface of respiratory tract, heart and vessels, particularly in the endothelial layer. Due to a global inflammatory response and endothelial damage, COVID-19 may predispose to coagulation disorders and severe thrombotic events. Endothelial dysfunction and systemic inflammation may lead to development of myocardial infarction, pulmonary embolism, stroke, peripheral artery thrombosis, acute pericarditis, rhythm disorders. A 38 years old male with no previous medical history positive for COVID-19 was hospitalized due to bilateral pneumonia. Standard treatment protocol was applied. Recommendations about home treatment included combination of antiplatelet agent (clopidogrel 75mg.) and novel oral anticoagulant (NOAC, dabigatran 2x150mg.). The prescription process requires GP's involvement, so the price of dabigatran to be reduced in 70%. As the patient was discharged on Saturday when GP was out of duty and unaffordable full drug prize he discontinued it. In 24 hours complained severe chest pain, dyspnea, nausea. The emergency team registered poor condition, tachycardia and hypotonia. Electrocardiogram showed acute anterior ST elevation myocardial infarction. He was hospitalized in cardiology department, coronary angiography revealed 100% thrombotic occlusion of left anterior descending artery in proximal segment. The procedure included thrombus aspiration and drug eluting stent implantation. No further acute complications were developed. Triple antithrombotic treatment was initiated-acetyl salicylic acid, clopidogrel and dabigatran. The key mechanism of cellular and tissue injury is dysregulation in angiotensin signaling, as a consequence of SARS-CoV-2 binding to its cellular ACE2 receptor, which results in increased signaling by thrombin (proteinase-activated) receptors on platelet and endothelial cells, leading to coagulopathy and thrombosis. Drugs that target proteinase-activated receptors may provide useful therapeutic results.

Conclusions: COVID-19 is still a challenge for GPs and other specialists to cope with diversity of symptoms and make proper diagnose of complications, especially in a distance and lack of financial resources. Gaps and lack of organization between hospitals, GP's, prescription and supply of expensive drugs such as NOAC, partially covered by insurance fund in Bulgaria may increase risk of severe life threatening thrombotic complications in COVID-19. More case reports, discussion and collaboration between GPs, hospitals and other medical specialists are needed for better results.

Keywords: Covid-19, GP and Thrombotic Events

P-29 The Wrong Communication Impact on Covid-19 Medical ManagementRostislav KOSTADINOV
Medical University of Plovdiv**Abstract**

Almost 600 days after the beginning of the Corona virus pandemic it is time to start analyzing the most obvious medical management errors that have been performed and, unfortunately, there is not even a single indication that there is a will for implementing any change into the wrong approach and activities. In order to highlight the origin of the undesired and unexpected COVID-19 medical management results, it is important briefly to overview some of the most significant medical management dependencies. Medical management could lead to successful results in decreasing the health risk level and eradicating the health related hazards, only when there is a common effort between medical community, led by medical specialists - epidemiologists and infection diseases specialists, patients infected by the corona virus, population at risk and public as a whole. If there is disbelief, suspects or contradictory signals and behaviour within these groups, no significant improvement into the medical situation could be foreseen. It is of utmost importance the unanimous statements and activities of the medical community, because entire population is looking for their guidance and directives. Every single argument within the medical community will reflect on population behaviour and it could be expected - How I can believe to the doctors when they are not sure what, when and how has to be done? Therefore, majority of the disaster medicine researches are highlighting the importance of the prompt, focused and transparent, comprehensible communication between the medics and population. In order communication to be effective and to reach the recipients, it is required this communication to address the main population concerns in case of the biological area of damage - epidemics or pandemic.

Keywords: COVID-19, Medical management, pandemic

P-30 Covid-19 Hub - Information, Innovations and Implementation of Integrative Research Activities

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Abstract

Structuring of COVID-19 HUB - innovations and integrative knowledge for modelling and prognosis. The interdisciplinary research programme of the COVID-19 pandemic consists of different strands. WP1, devoted to academic writing and preparation of Cochrane reviews. A systematic reviews preparation module designed to synthesize and evaluate the scientific literature data associated with the various aspects of the COVID-19 pandemic. This preparation includes preparation of a program of a course for making reviews, Selection of doctoral students, postdoctoral students and young scientists, as well as students for participation in an educational-scientific module for elaboration of systematic (Cochrane) reviews according to pre-defined selection criteria, Conducting the course with doctoral students, postdoctoral students and young scientists which completes with a valid certificate issued by MU-Plovdiv, preparation of different types of reviews on the topics included in this project by doctoral students, postdoctoral students and young scientists from 4 to 24 months of the project, and publication of review articles in cooperation with the teams on each activity and topic included in the project - after 8 months to 24 months of the project. After this process, there was a course part, and this course was 40 hours (Theoretical part: 30 hours, practical training: 10 hours). Finally, All of the trainees involved in preparing scientific materials according to individual tasks under the guidance of the mentors

Keywords: COVID-19, research, review

ABSTRACT ORAL PRESANTATION

P-31 Determination of Individuals' Anxiety Levels and Attitudes to Violence During the Pandemic Process

Aleyna UCANBELEN, Ferda YILMAZ, Kemal SAY, Behice Belkis CALISKAN, Hamiyet KIZIL, Cisem BASTARCAN

Abstract

Aim: Covid 19 has existed as a pandemic that affects society in many ways since 2019. The coronavirus epidemic has many social effects along with mortality findings all over the world. Anxiety, attitudes towards violence and the increase in social violence are among these social effects. The anxieties of the people who make up the society have increased, and the cases of violence have also increased. The psychological effects that come with physical conditions and economic difficulties are seen as only a few of the factors when we look at the whole. At this point, how anxiety and violence find meaning in people's lives and how they look at these negative components is important in terms of understanding the effects of the coronavirus epidemic on the attitude of the society. In this study, it was aimed to examine people's attitudes towards social anxiety and violence.

Methods: The research was conducted between 01-30 May 2021 in descriptive design. The sample of the study consisted of 167 individuals who met the sampling criteria of the study, after explaining the purpose of the study, and who were given permission to participate in the research after the information. "Personal Information Form", "Beck Anxiety Inventory" and "Attitude towards Violence Scale" were used as data collection tools in the study. Data were analyzed using SPSS (Statistical Package for Social Sciences) for Windows 22.0 program using frequency, independent groups t-test and one-way variance. The significance value was accepted as $p < 0.05$.

Results: 70.1% of the individuals participating in the study were women and 75.4% were single. 82.6% of the participants stated that they faced negativities during the pandemic, 67.1% experienced anxiety and 72.5% of them stated that violence events increased. It was stated that the participants' total BECK Anxiety Scale scores were high during the pandemic process. It has been reported that individuals who are single and negatively affected by the pandemic have higher average BECK Anxiety levels. There is a statistically significant difference between the increase in violence and anxiety and BECK Anxiety Scale scores. No significant correlation was found between the analyzes of the Attitude towards Violence Scale and the BECK Anxiety Scale analyzes. The Cronbach's Alpha values of the scales used in the study were determined as 0.935 for the BECK Anxiety Scale and 0.731 for the Attitude towards Violence Scale, respectively.

Conclusions: It was determined that the anxiety levels of individuals increased during the pandemic process and the incidence of violence in the society increased. It is recommended that individual and community psychosocial support programs be increased and disseminated.

Keywords: Pandemic, Social Anxiety, Violence.

P-32 Investigation of the Effect of Nursing Students' Emotional Intelligence Level on Their Attitudes to the Distance Education Environments During the Pandemic Process

Ferda YILMAZ, Aleyna UCANBELEN, Kemal SAY, Behice Belkıs CALISKAN, Hamiyet KIZIL, Cisem BASTARCAN

Abstract

Aim: With the Covid 19 pandemic, a different dimension has been passed in terms of education all over the world. In particular, the nursing department, which is an applied department and requires various conditions in terms of education, has left the place of formal education to online education in our country. With the transition of formal education to online education, unusual methods for nursing students came along. The situation of nursing students also affected their attitude and motivation to the nursing profession. After students became more familiar with online education, some advantages and disadvantages emerged. In this study, it was aimed to examine the Effect of Nursing Students' Emotional Intelligence Levels on Attitudes Towards Distance Education Environments During the Pandemic Process.

Methods: The research was conducted between 01-30 May 2021 in descriptive design. The sample of the study consisted of a total of 86 nursing students who met the sampling criteria of the study and were given permission to participate in the study after the information was given. As data collection tools in the research, "Personal Information Form", "Emotional Intelligence Characteristics Scale (CIS-SF) Short Form" and "The Use of Distance Education Environments in the Pandemic Process and the Scale of Psychometric Properties on Individuals" created by the researchers by examining the literature were used. Data were analyzed using SPSS (Statistical Package for Social Sciences) for Windows 22.0 program using frequency, independent groups t-test and one-way variance. The significance value was accepted as $p < 0.05$.

Results: 82.6% of the individuals participating in the study were women and 77.9% were psychologically adversely affected during the distance education process. It was determined that the Emotional Intelligence Feature Scale scores of the participants were at a moderate level, and the use of Distance Education Environments in the Pandemic Process and their Psychometric Characteristics on Individuals Scale score averages were high. There is a statistically significant difference between the effects of distance education environments on individuals, family type and negative psychological state. There was no significant relationship between the Emotional Intelligence Feature Scale and the Use of Distance Education Environments in the Pandemic Process and the Scale of Psychometric Characteristics on Individuals.

Conclusions: It was determined that the emotional intelligence levels of nursing students did not affect the distance education processes during the pandemic process, but the family type and negative psychological states of the students were effective in the educational environments.

Keywords: Pandemic, nursing students, emotional intelligence.

P-33 Determining Women's Thoughts of Conceiving and Affecting Factors During the Covid-19 Pandemic Process

Cisem BASTARCAN, Helin KARAKUS, Eda DURMAZ

Abstract

Aim: This study was performed in order to determine their thoughts Covid-19 pregnant women in the process of pandemic and related factors.

Methods: This cross-sectional study was conducted between April and May 2021 with 146 women using an online survey method. The data were obtained using a questionnaire consisting of 22 questions and the 'Covid-19 Fear Scale'. Number, percentage, mean and standard deviation were used as descriptive statistical methods in the evaluation of the data. Independent sample t-test was used to compare continuous quantitative data between two independent groups from parametric methods in data analysis. Significance value was taken as $p < 0.05$.

Results: The average age of the participants is 30.63 ± 7.27 . 77.4% of the participants stated that they are not thinking of pregnancy at the moment and 52.7% of them used a family planning method to prevent pregnancy. It was determined that the participants had a Covid-19 fear scale score of 18.86 ± 6.08 and had a moderate fear of Covid-19. A statistically significant difference was found between Covid-19 fear levels and thoughts of conception during the pandemic process ($p = 0.003$). The of those who think that pregnancy will create more risk during the pandemic process ($p = 0.003$), those who think they need to take more precautions ($p = 0.005$), those who think that it may cause miscarriage ($p = 0.008$) and those who are stressed that hospitals will not accept ($p = 0.008$) fear levels determined to be higher. It was determined those who think that if Covid-19 infection is passed during pregnancy, they will pass to their baby ($p = 0.000$), those who think that they cannot benefit from infection drugs ($p = 0.004$), and those who think their delivery method will change ($p = 0.001$) have higher levels of fear.

Conclusions: According to the results of this study, it was found that women experience uncertainty, anxiety, stress and fear about conception during the pandemic process. Covid-19 level of fear affects women's thoughts about getting pregnant.

Keywords: Covid-19, Woman, Pregnancy.

P-34 Relationship of Covid-19 Pandemic Process with Anxiety and Depression Levels of Pregnants

Cisem BASTARCAN, Eda DURMAZ, Helin KARAKUS

Abstract

Aim: This study was carried out to determine the relationship between the COVID-19 pandemic process and the anxiety and depression levels of pregnant women.

Methods: This cross-sectional study was conducted between April and May 2021 with 108 pregnant women using the online questionnaire method. The data were obtained by using a questionnaire consisting of 24 questions and the "Hospital Anxiety and Depression Scale". Number, percentage, mean and standard deviation were used as descriptive statistical methods in the evaluation of the data. Mann Whitney U (comparison of two groups), one of the non-parametric analysis methods, was used in the analysis of the data. The significance value was accepted as $p < 0.05$.

Results: The mean age of the participants was 27.87 ± 5.99 years. 64.8% of the participants reported that they got pregnant planned/intentionally during the pandemic period, 18.5% of them caught Covid-19 during pregnancy and 48.1% thought that their pregnancy was at more risk during the pandemic period. In the HAD scale sub-dimensions of the participants, the anxiety sub-score average was 10.02 ± 4.09 and the depression sub-score average 7.75 ± 4.12 . A significant difference was found between the HAD anxiety sub-dimension of the participants and those who had fear of losing their baby during the pandemic period and those who delayed their doctor's check-ups. Participant's HAD depression sub-dimension and presence of miscarriage/abortion, planned/intentional conception during the pandemic period, state of thinking that pregnancy is more risky, experiencing fear of losing the baby during the pandemic period, fear of not reaching the hospital when the birth started, and thinking that the doctor's check-ups would be disrupted after the birth there was a significant difference between.

Conclusions: According to the results of this study, it was determined that pregnant women experienced more anxiety and depression during the pandemic process. The idea that pregnancy is more risky during the pandemic process and that it will have a negative effect on the baby affects the psychological state of women.

Keywords: Covid-19, pregnancy, anxiety, depression

P-35 Investigation of the Change in Respiratory Functions and Exercise Capacity Levels in Patients Undergoing Open Heart Surgery: The Pilot Study

Yasemin SAHBAZ, Tulin OZALHAS, Ipek YELDAN, Ihsan BAKIR

Abstract

Aim: The study aims was to investigate the pre- and postoperative changes in respiratory functions and exercise capacity levels in patients undergoing open heart surgery.

Methods: Thirteen volunteer patients who had undergone open heart surgery in the Department of Cardiovascular Surgery, Istanbul University Istanbul Medical Faculty, between January and August 2019 and accepted to participate in the study were included in the study. The patients were evaluated preoperatively and on the day of scheduled discharge after the operation. Phase I cardiac rehabilitation program (patient training, positioning, respiratory muscle training, bronchial hygiene techniques, extremity movements, mobilization and gait training) was applied to the patients starting from the intensive care. Demographic data of the patients were evaluated with the demographic data form prepared by us, respiratory functions, spirometric measurements, exercise capacity with 6-minute walking test and dyspnea status with Borg Dyspnea Scale.

Results: The mean age of the participants (3W, 10M) was 61.15 ± 6.26 years, and the duration of disease was 27.54 ± 4.98 months. The change in respiratory functions and exercise capacity levels of the patients before and after Phase I cardiac rehabilitation was not found to be statistically significant ($p > 0.05$).

Conclusions: No significant difference was found between preoperative pulmonary functions and exercise capacity levels and postoperative Phase I cardiac rehabilitation program in patients who underwent open heart surgery. We think that this result may be due to the fact that the Phase I cardiac rehabilitation program covers the in-hospital period of approximately 7-10 days, psychological reasons such as anxiety due to surgical stress, fear of movement, incision pain and muscle inhibition due to the effect of anesthetics. We think that increasing the number of patients and comparing the short and long-term results of the evaluations will reflect the pre- and postoperative change more clearly.

Keywords: Open heart surgery, dyspnea, exercise capacity, respiratory functions

P-36 Telerehabilitation in Stroke Patients

Onur Salman KORTELLI

Abstract

COVID 19 Pandemic is a global health problem which has seen in 223 countries. Besides, stroke is very prevalent in older people and it has serious consequences. Rehabilitation programs include occupational therapy, physiotherapy, orthotic treatment, and speech and language therapy. Because of COVID 19 Pandemic, stroke patients can avoid rehabilitation services in hospital, but stroke patients should undergo physiotherapy regularly. Therefore, utilization of telerehabilitation is very important in stroke patients. Telerehabilitation is used to providing rehabilitation service utilizing electronic communication devices. Telerehabilitation platforms should be offered that allow physical, language, and cognitive rehabilitation, exergaming, remote monitoring and collection of patient – reported outcomes. Telerehabilitation could help to provide support and care to stroke patients. At the same time, it can reduce risk of COVID 19 transmission. That benefit from telerehabilitation interventions particularly stroke very useful for patients in this term. Future strategies should consider expanding telerehabilitation services for patients while addressing barriers and solutions with medical staff, caregivers, and patients

Keywords: Stroke, COVID 19, telerehabilitation, physiotherapy

P-37 Telecardiac Rehabilitation in the Covid-19 Pandemic

Hilal Ulku DOGRUYOL

Abstract

COVID-19, which first appeared at the end of 2019, is an infectious respiratory disease. Since the disease causes high contagiousness and mortality, it has been tried to prevent the spread of the disease with various restrictions. With the restrictions, individuals stayed in their homes for a long time, and as a result, the risk of cardiovascular disease increased. Offering a cardiac rehabilitation program to individuals with telerehabilitation, which is one of the sub-branches of telehealth applications, has become more important in isolation. In this review, the importance of telecardiac rehabilitation practices to prevent increased cardiovascular risk factors in the COVID-19 pandemic was mentioned.

Keywords: Telerehabilitation, cardiac rehabilitation, telecardiac rehabilitation.

P-38 The Impact of the Covid-19 on the Cardiovascular System

Aysegul SAHIN

Abstract

The novel coronavirus disease 2019 (Covid-19) pandemic caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) has affected millions medically and billions due to its social, economic, and psychological impact. Covid-19 disease initially thought to be an interstitial pneumonia with varying degrees of severity, anymore can be considered a vascular disease with regards to serious complications and causes of mortality. Blood clots have emerged as the common factor unifying many of the symptoms initially attributed without an explanation to Covid-19. Early findings in Covid-19 autopsies showed deep vein thrombosis (DVT) in many cases, a significant proportion of these are complicated by fatal venous thromboembolism (VTE). In addition, prior cardiovascular disease (CVD) is a major risk factor for complications and mortality associated with Covid-19. Individuals with CVD should be advised to pay particular attention to physical isolation precautions. There are concerns about provision of care during the pandemic for these diseases, from prevention to treatment.

The era of social isolation adopted around the world to contain the spread of Covid-19 has resulted in a substantial decrease in physical activity levels. Confinement-induced decreases in physical activity levels and increases in sedentary behavior may provoke a rapid deterioration of cardiovascular health and premature deaths among populations with increased cardiovascular risk. In this unexpected and critical period, home-based physical activity programs arise as a clinically relevant intervention to promote health benefits to cardiac patients. Recognition of the impact of physical inactivity on the burden of cardiovascular disease and interventions to mitigate it are critical to tackling both Covid-19 and inactivity simultaneously.

Keywords: Covid-19, coronavirus, cardiovascular diseases.

P-39 Investigation of Technological Rehabilitation Approaches Used in Rehabilitation of Individuals Who Have Total Knee Arthroplasty Applied in the Covid-19 Pandemic

Yasemin KARAASLAN, Mehmet Eren UCUZOGLU

Abstract

Aim: Total knee arthroplasty (TKA) is applied to alleviate the symptoms associated with degenerative arthritis in the knee. By adding rehabilitation to surgery, it is aimed to maximize function. With technological developments and the COVID-19 pandemic, the interest in technological rehabilitation approaches has increased within the scope of the treatment of patients. In this review, it was aimed to examine the technological rehabilitation approaches used in the rehabilitation of individuals who underwent TKA.

Methods: Studies between 2019-2021 and including related keywords (mobile application, exercise, virtual reality, telerehabilitation, total knee arthroplasty) were searched in Google Scholar, Web of Science, PEDro and PubMed databases.

Results: Eight studies were included in the review. The number of participants ranged from 25 to 290. In these studies, different technology-supported applications such as telerehabilitation, mobile applications and virtual reality were used within the scope of rehabilitation in individuals who underwent TKA. When virtual reality applications and traditional rehabilitation approaches were compared, no difference was found between pain, but there was a significant improvement in proprioception. Studies have reported that telerehabilitation applied via mobile applications is effective in reducing pain. It has also been reported that with technological rehabilitation approaches, range of motion increased, participants' access to treatment, compliance, awareness of treatment options and symptoms increased. On the other hand, this review is limited as it includes few studies and different technological rehabilitation approaches.

Conclusion: As a result, it is stated that technological rehabilitation approaches are easily applicable, adaptable, effective and resolving in the rehabilitation of individuals who underwent TKA in the COVID-19 pandemic. However, there is a need for randomized controlled studies with a high level of evidence, since studies in this field are conducted with a small number of patients and are insufficient.

Keywords: exercise, virtual reality, mobile application, telerehabilitation

P-40 Changes of Eating Habits with Covid-19 Pandemic and the Effect of Emotional Eating on the Process

Nese YAKSI, Merve TURKMEN

Abstract

Aim: Dramatic lifestyle changes have affected people physically and psychologically, and a weight gain has been observed during the COVID-19 (Coronavirus Disease-2019) pandemic. This study aims to reveal the nutritional habits and weight change during the pandemic and the effect of emotional eating on the process.

Methods: 117 adult participants who applied to a Healthy Nutrition Polyclinic in Nigde between 10.03.2021 and 21.05.2021 were included in this descriptive study. Anthropometric measurements were recorded and data were collected.

Results: The median age is 38(18-72), 91.5% are women and 55.5% are obese. 59.8% of them have increased their eating and 50% have prepared more meals at home during the pandemic. Consumption of pastry/dessert (56.4%) and chips/chocolate/biscuit (41.9%) are increased. 59% are emotional eaters, and 12% are very emotional eaters. While 73.8% of women are emotional eater/very emotional eater, this rate is 40% for men ($p=0.061$). Emotional eaters/very emotional eaters scored 66.6 out of 100 to feel depressive during the pandemic, while non-emotional eaters/low-level emotional eaters gave 53.9 ($p=0.045$). 59% of the participants gained weight during the pandemic, and the median weight gain was 3.9(0.1-17.9). While 43.8% of the participants who were not emotional eaters/low emotional eaters gained weight during the pandemic, this rate was 68.8% for emotional eaters/high emotional eaters ($p=0.014$). The rate of weight gain was 72.4% in those whose sleep patterns changed and 50% in those who did not ($p=0.015$). Weight gain is more among the participants increased the consumption of pastry/dessert ($p=0.015$), chips/chocolate/biscuit ($p=0.049$), acidic beverages ($p=0.014$). The rate of weight gain was higher in those who thought that nutrition was a determinant of the COVID-19 risk ($p=0.033$).

Conclusions: There is an increase in weight gain during the COVID-19 pandemic. Particularly, the frequency of emotional eating is relatively high. Emotional eating is more common in women, and emotional eaters have experienced greater weight gain. Nutrition and psychosocial counseling should be given during the pandemic.

Keywords: COVID-19 pandemic, emotional eating, nutritional habits.

P-41 Evaluation of the Relationship Between Mediterranean Diet Quality Index and Anthropometric Measurements in Children and Adolescents

Esra TUNCER, Alev KESER, Emine Nuket UNSAL, Sevinc ODABASI GUNES, Onur AKIN

Abstract

Aim: To evaluate the relationship between the Mediterranean diet quality index of children and adolescents and their anthropometric measurements.

Methods: Between August and December 2019, 174 [Boys (35.6%), Girls (64.4%)] normal weight, overweight and obese children whose mean age 11.6 ± 3.17 years who applied to the Pediatric Endocrine Polyclinic of Ankara Gulhane Training and Research Hospital were included in the study. Mediterranean diet quality index (KIDMED) was applied to the participants. A total score of KIDMED ≥ 8 is considered optimal Mediterranean diet, between 4-7 as moderate, and ≤ 3 points as low diet quality. Body weight, height, waist circumference measurements of the participants were taken by the researchers. Also, individuals' body fat percentages were determined using Tanita BC 601. Body mass index (BMI) values were evaluated according to z-scores using the World Health Organization Anthroplus program. The research data was evaluated using SPSS 26.0 package program for Windows. The statistical significance level was accepted as $p < 0.05$.

Results: According to BMI z-scores, 29.9% of the participants were normal weight, 23.6% were overweight, and 46.5% were obese. The majority of the participants (52.9%) had a moderate KIDMED score. KIDMED score of normal weight, overweight and obese participants were found to be 5.7 ± 2.62 , 5.4 ± 2.39 , and 4.6 ± 2.70 . KIDMED score of obese is significantly lower than normal weight children ($p < 0.05$). A negative and significant correlation has been found between KIDMED score and body weight, BMI, waist circumference, waist circumference to height ratio, BMI z-scores and, body fat percentage values (respectively; $r: -0.287$, $p: 0.000$; $r: -0.285$, $p: 0.000$; $r: -0.321$, $p: 0.000$; $r: -0.256$, $p: 0.001$; $r: -0.185$, $p: 0.013$; $r: -0.161$, $p: 0.034$).

Conclusions: A relationship was found between low adherence to the Mediterranean diet and increased body weight, BMI, waist circumference, and body fat in children and adolescents. Improving adherence to the Mediterranean diet may reduce the risk of developing obesity and chronic diseases associated with obesity.

Keywords: Mediterranean diet, waist circumference, body mass index, obesity, body fat percentage

P-42 Intuitive Eating and the Relationship Between Intuitive Eating and Health

Dilek SIVRI, Ulku DEMIRCI

Abstract

Intuitive eating is a health approach which promotes a positive attitude towards the body, food, food related behaviors and physical activity. It is characterized by eating based on physiological hunger and satiety cues rather than situational and emotional cues and is associated with psychological well-being. Several studies have shown the importance of intuitive eating for improved health, including lower chances of being overweight, lower total cholesterol, low-density lipoprotein and blood pressure, lower chances of binge eating, emotional eating, external eating and eating disorder symptoms, lowered concerns with body image and better diet quality. Intuitive eating has been proposed as a more natural and effective alternative to weight management methods. The aim of this review is to investigate the intuitive eating and the relationship between intuitive eating and health.

Keywords: Health; intuitive eating; weight management.

P-43 Healthcare Professionals' Awareness of Violence Against Women

Pelin ZİVDİR

Abstract

Today, the most common type of violence in our country and in the world is violence against women. When women apply to health institutions in a period of their lives, they can find the opportunity to interact with the health institution. Health personnel have an important role in identifying and helping individuals who have been subjected to violence for this reason. The healthcare professionals have difficulties due to the insufficient knowledge of the women who are subjected to violence because they do not know what to do, what to say and what questions to ask. Healthcare workers can encounter women of all socio-economic, cultural and educational levels who experience violence and in all areas of practice. For this reason, nurses and physicians have a very important role in detecting, preventing and helping violence against women. Scientific studies on violence against women have recently gained importance in our country, with the beginning of studies in western countries. It is important for health professionals to raise their awareness on violence against women. The purpose of this review is; It aims to determine the level of recognition of violence against women by healthcare professionals by examining the relevant literature and to make suggestions and inferences so that they can actively participate in the process by determining their ability to provide information about social and legal responsibilities.

Keywords: Violence against women, healthcare professionals, awareness, knowledge.

P-44 The Effect of Covid-19 Fear on Sleep Quality in University Students

Cevriye OZDEMİR, Hamiyet KIZIL

Abstract

Aim: The new coronavirus (COVID-19) infection, which started in the Wuhan region of China for the first time recently and then started to be detected in many countries of the world and became a pandemic, has affected all people in many ways such as biological, sociocultural and psychological. Various fears and anxieties have started to occur in individuals, affecting their daily life activities. University students at the beginning of the productive age also have various concerns, and it is seen that they have attempts to eliminate their concerns by following channels such as social media, news sites, television programs, and asking questions to their advisors/teachers. During the pandemic process, individuals stayed at home, and during this time, they experienced changes in sleeping habits with sleeping and waking up late. It is a known fact that emotional changes, fears and worries affect sleep and its quality. In this study, it was aimed to determine the effect of fear of COVID-19 on sleep quality in university students.

Methods: This research was designed as a descriptive study to determine the effect of university students' fear of COVID-19 on sleep quality. The universe of the study consisted of students studying in associate and undergraduate programs of various private and public universities in Turkey. The sample of the study consisted of a total of 450 students who met the sampling criteria of the study, after explaining the purpose of the study, and who met the sampling criteria of the study. As a data collection tool, the "Individual Characteristics Diagnosis Form", "Corona Virus 19 Phobia (CP19) -S) Scale" and "Pittsburgh Sleep Quality Index (PUKI)" were used. Data were analyzed using SPSS (Statistical Package for Social Sciences) for Windows 22.0 program using frequency, independent groups t-test and one-way variance. The significance value was accepted as $p < 0.05$.

Results: Of the students participating in the study, 76.4% were women and 88.2% were health sciences students. 61.6% of the students stated that they slept 6-8 hours a day during the pandemic and 35.3% did not feel rested when they woke up. A significant relationship was found between the Corona Virus 19 Phobia (CP19-S) Scale and Pittsburgh Sleep Quality Index scores of the participants. CP19-S scale psychological sub-dimension with a sleep quality score of 26.6%, social sub-dimension 29.7%, Covid fear scale somatic sub-neck with sleep disorder 35.8%, CP19-S scale economic sub-length with sleep disorder 27%. There is a positive and significant relationship at the level of 3. It was determined that the mean score of the CP19-S scale and the Pittsburgh Sleep Quality Scale was higher in women.

Conclusions: It was determined that the COVID-19 pandemic had a negative effect on the sleep quality, latency, duration and sleep disturbance of university students. It is recommended to develop coping mechanisms with the COVID-19 pandemic, and to increase and expand individual and community psychosocial support programs.

Keywords: Pandemic, COVID-19, sleep quality.

P-45 The Discourses of Cancer Patients About Cancer Disease

Aslı KAYA, Yasemî Nurbanu KAYA

Abstract

Aim: The discourses and thoughts of cancer patients about cancer disease were examined. The social impact of cancer on cancer disease has been investigated. How cancer disease shapes the social life of the individual and how it affects it has been examined.

Methods: A review study was prepared by collecting their views on cancer disease and life using the technique of interviewing cancer patients. Five questions were asked to each cancer patient.

Results: Demographic information of the volunteer cancer patients who participated in the interview was given. Each individual has a social lifestyle that he / she lives in accordance with his / her own social culture. How an individual lives is effective in the cancer treatment process, as well as in maintaining her life, even affecting her social life.

Conclusions: Cancer disease has affected every aspect of the individual's social life. Cancer disease has led the individual to a long-term process in which fear, anxiety, morale and motivation are low and relationships weakened but are still full of hope. Despite the cancer, the individual should keep his morale high and continue his life. He should not be offended by life and strengthen the social dimension of his life.

Keywords: Cancer, disease, social life

P-46 A Public Health Issue: Reducing the Effects of Elderly Social Isolation with the Use of Technology in the Covid-19 Epidemic

Fatma SAVAN

Abstract

Since the onset of the coronavirus epidemic, the initial public health response for the elderly population has focused on reducing community spread and increasing physical distancing. These measures, aimed at reducing exposure and reducing the strain on healthcare facilities, have manifested as lockdowns, temporary closure of non-essential businesses, cancellation of social events and events, and limited visits to living facilities such as nursing homes. This response has produced a decrease in flexibility and an increase in social isolation and loneliness among the older population. Loneliness, which was a problem before the epidemic, has led to a serious public health problem that also affects the use of social and health resources of the elderly, who are among the vulnerable population. Loneliness has been a known serious public health problem among the elderly population during the COVID-19 pandemic. In this review, it is aimed to discuss the practicalities of using emerging technologies to address the loneliness of the elderly and its effects and adaptations of the social isolation applied to the elderly due to the Covid-19 outbreak. As the COVID-19 pandemic continues, concerns for the quality of life and health of the elderly population should continue to be a priority. Although strict measures such as physical distancing need to be put in place to protect the elderly, who are the most vulnerable part of society, these measures can have harmful side effects. Technological tools and applications offer extraordinary opportunities to provide care and maintain connections despite the need to remain physically separated. These tools can be integrated into crisis communications, public health interventions and care programs to address loneliness among the elderly. As part of a broader plan, technological solutions and low-tech approaches can make the difference in reducing loneliness

Keywords: Covid-19 epidemic, elderly, social isolation, use of technology

P-47 Knowledge and Approaches of Emergency Nurses on Elderly Abuse

Aysegul ABDULLAYEV, Ayse DOST

Abstract

Aim: The research was conducted to determine the level of knowledge of emergency room nurses about elder abuse and their approaches to this issue.

Methods: The data of this descriptive study were collected between November 2020 and January 2021. Nurses who are members of the Emergency Nurses Association's social media account (N:1200) and 137 nurses who meet the inclusion criteria were included in the study. The data were collected on the internet with a questionnaire form prepared by the researchers in line with the literature.

Results: In the study, the rate of nurses who reported that they encountered elder abuse cases was 27%, and the rate of those who reported the abuse they detected was 19.7%. It was determined that 84.6% of the nurses did not have knowledge about the legal regulations for elder abuse. 65.7% of the emergency room nurses stated that they did not consider themselves sufficient in determining elder abuse, and 28.4% in providing care to an abused elder. It was revealed that 73.7% of the nurses did not receive training on elder abuse, and their knowledge of risk factors for elder abuse and common physical and behavioral symptoms of abuse was at a moderate level. 49.6% of the emergency nurses stated that reporting elder abuse cases was not only the responsibility of the physician, while 70.1% stated that all health personnel were responsible for reporting elder abuse. 46.7% of the emergency room nurses did not have knowledge about the procedures applied in the clinic in cases of elder abuse, 48.1% said that the abuse report could be made without the consent of the elder, 40.8% stated that the identity information of the relevant employee would be kept confidential in case of abuse reporting and 64.2% of them stated that they did not know about the legal sanction of not reporting abuse cases.

Conclusions: In the study, it was determined that the emergency room nurses did not have sufficient knowledge about elder abuse and they had inappropriate approaches. The issue of elder abuse should be dealt with in detail in the education of nurses working in emergency services, which are the areas where elder abuse and neglect cases are the most frequently encountered and these problems are likely to be overlooked due to their rapid functioning, and nurses should keep their knowledge and awareness constantly active.

Keywords: Elderly, Abuse, Emergency Room, Nurse

P-48 Few Decision Most Damage: Cytokines

Yagmur ARTAN, Aynur TUREYEN

Abstract

Aim: Covid-19, which was detected in Wuhan city of Hubei province of China at the end of 2019 and spread all over the world in a short time, has emerged as a very important and urgent public health problem. Coronaviruses are a group of RNA viruses which are pathogenic to mammals and birds. In humans, they generally cause mild upper respiratory tract infections, but at times, they can infect human populations and cause severe respiratory diseases such as the 2003 SARS and 2012 MERS outbreaks. This disease, that Covid 19, the new type of coronavirus, which progresses with severe clinical symptoms and complications, has made a term popular again: Cytokine storm. In COVID-19; cytokines need to be produced to control viral replication, limit virus spread, and eliminate the virus-infected cells. At the same time, tissue damage caused by the virus can induce excessive activation of macrophages and granulocytes and overproduction of cytokines. This event results in cytokine storm called Macrophage Activation Syndrome (MAS) or secondary hemophagocytic lymphohistiocytosis (sHLH) and thus further tissue damage occurs. Severe clinical prognosis may occur due to cytokine storm, resulting in multiple organ failure and often death. In other words, the immune system, which tries to save the person from infection, begins to harm the person herself/himself. These patients require intensive care and nursing care is gaining importance. The purpose of this review is to describe the cytokine storm and to give information about the mechanism of the clinical picture to the nurse who applies intensive care interventions to the patient with Covid 19.

Methods: A systematic search in the literature was performed in PubMed, Scopus, Embase, Cochrane Library, Web of Science and Google Scholar database using all available MeSH terms for COVID-19, Coronavirus, SARS-CoV-2, Cytokine Storm and Nursing Management.

Conclusions: Cytokine storm is one of the serious setting that develop in Covid 19 disease. The nurse, who undertakes a primary intensive duty in the care of these patients, should know the mechanism of the clinical picture the reason for the anti-cytokine therapy well.

Keywords: Covid-19 disease, cytokine storm, nursing.

P-49 Health Risks Related to Using of Personal Protective Equipment Among Nurses During Covid-19 Pandemic

Sevcan TOPCU

Abstract

Aim: Healthcare workers may be exposed to serious occupational hazards during the Covid-19 pandemic that can cause illness, injury or even death. These occupational risks include (a) occupational infections with COVID-19; (b) skin disorders and heat stress from prolonged use of Personal Protective Equipment (PPE); (c) exposures to toxins because of increased use of disinfectants; (d) psychological distress; (e) chronic fatigue; and (f) stigma, discrimination, physical and psychological violence and harassment. The aim of this study is to examine the studies evaluating the health risks associated with the use of PPE in nurses during the Covid-19 pandemic.

Methods: All studies were included in this review study if they met the following criteria: (a) the presence of nurses in the sample, (b) evaluating of health risks associated with PPE, (c) conducting between December 2019-May 2021. MEDLINE, COCHRANE, SCOPUS, EBSCOhost, PubMed, Web of Science, DergiPark, Google Scholar databases were searched to identify eligible studies. Seven studies were deemed eligible for inclusion in the study.

Results: The studies found that nurses experienced dermatitis, headache, respiratory distress-palpitation, heat stress, facial scars, redness, acne, nausea, inability to use the bathroom, excessive sweating, cracked hands, thirst, skin itching, extreme fatigue due to the use of PPE. Provide information about the analysis results. One study showed that the incidence of rash and headache was significantly higher in nurses compared to doctors.

Conclusions: When the team members who are left behind have to work more instead of the healthcare workers who are infected during the pandemic process, is to causes that the working hours to be prolonged, being exposed to a higher virus load, and the longer use of PPE. In order to prevent health problems related to the use of PPE, it is recommended to make arrangements about working hours and to make PPE suitable for personal use.

Keywords: Personal protective equipment, nurses, occupational risks.

P-50 Hypertension, Covid-19 and Nursing

Amine TERZI, Aynur TUREYEN

Abstract

The coronavirus disease that deeply affects the whole world; It is a serious viral disease that develops with respiratory system symptoms such as fever, cough, and shortness of breath with a high morbidity and mortality rate. The World Health Organization has expressed this situation as an “international public health emergency” and named the virus that causes the disease as “Coronavirus Disease-2019 (COVID-19)”. Although COVID-19 affects all individuals, regardless of whether they are healthy or sick, studies show that hypertension patients have the disease more often, and higher mortality rates. As a result, the relationship between hypertension-COVID-19; This is explained by the fact that the virus uses angiotensin converting enzyme 2 (ACE2) as a viral entry receptor in lung cells. In other words, the COVID-19 virus needs an enzyme called ACE2 to enter the cell. ACE inhibitors and angiotensin receptor blockers (ARB) are among the drugs frequently used in hypertension patients. This causes an increase in the number of ACE2 receptors and facilitates the entry of the COVID-19 virus into the cell. In the evaluation of 5700 COVID-19 patients, the prevalence of hypertension was as high as 56.6%. Mortality rates were 26.7% in those who did not receive ACEI/ARB, 32.7% in those who received ACEI, and 30.6% in those who received ARB. However, in contrast to this study, there are also studies in the literature that indicate that although the COVID-19 virus uses the ACE2 receptor as the cellular receptor in ACEI / ARB use groups, there is no overall difference in the studies in terms of prognosis. As a result, it should be known that especially hypertension patients are at risk for the development of serious symptoms and complications during infection, and it is extremely important to increase preventive health services and provide especially individual nursing care.

Keywords: COVID-19, hypertension, nursing

P-51 Investigation of Nursing Postgraduate Theses Related to Breast Cancer in Turkey

Sevval BOSTANCI, Ayse AKALIN

Abstract

Aim: Breast cancer is the most common type of cancer and the leading cause of cancer related deaths among women in worldwide. This study aims to investigate in a systematic way nursing postgraduate theses related to breast cancer in Turkey.

Methods: The data of the study were collected by screening the database “The Council of Higher Education National Thesis Center” between January and March 2021. All of thesis completed in the department of nursing, were evaluated using the keywords breast cancer, screening, early diagnosis, risk, level of knowledge, and health belief without given any date range. A total of 32 theses completed between 1992 and 2020 years and allowed full-text access were included in the research. The data of the research were collected with a standard data summary form. Data were analyzed by frequency (n) and percentage (%).

Results: Of all postgraduate theses, 6.2% (n:2) were doctoral dissertations and 93.7% (n:30) were master's theses. The majority of the theses 59.4% (n:19) were descriptive design, and 21.9% (n:7) were published in 2019. Data were collected mostly using the Champion’s Health Belief Model Scale (40.6%) and the Breast Cancer Fear Scale (18.7%). The mean sample size was 863 including women, female health workers, nurses, female lecturers and female university students. The level of knowledge, practices, attitudes, early diagnosis and screening behaviors, risk factors, health beliefs, and awareness and sensitivity related breast cancer among women were evaluated in the theses.

Conclusions: It was determined that the level of knowledge and screening behaviors about breast cancer among women was low. Attitudes toward breast cancer screening were effective in compliance with screening practices among women. It is need to raise awareness of women about breast cancer in terms of reducing mortality rates and prolonging survival.

Keywords: Breast cancer, risk, level of knowledge screening, early diagnosis.

P-52 Investigation of Nursing Studies on Tele Health Practices in Turkey Between 2010-2020

Sema Nur YAMAN CELIK, Aylin DURMAZ EDER

Abstract

Aim: This systematic review was carried out to examine the national nursing studies conducted between 2010 and 2020 on telehealth practices in Turkey.

Methods: National nursing studies on telehealth practices in Turkey between 2010 and 2020 were examined in Google Academic Search and YÖKTEZ databases. The keywords 'tele health', 'tele-nursing', 'mobile health and nursing' were used in the databases. Studies published in the last ten years (2010-2020), in Turkish, with keywords searched in the title of the publication, and with full text are discussed. In the Google Academic Search, 10 articles were reached in the analysis with keywords. When the studies in YÖKTEZ databases were examined with the same keywords, 6 theses were reached. A total of 16 studies were examined.

Results: 50% (n: 8) of the studies are reviews, 37.5% (n: 6) are thesis studies, 12.5% are systematic reviews (n: 2) articles. 33.3% (n: 2) of the thesis studies are doctoral thesis, 66.6% (n: 4) are master's thesis. 33.3% (n:2) of the thesis studies were descriptive, 50.0% (n:3) were experimental studies, and 16.6% (n:1) were semi-experimental. Post-discharge tele-nursing effect on patients undergoing surgery in experimental studies, breast cancer receiving chemotherapy In this study, the procedural effects of the training given to cancer patients by tele-nursing and the training given to patients who will undergo surgery, counseling and follow-up with tele-nursing service were examined. Of all the studies reached, 75% were carried out in the last 5 years (2016-2020), 25% between 2010-2015.

Conclusions: As a result of the examination; It has been seen that studies on national nursing studies conducted between 2010 and 2020 on telehealth practices in Turkey are not sufficient. In recent years, it has been seen that telehealth issues have come to the fore more with the effect of the pandemic. It has been seen that more studies are needed to examine the effect of telehealth.

Keywords: Telehealth, tele-nursing, mobile health

P-53 Surgical Nursing During the Covid-19 Pandemic Period

Yasemin Eda TEKIN

Abstract

Emergency services, intensive care units and COVID services are among the most intense and risky areas in hospitals. In addition, operating rooms are high-risk areas for the transmission of respiratory tract infection, and it is very important to organize the necessary infrastructure and resources in these areas (Kamer and Çolak, 2020). As it is known, many elective cases have been canceled or postponed until after the pandemic. In this process, only emergency surgeries were performed. Although this situation seems to have reduced the workload of the operating room personnel during the pandemic process, it is reported that healthcare professionals who do not take an active role in the operating room are assigned to other units. However, when the number of cases decreases, the patients on the waiting list are also added to the patients in crisis. Therefore, the surgical team, which continues to work intensively during the pandemic process, expects a more intense work pace after the pandemic. In this case, the fatigue of healthcare professionals may affect the surgical process in hospitals (Şanlı, 2020; Albuz and Uludağ, 2020; Köken et al, 2020). In addition, studies have reported that the results of patients who had COVID-19 infection during surgery were worse (Axiotakis et al., 2021). For this reason, there are many evidence-based recommendations for the proper management of the surgical process both during and after the pandemic. Compliance with these recommendations will protect both healthcare professionals and patients from the effects of the pandemic (Şanlı, 2020; Albuz and Uludağ, 2020; Köken et al, 2020).

In the studies, it is seen that there are guides that include the entire operating room team (headnurses, operating room nurses, surgeons, anesthesiologists, anesthesia technicians and surgical technicians) to be used during the COVID-19 pandemic period and include the precautions to be taken in the perioperative process. These guidelines include the precautions and interventions that the entire surgical team should take in preoperative, intraoperative and postoperative periods in emergency or non-deferred surgical interventions (Dağcı and Alptekin, 2020). In this section, the precautions and approaches to be taken in surgical units specific to the pandemic will be presented in line with the literature.

Keywords: COVID-19, Nursing, Surgery, Perioperative process, Operating room.

P-54 Management of Nursing Services After the Pandemic

Yasin CETIN

Abstract

After the Covid-19 epidemic reached global dimensions, it was declared a pandemic by the World Health Organization. The rapidly increasing number of patients due to the epidemic has increased the workload of healthcare professionals in hospitals. Working habits of nurses, who consist of the majority of health professions, suddenly changed and they faced an intense workload. Especially in the early stages of the epidemic, when there was a lack of information and fear about the disease, nurses were at the forefront of the provision of health care services. During these processes, nurses experienced many difficulties such as working hard, not being able to take annual leave, not being able to leave the job and even not being able to see their families. In these processes, where the pandemic process continues but the epidemic rate slows down, the spread of vaccination is also promising for the end of the pandemic. As the management of nursing services is very important during the epidemic process, the management of nursing services is also very important in the post-pandemic period. In this process, nursing services managers have roles and responsibilities in order to reduce mortality rates due to the epidemic, to increase studies on evidence-based care, and for nurses to care for patients in a safe working environment. In this direction, in the management of nursing services after the pandemic, making plans to increase the work motivation of nurses, reducing their workload, using their leave at any time, creating physical conditions for suitable working conditions, making career plans, increasing reward systems, providing cooperation as a team, and versatile communication models use is recommended.

Keywords: Nurses, nursing services, management, pandemic.

P-55 Mental Problems Experienced by Pregnant Women During the Covid-19 Pandemic Period: A Systematic Review

Cisem BASTARCAN, Eda DURMAZ, Helin KARAKUS

Abstract

Aim: In this review, it is aimed to examine the mental problems experienced by pregnant women during the Covid-19 pandemic period based on literature.

Methods: The search using the PICO method was conducted online between 10-20 May 2021 in Google Scholar and Pubmed databases. Keywords "covid-19, pandemic, pregnancy, mental health" were searched in the literature in Turkish and English. In the screening, all articles published until 20 May 2021, the full texts of which were accessed and that examined the mental problems experienced by pregnant women during the covid-19 pandemic period were discussed. As a result of scanning the keyword combinations determined in this study, 381 (Google academic: 217, Pubmed: 164) studies were reached. The 381 studies accessed were analyzed first according to their titles and then according to their abstracts, duplicate articles were omitted, and 361 studies that did not meet the inclusion and exclusion criteria were excluded. 20 Articles, the subject of which is suitable for the purpose of the study, have been discussed for systematic review.

Results: In 55% of the 20 studies examined, it was found that anxiety was the most important factor on pregnant women. It has been found that in 5%, the anxiety of the husband is observed equally with the anxiety of the pregnant women. In 5%, it was observed that a bad economy increased anxiety on pregnant women. In 40%, it was found that regular training and treatment provided a positive effect on the relief of anxiety and insomnia and a positive effect on mental health.

Conclusions: In general, the articles reviewed show that stress, anxiety, insomnia and mental disorders occur in pregnant women with Covid-19. In addition, it was observed that the husband's fear of the Covid-19 epidemic was directly related to the actor effect, depression, anxiety, suicidal intention, mental quality of life and preventive Covid-19 behaviors. It has been observed that the economic situation, which went bad during the Covid-19 epidemic, had a negative effect on the mental health of pregnant women. At the same time, it was observed that psychological factors such as anxiety, insomnia and stress decreased when individuals were given education and appropriate treatment.

Keywords: Covid-19, pregnancy, mental problems.

P-56 Psychological Hardiness, Life Satisfaction and Virtual Environment Loneliness Among Nursing Students During the Covid-19 Pandemic

Yesim CEYLANTEKIN, Hamide Nur CEVIK OZDEMIR, Dilek OCALAN, Ibrahim KILIC

Abstract

Aim: The aim of this study was to evaluate the life satisfaction, psychological hardiness, and virtual environment loneliness levels of nursing students during the COVID-19 pandemic and to investigate the relationships between them.

Methods: It is a cross-sectional and descriptive study. The study was conducted with 321 students studying at the Faculty of Health Sciences, Department of Nursing. The data were evaluated using the information form, Satisfaction with Life Scale (SWLS), Psychological Hardiness Scale (PHS) and Virtual Environment Loneliness Scale (VELS) scales. Frequency, percentage, t-test, ANOVA and correlation analysis were used in the analysis of the data.

Results: The mean total score of the nursing students was (13.52 ± 4.34) from SWLS, (38.49 ± 7.35) from PHS, and (46.46 ± 9.10) from VELS. A moderate negative correlation between SWLS and VELS ($r=-0.41$), a moderate positive correlation between SWLS and PHS($r=0.412$), and a weak positive correlation between PHS and VELS ($r=0.33$) were found.

Conclusion: The study results revealed that the COVID-19 pandemic process has affected the life satisfaction, psychological hardiness, and virtual environment loneliness of nursing students.

Keywords: Covid-19, nursing students, life satisfaction, psychological hardiness, virtual environment

P-57 The Relationship Between Personal Protection Behaviors and Fear Levels of Healthcare Professionals Who Get Covid-19 Vaccine

Seda Tugba BAYKARA MAT, Cisem BASTARCAN, Okan Anil AYDIN, Kadir CALISKAN

Abstract

Aim: The purpose of this study is to reveal the relationship between personal protection behaviors and fear levels of healthcare professionals who get Covid-19 vaccine.

Methods: This descriptive and relationship-seeker study was carried out between February and April 2021 using an online questionnaire method with 103 healthcare professionals who were actively involved in the Covid-19 pandemic process in public and private hospitals in Istanbul. The data were obtained using the "Participant Information Form" consisting of 19 items and the "Covid-19 Fear Scale". In the analysis of the data, besides parametric analysis, descriptive statistical methods (mean, standard deviation, frequency, percentage), Pearson Correlation, Independent Samples T Test and One-Way ANOVA were used. Results were evaluated at 95% confidence interval.

Results: As a result of the analysis, it was seen that the average score obtained from the Covid-19 Fear Scale was medium ($\bar{X} = 2.54 \pm 0.89$). A positive significant relationship was found between the fear of Covid-19 and the use of gloves, surgical masks, N95 / FFP2 masks and disposable gowns / overalls before vaccination by the healthcare professionals participating in the study. After vaccination, it was revealed that there is a positive and significant relationship between the use of gloves and surgical masks and the fear of Covid-19. In addition, it was stated that there was no significant relationship between the participants' use of N95 / FFP2 masks and disposable gowns / overalls after vaccination and the fear of Covid-19.

Conclusions: According to the results of the study, it can be said that there is a significant relationship between the personal protection behaviors and fear levels of healthcare professionals who get Covid-19 vaccine, and the vaccination situation reduces the fear of Covid-19 and reduces the level of protective equipment.

Keywords: Covid-19, fear, fear of Covid-19, Covid-19 vaccines, personal protective equipment.

P-58 The Relationships Between Psychological Resilience, Perceived Stress and Anxiety of Nursing Students During the Covid-19 Pandemic Process

Hamide Nur CEVIK OZDEMIR, Pakize OZYUREK, Ibrahim KILIC

Abstract

Aim: To evaluate the psychological resilience, perceived stress and anxiety levels of nursing students during the COVID-19 pandemic process and to examine the relationships between them.

Methods: A cross-sectional, descriptive and correlational study design was conducted with 315 students studying at the faculty of health sciences nursing department. Instruments included information forms, Brief Resilience Scale (BRS), Perceived Stress Scale (PSS) and Generalized anxiety disorder-7 (GAD-7) scales. Descriptive, t-test, ANOVA, correlation analysis and cluster analysis were used in the analysis of the data.

Results: BRS ($X \pm SD = 3.10 \pm 0.88$), PSS (2.99 ± 0.62) and GAD-7 (1.07 ± 0.78) scores were intermediate. A negative and strong correlation was found between psychological resilience and perceived stress ($r = -0.624$), a positive and strong ($r = 0.605$) correlation between perceived stress and anxiety, a negative and moderate correlation ($r = -0.530$) was found between psychological resilience and anxiety. Some parameters levels differed significantly according to some individual characteristics of the students. The students were divided into four groups: feeble, frontier, passable and sturdy.

Conclusions: The nursing students in the feeble and frontier group were at risk in terms of psychological resilience, stress and anxiety. Empowerment programs should be prepared to support and encourage nursing students.

Keywords: Covid-19, nursing students, psychological resilience, perceived stress, anxiety.

P-59 Balneotherapy and Hydrotherapy

Ezgi YARASIR, Suleyman Erhan DEVECİ

Abstract

The use of water for health and therapeutic purposes is one of the oldest treatment methods that continue today. Balneotherapy is currently used as a drug-free method in spa and cure centers for therapeutic, preventive and rehabilitative purposes. In addition to the main therapeutic effect in spa treatment, thermal and mineral waters and bath applications, therapeutic muds (peloids), climatological factors, other balneotherapy applications (gas baths, underwater massage, showers, irrigation, drinking cures, inhalation) also have an effect on healing. Both balneotherapy and hydrotherapy are used as traditional and complementary treatments to reduce pain and morning stiffness in patients, to ensure good posture, to increase range of motion, and thus to increase quality of life. Today, balneotherapy and hydrotherapy are becoming widespread and this increases the application rate. There may be deficiencies and wrong approaches in the use and applications of balneotherapy and hydrotherapy. However, despite their demonstrated clinical and symptomatic benefits, their role in modern medicine is still controversial. Because the biological mechanisms underlying these benefits have not been fully explained yet. For this reason, balneotherapy and hydrotherapy treatments should be performed under the advice and supervision of the relevant medical specialties, and should be decided according to medical evaluations in terms of benefits and harms.

Keywords: Balneotherapy, hydrotherapy, spa.

P-60 Evaluation of a School of Medical Students' Attitudes Towards Violence Against Women in Istanbul

Selin DAVUN, Merve KURNAZ AY, Seyhan HIDIROGLU

Abstract

Aim: Violence against women has become an important public health and human rights issue. In this study, it was aimed to determine and evaluate the attitudes of students in a medical school in Istanbul towards violence against women.

Methods: The universe of the cross-sectional type of research consists of 1523 undergraduate students studying at the Faculty of Medicine of a university in Istanbul in the 2020-2021 academic year. The sample size was calculated as a minimum of 461 people. In total, our study was conducted with 504 participants. The research data were collected using a questionnaire created to determine the sociodemographic characteristics of the participants and the "Attitudes Regarding Violence Scale (SITO) ", which evaluates the participants' attitudes towards violence. In the study, Pearson Chi-square, Mann Whitney U test and Kruskal Wallis analysis were used and $p < 0.05$ was considered statistically significant. Ethics approval was obtained.

Results: 65.3% of the participants were women and 41.9% of the participants were preclinical medicine students. There is a significant difference between the total scores of women and men on the SITO scale. While the median of the SITO total score of the preclinical medicine students was 32.38 ± 0.37 , the SITO total score median of the clinical medicine students was 33 ± 0.47 ($p < 0.05$). When the scale scores of the participants were examined according to the region where they were born, a significant difference was found between the participants according to the regions they were born in terms of the scores obtained from the SITO economic subscale.

Conclusion: Medical faculty students have a contemporary attitude towards violence against women. Students' gender, class levels, place of residence, region of birth, economic status, and their parents' work and education levels affect their attitudes towards violence against women.

Keywords: Medical students, violence, attitude

P-61 Evaluation of Gender Bias in Students of a School of Medicine in Istanbul

Merve KURNAZ AY, Seyhan HIDIROGLU, Cagan DENIZ, Isil CEBI, Dilara ENGIN, Isik KARABAKAL, Selin DAVUN, Melda KARAVUS

Abstract

Aim: Gender bias is widespread in medicine and healthcare and is one of the main drivers of health-related inequalities. It is necessary to know the approach and point of view of medical students to this attitude. Studies point to the need for gender perspectives in medical education to determine the most accurate healthcare services for both men and women and increase gender awareness among future doctors. Our study aimed to evaluate the gender bias of students in a medical school in Istanbul using a scale with validity and reliability in Turkish.

Methods: The population of this cross-sectional study consists of the 1523 medical students studying at a university in Istanbul in the 2020-2021 academic year. The sample size was calculated as a minimum of 461 people. In total, our study was conducted with 484 participants. The data were collected using a questionnaire for sociodemographic features and the Nijmegen Gender Awareness in Medicine Scale. Mann-Whitney U, Kruskal Wallis tests and multivariate linear regression were used in data analysis. Statistically, $p < 0.05$ was considered as the level of significance. Ethics approval was obtained.

Results: Most of the participants were female (65.9%) and the participants' mean age is 21.8 ± 2.1 years. Multivariate tests showed differences in gender role ideology towards patients and doctors according to the gender of the participants and the working situation of their mothers. Also, significant sex-related differences were found in gender sensitivity as well. As compared to others, male students or those whose mothers are unemployed held slightly more gender stereotypes towards patients and doctors.

Conclusions: We suggest that gender issues should be included in medical education to focus on gender attitudes. Previous studies suggest that students become more positive and engaged as they learn more and become accustomed to gender debates.

Keywords: Gender awareness, gender sensibility, medical students.

P-62 Experiences and Psychosocial Problems of Intensive Care Workers During the Covid-19 Pandemic Istanbul

Hulya LEBLEBICIOGLU, Hamide Nur CEVIK OZDEMIR, Fatma NAIR AKTAS, Kazim SENOL

Abstract

Aim: Health professionals in intensive care units work under difficult conditions and intense stress due to the COVID-19 pandemic. The aim of this study is to determine the experiences and psychosocial problems of nurses and doctors working in an intensive care unit during the COVID-19 pandemic.

Method: In this study, a descriptive phenomenological approach was used. The sample of the study consisted of 8 nurses and 8 doctors working in an intensive care unit (of a tertiary education and research hospital in Turkey). Interviews was held face-to-face between August-December 2020. Data were analyzed using Colaizzi's seven-step method.

Results: 4 main themes and 12 sub-themes emerged from the analysis of the data; effects of the pandemic, coping strategies, professional perspective and expectations. During the pandemic, nurses and doctors working in the intensive care unit experienced psychosocial problems such as fear, stress and anxiety and were affected by the isolation process. In this process, health workers used short-term coping strategies.

Conclusions: Nurses and doctors working in the intensive care unit were adversely affected by the COVID-19 pandemic, both psychologically and socially. Health workers needed psychosocial support, protective equipment and improved working conditions. Clinical Inference: In the face of future emergencies, quality and effective clinical protocols should be prepared for healthcare professionals in the intensive care unit, resource management (human, material, etc.) should be optimized, psychological support and adequate training should be provided.

Keywords: COVID-19, critical care, nursing, epidemics, qualitative research.

P-63 Prevalence of Neck Pain in Drivers and Affecting Factors

Ezgi YARASIR, Mehmet Ali SEN, Edibe PIRINCCI

Abstract

Aim: Neck pain is a common condition among drivers that causes physical disability and cost. The prevalence of neck pain in drivers ranges from 7.1% to 78.8%.

Methods: This study was conducted to determine the prevalence of neck pain in drivers and the factors affecting it. This cross-sectional study was conducted among 323 drivers in Diyarbakir. In the research, a questionnaire form prepared by the researchers based on the literature was used to collect data. The questionnaire form was filled in by the researchers using face-to-face interviews from the drivers who gave their consent by going to the bus, taxi and minibus stops in Diyarbakir. The field study of the research was carried out in March-June 2019, after the approval of the ethics committee.

Results: All of the drivers included in the study are male and their average age is 41.7 ± 11.5 (min: 19, max: 70). The data were evaluated as statistical significance with $p < 0.05$ in SPSS 22.0 program. Percentage, mean, and chi-square test was used in the analysis of the data. Neck pain was found in 49.8% of the drivers in our study. Neck pain; it was found to be significantly higher in drivers with poor socioeconomic status, very uncomfortable at the end of the working day and having sleep problems ($p < 0.05$). The neck pain of drivers does not change according to marital status, type of vehicle used and education level ($p > 0.05$).

Conclusions: Neck pain was detected in about half of the drivers. In order to prevent neck pain in drivers, importance should be given to protective and rehabilitative interventions in terms of physical health and socioeconomic status.

Keywords: Driver, neck pain, sleep

P-64 Seasonality of Suicide and Prediction of Suicide Rates in the Following Years

Kubra YILDIZ, Ramazan Azim OKYAY, Adem DOGANER

Abstract

Aim: Suicide rates increase at certain times of the year and the changes in these rates show seasonal differences. The aim of this study is to determine whether the suicide rates show seasonal fluctuations in Turkey and to predict the suicide rates in the following years by month. Anticipating suicides will also contribute to taking various precautions.

Methods: In this study, a total of 6 years of data covering the years 2013-2018 were examined. Monthly suicid data for these years were obtained from the Turkish Statistical Institute (TURKSTAT). The compliance of the data to normal distribution was examined using the Shapiro Wilk test. Time series analysis was applied in the realization of forward-looking predictions. Death rates and number of deaths by months were compared using variance analysis. Tukey hsd test was used in post-hoc analysis. Statistical significance was accepted as $p < 0.05$. The data were evaluated in the program R.3.6.0, Statistica 13.3 Academic and SPSS version 22.

Results: The number of suicides and death rate in May were found to be statistically significantly higher than in January, February, October, November and December ($p < 0.05$). There were more suicides in summer than in winter. According to the time series analysis, it is estimated that the most suicidal deaths for 2019 and 2020 will occur in May with approximately 305 cases.

Conclusions: As a result, it was determined that suicide rates show seasonal differences and are more common in summer than in winter. It is estimated that the highest number of suicides in the next two years will be in May. These findings can provide rapid and effective results in predicting the suicide risk of populations. Suicides can be prevented with timely precautions, information and training.

Keywords: Suicide, seasonality, time series analysis

P-65 The Awareness of Childhood Autism: A Qualitative Study

Selin DAVUN, Alican SARISALTIK, Pinar KAYNAR, Khadija ELTAIRA, Ghania Hemed SALIM, Ammar Al SALLOUM, Negar RASHIDI, Amira a Ahmad SALEH, Fadi AL MUSTAFA, Saif Husham Yousif BAYAZEED, Seyhan Hidiroglu, Melda Karavus

Abstract

Aim: Autism or Autism Spectrum Disorder is a neurodevelopmental disorder that is related with deficits in social interaction and communication with restricted and repetitive behaviors. The aim of this study is to evaluate autism awareness among parents living in Turkey, Iran, Syria, Libya, Tanzania, Saudi Arabia, Iraq and Libya community.

Methods: This study has designed as a qualitative study. The study was conducted with sixteen parents who live in Turkey, Iran, Syria, Libya, Tanzania, Saudi Arabia and Iraq and not have children with autism. Data collection was done with in-depth interviews of the parents. A semi-structured questionnaire consisting of open-ended questions is used in the research. Data collection was done via online interviews where the parents were asked about their demographic information and their awareness about autism. The recordings were transcribed with their permission and thematic analysis was done to categorize the data for better interpretation.

Results: Most of the participants were aware of the word autism and the stigmatization that is made by the community to these children and their parents. They all expressed that autism as a developmental disability. And also, they think that a child with autism will have a negative impact on the community, nevertheless there were, who think that autism can have a positive impact on the child and the community. Stigmatization faced by these children by the community, school and in the social and crowded areas was also acknowledged by the participants.

Conclusion: It can be suggested that growing awareness and recognition of autism among parents from different communities. However, it may need little improvement, which can be targeted by focused educational campaigns. Such initiatives should facilitate the development of systematic and sustainable solutions for enhancing autism awareness among young parents and hence develop effective and sustainable public health solutions.

Keywords: Autism, awareness, qualitative.

P-66 Psychological Effects of Covid-19 Pandemic on Our Health

Büşra İNAC YILMAZ, Nevin KANAN

Abstract

Introduction: The COVID-19 pandemic, which has shaken the world with its emergence and caused deaths (350,000 people in the world and 4340 people in our country) and health problems, has been a crisis that affects our mental health deeply and creates stress in this process.

Aim: In this study, the effects of covid 19 on our health were mentioned.

Conclusion: The most important effect on social psychology is the increase in the levels of fear and anxiety, as well as the psychological problems resistant to desperation, despair and age. Even the measures taken by health institutions such as mandatory isolation, quarantine and temporary closure had negative effects psychologically and caused fear, desperation and fear due to the lack of clarity regarding treatment and effective vaccination. Because one of the most important factors that psychologically forces people who remain in quarantine or in isolation is uncertainty in the process, associated with having high levels of anxiety and adjustment disorder, and losing a loved one due to the epidemic, symptoms of post-traumatic stress in individuals, depression, perceived stress and insomnia. has been found to be related. In particular, there was a difficult period in which everyone had to close their homes and had to adapt to new conditions and get through this process without problems, and especially in terms of economic and social impacts, which can remain on the agenda for a long time. Therefore, following reliable sources to protect against the effects of psychological problems caused by COVID-19, limiting the time allocated to news about the epidemic, increasing sharing positive experiences and stories, supporting those around us and our relatives, and continuing everyone's own routines are among the valuable recommendations that are often mentioned in the literature. is available.

Keywords: covid 19; exposure; health; pandemics

P-67 Overview of the Perioperative Period and Nursing in the Covid-19 Pandemic

Oyku KARA, Seher Deniz OZTEKIN

Abstract

Introduction: The coronavirus disease 2019 (COVID-19), identified as coronavirus 2 (SARS-CoV-2), is a viral disease that causes severe pneumonia. In this process, in which a pandemic has been declared and caused a global health crisis, the correct implementation of the measures to be taken to protect the surgical team, the patient and the environment is extremely important. The nurse, who is an important member of the surgical team, has important roles and responsibilities in the implementation of universal and national measures specific to the perioperative period and in the effective management of the process.

Objective: For this purpose, it was aimed in the study to examine and present the measures and practices for the management of the perioperative process in the COVID-19 pandemic according to the current literature.

Material and Method: All studies published in Turkish and English languages were scanned in the “Pubmed”, “Google Scholar”, “ScienceDirect”, “Proquest”, “Cochrane Library”, “Cumulative Index to Nursing and Allied Health Literature (CINAHL)”, “Ulakbim-Tübitak” and “TR-Dizin” databases using the key words of “perioperative period”, “operating room”, “surgery”, “nursing” and “infection precautions”.

Findings: It was seen in the scanned literature data that determination of special surgical teams and surgical operation rooms for patients with the diagnosis of COVID-19, found suspected or negative, separation of transfer routes, use of negative pressure rooms, preference for disposable materials and equipment in treatment and care and making minimum number of equipment and surgical team members available in the operating room have been recommended. It has been also recommended that a minimum number of health care professionals be present in the operating room, to write their names on checklists, and to cover patients with a barrier draping in applications that may cause aerosol formation, such as general anesthesia in the operating room, resuscitation, intubation and extubation. Complete use of personal protective equipment such as FFP2/3 masks, barrier gloves, goggles, face shield, bonnet, impermeable surgical gown, special shoe covers or boots by the surgical team, covering sensitive surgical equipment with protective covers in terms of decontamination, restriction of sudden movements that cause airflow, providing and maintaining training for the wearing and removal of personal protective equipment, the necessity of nurses taking an active role in resource management, creating and executing protocols, and evaluating the attitudes of the surgical team are among the suggestions.

Conclusion: Due to the increase in the number of individuals diagnosed and suspected of COVID-19, the requirement of the determination of transmission routes, the adoption of universal and national precautions, and the continuation of the perioperative treatment and care process according to these measures were determined for the perioperative management of urgent and non-deferred surgical operations. Accordingly, it is recommended to carry out studies on the implementation level of universal and national COVID-19 measures in the perioperative period.

Keywords: COVID-19, perioperative period, operating room, surgery, nursing, infection precautions

P-68 A Review on Covid-19 Phobias of Nursing Students

Nuriye DEGIRMEN, Esra KILINC AKMAN, Sevgi GUR, Nevin KANAN

Abstract

Introduction: Deaths and cases in Turkey and around the world due to COVID-19 continue to occur alongside various mutations.

Aim: This study aimed to determine/review the COVID-19 phobia levels of nursing students studying at a foundation university.

Methods: The descriptive and cross-sectional study was conducted with 249 Haliç University nursing students who voluntarily accepted to participate in the survey by obtaining ethical permission through the Google survey application. The COVID-19 Phobia Scale, which was developed in Turkish by Arpacı et al. 2020, was used. Each statement in the 5-point Likert-type scale is evaluated according to “strongly disagree” 5 “strongly agree” 1. It was created according to DSM-V specific phobia criteria. Cronbach’s alpha value is 0.92.

Results: It was found that the mean age of the students participating in the study was 20.35 ± 2.11 years, and 99.6% (n=248) were female, 25.7% (n=64) were 3rd-grade students and 57.4% (n=143) were living in the province. In addition, it was determined that 87.6% (n=218) had a habit of smoking, 2% (n=5) had asthma, 37.3% (n=93) had been hospitalized before, 22.9% (n=57) of them were not familiar with Covid-19, 33.7% of them had a relative who was diagnosed with COVID-19, and 81.9% (n=204) did not have any handshake/hug/contact with individuals other than their families. In the sample, the Cronbach’s Alpha of the scale was found to be 0.95, the C19P-S variable was found to be 60.17 ± 20.18 , and the highest sensitivity was found in the item “I am extremely afraid of the possibility of catching the coronavirus in one of their families”. The highest phobia was seen in the social sub-dimension. The students with the most somatic phobia were the 2nd year students with a mean of 17.07 ± 6.24 . It was determined that the students with the highest level of social anxiety lived in the town. As the age increases, the level of economic phobia also increases.

Conclusion: It was determined that the COVID-19 phobia levels of nursing students changed depending on their age and location and that they had social and somatic concerns. To this end, it is recommended to address the ways of coping with COVID-19 phobia in the nursing curriculum and carry out awareness-raising studies.

Keywords: COVID-19, Phobia, Nursing Students

P-69 Perceptions and Experiences of Intensive Care Nurses on Compassion Fatigue in the Covid-19 Pandemic: A Qualitative Study

Sevgi GUR, H. Banu KATRAN, Nurgul ARPAG, Seher Deniz OZTEKIN

Abstract

Aim: In this study, it was aimed to determine the perceptions and experiences of intensive care nurses regarding compassion fatigue in the COVID-19 pandemic.

Methods: This qualitative study of phenomenological type was conducted in May 2021 with nurses working in the adult anesthesia intensive care units of a pandemic hospital in Istanbul. Data were collected by conducting focus group interviews with 9 nurses through a semi-structured questionnaire. Content analysis was used to evaluate the data. As a result of the research, three main themes and twelve sub-themes were determined as administrative problems in the COVID-19 pandemic, the positive effects of the COVID-19 pandemic on intensive care nurses, and the negative effects of the COVID-19 pandemic on intensive care nurses.

Results: Intensive care nurses expressed their difficulties in teamwork, managerial problems, motivating patients and colleagues, development of empathy skills, asocial and isolated life, fears, ethical dilemmas, obscurity, burnout, compassion fatigue towards themselves and their struggle during the pandemic process.

Conclusion: It was seen that the COVID-19 pandemic caused physical, psychosocial and politico-economic effects, especially burnout in intensive care nurses. It is recommended that these effects be noticed and necessary improvements should be made in personal rights and psychological support should be provided.

Keywords: COVID-19, compassion fatigue, intensive care nurse

P-70 Perioperative Nursing Care of Liver Transplant Patients During Covid-19 Pandemic

Seher Deniz OZTEKIN

Abstract

Introduction: Transplantation is one of the most affected sectors, as it relies on a variety of services that have been drastically occupied to treat and care of patients affected by COVID-19. It's affecting all aspects of hepatology, including the organ transplant patient care.

Aim: This review aimed to review the current literature regarding perioperative outcomes of COVID-19 in liver transplant patients and individualized nursing care, and recommendations.

Methods: All studies published in Turkish and English languages were searched in the "Pubmed", "Google Scholar", "ScienceDirect", "Proquest", "Cochrane Library", "Cumulative Index to Nursing and Allied Health Literature (CINAHL)", "Ulakbim-Tübitak" and "TR-Dizin" databases using the key words of "perioperative care", "COVID-19", "liver transplantation", and "nursing".

Findings: Initial uncertainty and fear of cross transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) have changed the routine management of patients either listed for or received a liver transplant. The fear of COVID-19 before or after liver transplantation has lead to a significant reduction in liver transplantation numbers, and patients with decompensated cirrhosis remain at risk of wait list mortality. Liver transplantation is particularly challenging because it must consider risks to both the donor and the recipient. General guidance should be supported by hospital-specific transplant policies to optimize resource utilization and limit risks to patients, and health care professionals. **Conclusion:** Protecting liver transplant patients, nurses and other health-care professionals against SARS-CoV-2 infection by minimizing exposure is the most important mission of transplant nurse coordinators. The approach to nursing care plan must therefore be individualized in perioperative transplantation settings,

Keywords: COVID-19; transplantation; perioperative; nursing care

P-71 Burnout and Intention to Leave a Meta-Analysis of the Relationship Between in Turkey

Okan Anil AYDIN, Mustafa Suheyl POZANTI, Aysegul KAPTANOGLU

Abstract

Aim: The aim of the study is to determine whether there is a relationship between the studies conducted in Turkey on burnout and the intention to leave work. The results of this study are important because it is seen as a deficiency in the field.

Method: 28 studies were found that examined the relationship between burnout and intention to leave work, and their analysis was conducted using the meta-analysis program Comprehensive Meta-Analysis v3. An in-depth literature review was conducted before the analysis was carried out, and studies that meet the established criteria were included in the analysis. The heterogeneity of the studies, statistical significance, impact size analyses and publication biases were examined during the analyses. In addition, subgroup analyses were performed to measure the difference between sectors.

Results: First, the significance of the studies taken into the analysis was looked at and found to be statistically significant. Looking at their heterogeneity, the studies were determined to be heterogeneous, and the effect size was evaluated according to the random effects model. According to the results of the effect size analysis, a statistically significant and strong association was found between burnout and intention to leave work ($E.S.= 0.610$). It has been found that there is no publication bias in the study. Finally, no significant differences were found according to the difference analysis conducted according to the sectors in which the data sample was taken. But the bank sector ($E.S.=0.671$) had the highest impact, while the health sector ($E.S.=0.567$) had the lowest impact. Considering all the results, it was found that there is a strong effect between burnout and intention to leave work, that is, as burnout increases, the intention to leave work also increases.

Conclusions: Considering the aims of the study, it was revealed that burnout and quitting each other affect each other. However, it was determined that the individual studies included in the study did not have publication bias. Finally, no significant difference was found in the analysis of differences between sectors. This reveals that there is no special situation according to the sectors.

Keywords: Burnout, Intention to leave, Meta-analysis.

**P-72 Cardiovascular Health Services and Health Literacy Among Immigrants in Europe:
Addressing the Challenges and Opportunities During the Covid-19 Outbreak**

Muhammet GUMUS, Sibel ORHAN

Abstract

Aim: Europe is a destination for many immigrants, and when we look at the proportion of the general population, it is a group that will increase in the next decade. Cardiovascular (CV) risk distribution and consequences and health literacy are likely to be different from the host population. Challenges related to immigrant health status, cardiovascular risk distribution and health literacy are compounded by the ongoing coronavirus disease 2019 (COVID-2019) crisis.

Methods: A review of the available evidence on migrant CV and health literacy in Europe was conducted.

Results: Health literacy is lower among immigrants, but can be developed through targeted interventions. Some immigrant subgroups appear to have higher rates of cardiovascular disease (CVD) risk factors, most notably hypertension and diabetes. On the other hand, it has been found that there is strong evidence for the so-called healthy migrant effect that describes lower CV risk distribution and mortality rates in a different subset of immigrants. During the COVID-19 pandemic, CV risk factors and health literacy are key elements to best manage public health responses in the ongoing pandemic.

Conclusions: Migrants are both an opportunity and a challenge for public health in Europe. Research aimed at better understanding the healthy migrant influence is needed. Practicing the beneficial behavior of immigrants can improve results in the whole population. Special interventions to screen risk factors, manage chronic diseases and increase health literacy can improve health services for migrants. This pandemic is a challenge for the entire population, but the active inclusion of immigrants in established healthcare systems can help improve the long-term health outcomes of migrants in Europe.

Keywords: Immigrants, Cardiovascular, Covid-19, Sars-cov-2, Health literacy

P-73 Examining the Impact of Health Literacy on the Level of Covid-19-Induced Psychological Distress

Hamza SIGIRCI, Pınar OZER, Mehmet YORULMAZ

Abstract

Aim: It is not known exactly what effects health literacy has on the level of psychological distress caused by the Covid-19 outbreak. The aim of our study is to examine the relationship between the health literacy levels of individuals and the levels of psychological distress caused by covid-19. For this reason, it is thought that the study will contribute to the literature.

Method: The population of the research consists of individuals aged 18 and over living in Turkey. Questionnaires were delivered to 429 people, who were easily reached by sampling method, using the online survey method. The Health Literacy Scale was used to measure the health literacy levels of individuals, and the Covid-19 Psychological Distress Scale was used to measure the covid-19 psychological distress levels. The scales are observed to be highly reliable at 0.92 and 0.88 when looking at internal coefficient coefficients, respectively. By using parametric tests in the realization of data analysis; Independent Groups t test, One-way ANOVA and Pearson Correlation test were used.

Results: Of the 429 participants, 67.1% were individuals aged 25 and under. In addition, when the genders of the participants were examined, it was observed that 75.1% of them were women, and when their educational status was examined, 60.8% of them were individuals who received undergraduate education. When the data were analyzed on the basis of income, it was concluded that 29.8% of the participants had an income between 2851 and 4500 TL. Finally, it is observed that 80% of the participants have not been infected with the covid-19 virus before, and 53.1% have lost income during the epidemic process.

Conclusions: According to the research findings, a positive and significant relationship was found between the health literacy levels of individuals and the psychological distress levels caused by covid-19 ($r=0.116$, $p<0.05$).

Keywords: Covid-19, Epidemic, Health literacy, Pandemic, Psychological distress

P-74 Attention a New Approach to the Treatment of Secondary Memory Loss

Ercan SUT

Abstract

The patient, who developed hypoxic encephalopathy due to carbon monoxide toxication at the age of 15, and faced permanent memory impairment despite all the treatments applied after his intensive care hospitalization, was defined as disabled with a report of Mental Disability and was directed to special education, attempts were made for treatment in various health institutions, but no improvement was observed, and epileptic attacks were also accompanied by epileptic attacks in the future. His memory impairment has become chronic. After a 4-year period, after the patient was referred to the patient who was observed to have biparietal and frontal ischemia-related complaints in the evaluations made by the Istanbul Medical Faculty Neurology BD, a 6-month treatment plan was made, and he was intervened with EMDR once a week for 25 weeks. After the treatment, it was evaluated that all his complaints at the time of admission disappeared and the patient was discharged with good health. In the cranial MRI evaluation performed later in the treatment process, results were consistent with the pre-treatment results. It has been concluded that new connections can be created that can reduce memory loss with treatment.

Keywords: Memory Loss, Treatment, New Approach

P-75 Interaction Anxiety in Covid-19 Pandemic

Ozlem ANUK, Simge MURCAK, Gizem AYDOGDU

Abstract

The pandemic process in the world has directly or indirectly affected every society, institutions and living beings and initiated a process of isolation. A person is an entity that comes into contact as part of nature and the cultural structure in which it is located, and provides many communication activities in this way. As a being affected by nature and affecting nature, it is believed that the inability of a person to come into contact will negatively affect him and create a new space that will reveal negative behavior. Interaction can also be expressed as a process of reciprocity and the initial process of causes that lead to the change of behavior of the parties. A person is a social being and constantly communicates with his environment. The pandemic process changes the way people come into contact as a basic condition for protection from the disease and requires that contact be minimized. Given the process of interpersonal relationships, interaction, and global mobility, it is thought that this isolation process will affect individuals physiologically and psychologically. Given the measures taken, the closure processes and sanctions that arise in the entire social structure have revealed the situations of congestion and inability to socialize in individuals through research in this context, it was thought that interaction problems will also arise. These problems are life-long scars that can leave your social anxiety, introversion, isolation from society, to terminate their relationship with the outside world and especially the possible states are thought to be as the covid-19 pandemic individuals about their future problems that will arise in many areas are expected to affect the interaction of individuals. In this study, curiosity about how future interaction problems affect and affect individuals was tried to be supported by literature research and was intended to shed light on possible problems and measures.

Keywords: Covid-19; Interaction Anxiety; Isolation

FULL TEXT ORAL PRESANTATION

P-76 The Experience and Lessons for Healthcare Management During Covid-19 Pandemic

Yusuf CELIK

Abstract

It should not be a mistake to name COVID-19 as a crisis or disaster for healthcare organizations because it has affected all aspects of human life in all countries, even freedom of humans. It affected both developing countries and also developed countries. The richest countries had serious problems in providing appropriate care or even supplying very cheap medical supplies such as medical masks.

The first question that health managers have to ask themselves and answer honestly is ‘were we able to estimate COVID-19 type pandemic?’ For the honest answer of this question, we should look at the discussions we did in previous years. Think about the ‘swine flu’ or ‘bird flu’. In the past WHO warned the countries and issued necessary measures in dealing with pandemics in healthcare several times. Think about we eliminated all chickens in the country, and we did not consume chicken and even eggs for long time. These examples show that disasters or flu pandemics in healthcare have been expected. We were lucky since those flu cases were not very contaminated, and they affected local regions and countries. But, there is a fact that healthcare organizations and health systems should be ready in dealing with negative effects of pandemics or disasters in the future.

We all know that Turkey is a country that is more likely to face with natural disasters such as earthquakes, floods, landslides, rock falls, etc. For this reason, ‘Disaster and Emergency Management Authority – we call it AFAD - was established and it developed a new disaster management model. A new disaster management model has been put into practice in Turkey, and it has shifted priority from “Crisis Management” to “Risk Management”. This model is called the “Integrated Disaster Management System”, and it has been designed to ensure that hazards and risks are identified in advance, so as to avoid losses resulting from disasters and emergencies. The system also aims to take steps that would prevent or minimize potential losses before a disaster happens; to provide efficient response and coordination; and to ensure the integrated conduct of improvement efforts following a disaster. This model and its concepts can be easily adopted by healthcare managers in their organizations in management of crises. The question is ‘are we able to follow the steps in the model to make our health systems and healthcare organizations ready for the crisis?’ (AFAD, 2018).

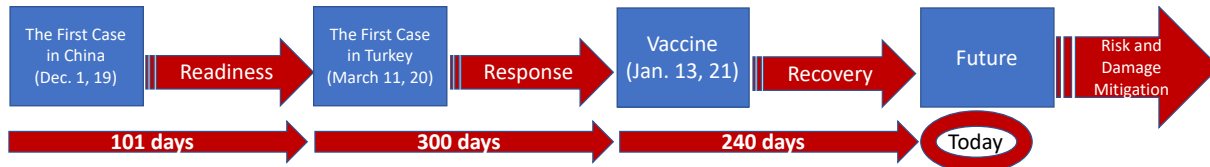
Before-during-after a crisis or disaster, there are many things that healthcare managers have been expected to do. The expected things in each step of crisis management are listed by Daft. Daft categorizes the expected things for crisis management under three main categories and he calls them as critical planning methods (Daft, 2010):

1. The first method is **Contingency planning**: He suggests that all organizations should have contingency plans. Contingency plans define company responses to be taken in the case of emergencies, setbacks, or unexpected conditions.
2. The second method is **Building scenarios**: Scenario building involves looking at current trends and visualizing future possibilities.
3. The third method is **Crisis planning**, it mainly deals with uncertainty. There are two main tasks for crisis planning:
 - a. *The first task is to **prevent crisis***. The crisis prevention stage involves activities managers undertake to try to prevent crises from happening and to detect warning signs of potential crises. A critical part of the prevention stage is building open, trusting relationships with key stakeholders such as employees, customers, suppliers, governments, unions, and the community. Please remember that how healthcare organizations had severe difficulties in the supply process of personal protection equipment (PPEs) such as medical masks, or even disinfectant.
 - b. *The second task under crisis planning is to **prepare organizations the crisis***: The crisis preparation stage includes all the detailed planning to handle a crisis when it happens.

There are three steps in the preparation stage. These are: (1) designing a crisis management team and spokesperson, (2) creating a detailed crisis management plan, and (3) setting up an effective communication system.

All countries have a lot of difficulties in communicating with people, and it is still a case when we consider the reality of vaccine protests.

Figure 1. Critical Points in COVID-19 Pandemics From The First Case in China to Today



The figure 1 gives an idea what kind of opportunities Turkey had to make its health system and health care facilities ready for COVID-19 by showing four important steps in integrated disaster management system developed by AFAD. In all steps, before-during-after the crisis, time should be considered as valuable and very limited resource. Time is as important as money, and it should be used efficiently since it is not recovered. It should be used efficiently and effectively at the first time.

In case of COVID-19 crisis we have to ask another question and answer it honestly: ‘Do we have enough time and evidence on new emerging crisis is approaching and we need to get our healthcare organization ready for this crisis?’

- The first official COVID case was reported in China on December 1, 2019.
- The first COVID case in Turkey was reported on March 11, 2020.
- There was no vaccine or effective treatment for COVID-19 up to the late of 2020. And the first vaccine was shut on January 13, 2021, and after March 2021 vaccine has been implemented by starting from the riskiest population and age groups.
- We have still been under the effect of COVID and there are ongoing discussions the effectiveness of vaccines and treatment of that disease, and unfortunately there is no hope in the near future to eradicate COVID in our life.

Can we say that Turkey or other countries used the time that they had before facing with the COVID-19 efficiently to get ready for the crisis? To be honest in answering this question, we have to admit that we are not successful in preparing our health systems and healthcare organizations. For instance, we have to remember that there were exactly 101 days (more than three months) time to get Turkey and healthcare organizations ready for COVID-19. In this time interval, a lot of things could have been done successfully, especially at the healthcare facility level. But, we could not. This is the case also for many countries, and some countries are still in big trouble.

Another question ‘did we have enough evidence on COVID-19 is a real pandemic and having serious damages on healthcare organizations?’ The answer of this question should be found in scientific journals or the media of countries experiencing COVID-19. In our context these countries are China and Italy. Especially China. China started sharing its experiences with COVID-19 on January 2020 just after one month and the first officially reported COVID case. The shared information suggests healthcare organizations need personal protection equipment use and there might be shortage in providing enough and comfortable personal protection equipment for healthcare providers. The shared information also suggested COVID pandemic might cause the mortalities among healthcare

professionals (Zhan et al. 2020; Fan et al. 2020). So, an experienced and talented healthcare manager should have taken lessons from China's experience.

Another question is 'do we have evidence on successful strategies?' The answer of this question can be found in the numbers reported by international organizations such as WHO. But the numbers say China is the single successful country in preventing COVID-19 and getting back to normal compared to many countries in the world. China managed to control its cases under 100.000, there are only 4,636 deaths. However, there are many countries including Turkey having heavy burden of COVID-19 and its new variants as cases and deaths. It is better to look at what China is doing.

There are many macro level measures to lessen the negative effects of pandemics in Turkey. Building corona virus scientific board, putting thermal cameras at airports, border controls and bans to public transportations are some of these measures. There have been also some health facility measures such as creating new ICUs, transforming in-patient clinical services to ICUs, training courses provided to healthcare professionals, etc. However, lack of personal protection equipment, inappropriate use of personal protection equipment, long working hours, inappropriate working conditions, and working with inexperienced young healthcare professionals are among the severely witnessed problems at the healthcare facility level.

At this point it is necessary to ask another important question: 'are we able to prepare our healthcare providers and professionals to pandemics?'. When we look at the media, we can say that we are not successful. However, this is true not only for Turkey, but also for some other countries, even very rich countries. What especially nurses and physicians did in response to the problems they witnessed, they have never given up to bring the problems on the agenda including national and local media. They established close network and collaboration with their peers at the field, and they are more eager to receive evidence on the effect of the pandemic. They issued many reports explaining their problems, they developed their own solutions and forced the Ministry of Health to take necessary measures. There are some examples of problems witnessed by especially nurses and physicians. There is also evidence on the measures taken by nurses and physicians.

Another question is 'are healthcare managers successful at managing COVID-19 crisis?', and the answer of this question is important from the perspective of healthcare management discipline. In answering this question, to be honest, there is no clear and adequate evidence on the measures taken by healthcare managers at the facility level. Of course, there are some publications, but they are mainly on the effects of COVID among health care providers or the public. Healthcare managers do not have a right to complain, they have a responsibility to develop solutions to ease the problem. But, it is also necessary to share the problems and look for more evidence and support from the overall healthcare environment to develop more appropriate and sensitive solutions for the problems witnessed in the crisis period. It is unfortunate to observe that healthcare managers and their professional associations do not share their experiences, and they do not provide reports on problems and likely solutions.

In dealing with the emerging crisis in the future, it is needed to

- share evidence and experience,
- build close and effective partnership with our stakeholders, and
- use media effectively.

Beside these, it is needed to use the thoughts of management approaches effectively in dealing with daily problems caused by COVID-19. As recommended by Shortell and Kaluzny, health human resources and healthcare organizations should be seen as brains, playing fields and holograms in practicing better health services management (Shortell&Kaluzny, 2000). Health services organizations and their employees should be seen as brains. The importance of learning, intelligence and information processing are the key concepts that we need to give more emphasis in coming years.

Health services organizations should be organized like a playing ground. Health care professionals including physicians, nurses, managers, even care givers have a highly developed sense of professionalism and professional identity. We appreciate them for their services during the early stages of Covid-19, and they have acted like super heroes. We should never allow one culture that emphasizes its beliefs and values relatives to others in competing for limited resources. The COVID indicated that all health care professionals are important in combating especially new and unpredictable crisis. In this process, we learned that nurses are essential providers of patient care, and they might be more important than treatments mainly provided by physicians. We learned that mask might be more important than MR machines.

We need to manage healthcare organizations like a hologram. A hologram is an object in which each of the parts contains the entire essence of the overall object or image. As a result, the overall object or system can continue to function even when a specific part malfunctions or removed. This metaphor indicates that we should train our employees to gain them an ability of carrying out multiple tasks. In the early stages of COVID the most limited resource was experienced nurses in providing care to patients. So, physicians, nurses, and other health care professionals should be ready for sharing their powers to be a strong one power to combat the risks of the future. We need to design our health care facilities physically in more flexible way. At the beginning of the COVID we needed more ICUs and we used some inpatient clinics like ICUs. It is unreasonable to build all in-patient clinics like an ICU, but it is also important to transform them as new health care providing areas in a short time when we need them to use for different purposes.

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P-77 Covid-19 Pandemic and Domestic Violence

Lambrini KOURKOUTA

Abstract

Introduction: Domestic violence is violence or other type of abuse in a domestic setting, such as in marriage or cohabitation.

Aim: The current review study presents the negative effects of the COVID - 19 pandemic such in domestic violence.

Methodology: The study's material consists of articles related to the topic, found in Greek and International databases, the Google Scholar, and the Hellenic Academic Libraries (HEAL-Link).

Results: The Covid-19 pandemic brings negative consequences, including physical and psychological health risks, isolation and loneliness. Through all of that, children and their mothers are particularly vulnerable to the risk of domestic violence. Work needs to be done to ensure that people who experience abuse can continue to obtain access to support, refuge, and medical care.

Conclusions: As such, the Covid-19 pandemic has put a spotlight on numerous ongoing public health crises, including violence within the home.

Keywords: Covid - 19, pandemic, domestic violence.

Introduction

Domestic violence (also named domestic abuse or family violence) is violence, or other type of abuse, in a domestic setting such as in marriage or cohabitation. In its broadest sense, domestic violence also involves violence against children, teenagers, parents, or the elderly. It takes multiple forms, including physical, verbal, emotional, economic, religious, reproductive, and sexual abuse (Shipway, 2004).

In 1993, the United Nations Declaration defined domestic violence (DV) as: "Physical, sexual and psychological violence occurring in the family, including battering, sexual abuse of female children in the household, dowry-related violence, marital rape, female genital mutilation and other traditional practices harmful to women, non-spousal violence and violence related to exploitation." (United Nations, 2013). On the other side, a pandemic is an epidemic occurring on a scale that crosses international boundaries, usually affecting people on a worldwide scale (Porta, 2008). A disease or condition is not a pandemic merely because it is widespread or kills many people; it must also be infectious. For instance, cancer is responsible for many deaths but is not considered a pandemic because the disease is not contagious (i.e. easily transmittable) and not even simply infectious (Dumar, 2009).

As it is known, COVID-19, (the new strain of coronavirus) has been declared a global pandemic. The COVID-19 pandemic caused by the acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has caused significant destruction worldwide (Centers for Disease Control and Prevention U.S., 2020). However, there are also many negative consequences. The virus brings with it multiple new stresses, including physical and psychological health risks, isolation and loneliness. Through all of that, children and their mothers are particularly vulnerable to the risk of domestic violence (Bradbury-Jones, Isham, 2020). One (1) in four (4) women and one in ten (10) men experience domestic violence (DV), and violence can take various forms: it can be physical, emotional, sexual, or psychological (Herrington, et al., 2021). DV usually occurs in a domestic space when one individual holds power over another. It refers to a range of violations that happen within a domestic space (Jackson, et al., 2020).

The purpose of this present study is to present the negative effects of the COVID - 19 pandemic in domestic violence. The study consists of a review of Greek and international bibliography. The study's material consists of articles related to the topic found in Greek and international databases such as Google Scholar, the Hellenic Academic Libraries Association (HEAL-Link), and with the use of keywords such as school, education, students, active involvement, and activities taking place at school. The exclusion criteria for the articles was the language, except for Greek and English. For the most part, only articles and studies accessible to the author were used.

Talking About Covid - 19 Pandemic and Domestic Violence

Stay-at-home orders may cause a catastrophic milieu for individuals whose lives are plagued by domestic violence (Huecker, Smock, 2020). Closures of schools and childcare facilities have added to the stress at home. Virtual learning often requires the involvement and supervision of parents and guardians. Some families do not have access to a reliable Internet connection, and childcare obligations may fall to friends, neighbors, or family members while parents work or attempt to find work. Some parents are considered essential workers and cannot work from home, and others are required to work virtually. The added stress of balancing work, childcare, and children's education has led to a rise in child abuse (Di Giovanni, et al, 2021).

Domestic violence rates are rising, and they are rising fast. An article published in the Guardian (2020) reported on how the surge of domestic violence cases is a pattern being repeated globally. Reporting from several different countries, the article highlighted alarming figures, for example a rise of 40% or 50% in Brazil (BBC, 2020). Local government and non-governmental organizations responded to pandemic related increases by launching hotlines and online resources (Valesca, 2020). According to the United Nations entity UN Women, DV reports in France have increased by 30%. DV calls in Argentina have increased by 25%. The organization also reports a 30% increase in helpline calls in Cyprus and 33% increase in Singapore (Boserup, et al, 2020).

In the UK, calls to the UK Domestic Violence Helpline increased by 25% in the seven days following the announcement of tighter social distancing and lockdown measures by the government. In Spain, the government claimed that calls to its helpline had risen by 20%. In south Asia, calls to the national helpline in Nepal doubled between April and June 2020 compared with the previous year (Sharma, 2020).

Experience in New Zealand has shown that family violence can escalate during and after large-scale disasters or crises (NZFVC, 2020). Statistics from Greece show that domestic violence in Greece has increased by 16.5% (Tolidou, 2020). Not to mention, their husbands throughout 2020, and nine throughout 2021 killed twelve women so far, and the last one of them was actually killed yesterday.

Data from US police departments provides some insight into the effect COVID-19 has had on DV in some regions. For instance, the Portland Police Bureau recorded a 22% increase in arrests related to DV (Portland Police Bureau, 2020). The San Antonio Police Department subsequently noted they received an 18% increase in calls pertaining to family violence in March 2020 compared to March 2019 (Department of Government and Public Affairs, 2020). In Jefferson County Alabama, the Sheriff's Office reported a 27% increase in DV calls during March 2020 compared to March 2019 (Money, 2020). In New York City, during the month of March 2020, the New York City Police Department responded to a 10% increase in DV reports compared to March 2019 (New York City Police Department, 2020).

Domestic violence (DV) cannot be addressed without also addressing social factors, especially in the context of a pandemic that is causing substantial isolation (Megan, et al, 2020).

Although these measures can be effective to control the spread of disease, they have a profound impact on society leading to social, financial and psychological repercussions. Isolation may expose or worsen vulnerabilities due to a lack of established social support systems. The temporary shutdown of non-essential businesses has led to unemployed and economic strain (U.S. Bureau of Labor Statistics, 2020). Quarantine conditions are associated with alcohol abuse, depression, and post-traumatic stress symptoms (Brooks, et al, 2020).

Stay-at-home orders, intended to protect the public and prevent widespread infection, left many IPV victims trapped with their abusers. It seems that home is not always a safe place to live; in fact, for adults and children living in situations of domestic and familial violence, home is often the space where physical, psychological and sexual abuse occurs (Megan, et al, 2020).

In the COVID-19 crisis, the exhortation to "stay at home" therefore has major implications for those already living with someone who is abusive or controlling. Stringent restrictions on movement shut off avenues of escape, help-seeking and ways of coping for victim-survivors. Unintentionally, lockdown measures may therefore grant people who abuse greater freedom to act without scrutiny or

consequences. During the COVID-19 crisis, it is therefore important to think critically about idealized representations of home and family and to make it possible for people to talk about, and if possible, take action to counter abusive and controlling family life. Asking people directly, on repeated occasions, about whether they consistently feel safe at home is one way of doing this (Bradbury-Jones, Isham, 2020).

Governments, moreover, should provide safe spaces for disclosure in healthcare settings, or to invest in advocacy and support services that are fully integrated with healthcare. Social media should also be leveraged while stay-at-home orders are in place to reach a wider audience and provide support. Overall, it is vital that health care providers do not lose sight of the increased potential for violence while fighting this global pandemic since they may be the first point of contact for survivors (Boserup, et al, 2020).

Conclusions

This cursory analysis illustrates that stay-at-home orders may create a worst-case scenario for individuals suffering from DV and demonstrates a need for further research. With the apparent rise in DV reports, there is a need for more current and standardized modalities of reporting actionable DV data (Boserup, et al, 2020).

The Covid-19 pandemic has put a spotlight on numerous ongoing public health crises, including violence within the home. As state mandates relax and people begin to live a new version of normal, clinicians, public health officials, and policymakers cannot stop addressing the layers of social inequities in our communities and the ways in which they affect people's access to care. The pandemic has highlighted how much work needs to be done to ensure that people who experience abuse can continue to obtain access to support, refuge, and medical care when another public health disaster hits. (Megan, et al, 2020)

After the pandemic, we must target resources on improving the healthcare response by building on the increased visibility of this kind of abuse, our improved understanding of its association with other inequalities, and the likelihood that healthcare in many countries will continue to use a blend of remote and face-to-face consultations.

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P-78 The Effect of Child-Centered Play Therapy on Anxiety

Neşe CINGISIZ KINACILAR

Abstract

8 year old boy. In this study; The experiences of the play therapy process with a family and their child who applied with the problems of nail biting, bedwetting, anxiety and losing their parents will be shared. This process, which started with the family's search for a solution to end the psychiatric drug that the child has been using for 1 year; It took 9 sessions. In the process of using child-centered play therapy, parent counseling was also provided to the family. In addition, a comprehensive and holistic study was carried out in contact with the psychiatrist the child was attending. A story of a child with high levels of separation anxiety and difficulties with the separation process.

Keywords: Anxiety; child; child-centered play therapy; play.

Introduction

Children are an important and indispensable part of society (Dodson, 2000). Children grow up with constant development and change from the moment they are born. In addition to the physical health of children, their mental health is also important. Mental health; the person is in a constant balance and harmony with himself and his environment (Yörükoğlu, 2002). After love, play is the most important nutrient for a child's physical and mental healthy development and education (Ellialtıoğlu, 2005).

According to Ellialtıoğlu (2005); The game helps in solving the child's mental problems. The child's emotions, behaviors, wishes, thoughts are most clearly revealed while playing.

Since play is the child's most natural means of expressing himself, the child has the opportunity to express his accumulated emotions such as tension, frustration, insecurity, aggression, fear, confusion and confusion through play. These feelings are revealed by the child's export through play; the child confronts them, learns to control them and moves away from them. When emotional relief is achieved, the child begins to feel the strength needed to be himself, to think for himself, to mature psychologically, and thus to realize himself. This is achieved through play therapy for the child. (Axline, 2019).

Play Therapy; It is the treatment and improvement of mental problems and behavioral problems in children through games and toys by an expert trained in this field (Sniscak Sywulak, Vanfleet, 2020). Play Therapy; It is a process-oriented intervention approach. Because; has significant benefits for different types of existing problems (Ray, 2020). Play therapy is often effective in dealing with anxiety, as it allows children to express their feelings in their own unique ways and gain competence in coping with their fears.

Anxiety disorder is a psychiatric disorder seen in 9% to 32% of childhood. (Essau and Gabbidon, 2013). Anxiety disorder is associated with significant impairments in many areas such as developmental, cognitive, emotional, social and academic achievement. (Essau and Gabbidon, 2013).

Aim

This study aims to measure the effectiveness of child-centered play therapy in the treatment of anxiety and anxiety problems in children.

Method

Child Centered Play Therapy sessions. It is also an evaluation study. The effectiveness of Child-Centered Play Therapy was audited in the study. Within the scope of the study, Child Centered Play Therapy was applied to the child who had anxiety and anxiety problems and applied to the clinic, with the consent of the parents. 9 sessions were practiced once a week. Before starting the sessions, they stopped using the psychiatric drug in a controlled way by meeting with the psychiatrist who continued

the psychiatric treatment of the child. It was important to see if the symptoms would emerge and improve with play therapy.

The children participated in the sessions very willingly.

In the sessions; experienced a lot of confusion. Tried to build trust. The anxiety in him came out through toys and play. Worked the theme of anxiety and the need for approval. He studied the theme of relationship, the desire to be free appeared. He studied the feeling of inadequacy he felt because of the speech problem he had. He's done a lot of work to be good enough. In the last two sessions, he studied the themes of relaxation and stress relief.

In this process, by meeting with parents every 3 weeks; parent counseling was provided. Information about the child's normal life behaviors was obtained from the family.

Case

The importance of family support in the process of Child-Centered Play Therapy cannot be denied in terms of the efficiency of the therapy. As a result of parental counseling to the family, positive parental attitudes of the parents provided faster results from the therapy.

Conclusion

Nail biting and bed-wetting behavior is over. He stopped using psychiatric medication for 1 year. Intense anxiety about separation from parents decreased. She started to stay at school until the time of departure and she was able to control her anxiety in this process. Follow-up work continues. It has been 26 months since the treatment and no adverse events were observed.

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P-79 The Review of Psychotherapist Role and Psychotherapy Processes in the Context of Psychological Support and Psychology Ethics in TV Series

Ezel AVCI, Yaren ŞAHİN

Abstract

Aim: In this study, it was aimed to examine the psychotherapist role and the effects of psychotherapies on the intention and attitude to receive psychological help, psychotherapy and professional ethics, in recent TV series and especially in the “Kırmızı Oda, Masumlar Apartmanı, Bir Başkadır”.

Method; Sociodemographic Information Form, Intention to Get Psychological Help Inventory, Attitude Scale towards Seeking Psychological Help-Short Form, Opinions Scale about Psychotherapy, data filled by 254 participated in the research were analysed with SPSS 21 program. A questionnaire was applied to measure the beliefs of the participants who watched the series that psychotherapy would work for their own problems, and the psychotherapists' opinions about privacy, respect for human rights, honesty and competence attitudes.

Results: There is a significant difference between the series presented and the intention to seek psychological help. Items other than "belief that psychotherapy will work" were found to be related to the TV series. There is a significant difference between the watched TV series vs gender and education level. There is a significant difference between the attitude towards getting psychological help, the intention to get psychological help, and the items other than "competence" and gender. A significant difference was found between the attitudes towards receiving psychological help, thoughts about psychotherapy and the items other than "respect for human rights", "competence" and education level.

Conclusion; When examining the relationship of the preferred series with our attitudes, intentions, thoughts about psychotherapy and their effects on them, gender and education factors stand out. Women and primary school graduates got the highest scores in the relationships between gender and education status, which were significant in the study. In order to discuss the way the psychotherapist role and psychotherapy is handled and its effect in the series, it is necessary to examine these factors as well as other important findings that do not show a significant difference in the study.

Keywords: Ethics; getting psychological help; psychology; psychotherapy; thoughts on psychotherapy

Introduction

In recent TV series and series on digital platforms, a remarkable situation is that the audience will hear more psychological words whispered in their ears and recognition increased (Arcan, 2018). So the monitoring of the series, which includes psychotherapy and the role of psychotherapist, makes it a question of how individuals have an opinion on the ethical attitudes of psychotherapy and psychotherapists, how their intentions and attitudes toward psychological support are affected by these ideas.

In a study of how media affects ideas about mental health professionals and institutions, when asked where they get information about psychologists and psychology, they were printed out by studying real psychologists on TV and watching actors in movies, in series as psychologists (Dalda 2007, provided by; Yazar, 2007). The Media Psychology and Technology Association (MPTB; Media Psychology and Technology Association) also draws attention to the effective, ethical use of media to promote correct, appropriate psychology and to educate people to explain the work of psychologists to those who are not from this field (Arcan, 2018).

Since the viewers can show the effects of information acquisition, expectation and thought creation, they can also influence the perspective of mental health professionals and the tendency to apply (Özgü

& Topaç, 2017). In a study that examines the impact of cinema in the formation of psychologists and psychology-related attitudes using the film " One Flew Over the Cuckoo's Nest " it was observed that the negative attitudes associated with the screening of the film did not change even if a documentary was seen with the correct information (Domino, 1983). Individuals may have prejudiced, negative thoughts and fears of being inadequate in problem resolution in the field of mental health, and may have the behavior of receiving assistance from an expert as a last resort (Vergili, 2017).

The barriers to the desired occurrence of the assistance process have identified the problem as factors of inadequate identification and evaluation, psychological relations, demographic factors, social support and services provided (Rothi and Leavey, 2006). Psychological relationships include disgraceful feelings about professional support, fear of getting treatment, insecurity about the treatment process. The fears of rejection associated with the attitude of seeking help, interpersonal openness, belief in the psychological advisor can be associated with the behavior of individuals to open themselves (Vergili, 2017). Cullari (2001)'s reaction as one of the important expectations of consultants\the chance to talk to someone without fear of criticism and the competency, which is the most important expectation of consultants identified by Pope and Vasquez (2007), is closely related to the ethical values that are focused on in this study (provided by; Çetinkaya Yıldız, 2019).

Ethical regulations include protecting the dignity, value and sensitivity of psychologists, profession and psychology science as well as providing the best benefit from the harm that can occur (Korkut, 2014). Therefore, sequences can be informative, non-instructional structures and individuals motivations for monitoring can be informative, entertaining, etc. the ability to diversify reveals the desire to properly inform psychology and mental health workers, to prevent any adverse behavior that may develop.

Gender and educational level variables have been defined among the factors associated with psychological assistance search behavior in the literature (Şimşek, 2016). In this study, the ability to explain the impact of the following in relation to demographic features such as gender, age, education, socioeconomic status will provide a more viable roadmap of solutions to be developed, or what needs to be taken in action.

Method

1.1. Population and sample

The study included 178 women and 76 men living in different cities in Turkey, and 254 people. The average age of the sample is 33,01.

2.2.Data Collection Tools

2.2.1.Sociodemographic Information Form: This form provides the knowledge of the participants about gender, age, current province, education status, socioeconomic status and the followed series.

2.2.2. Inventory of Intention to Seek Psychological Help: The Inventory of Intention to Seek Psychological Help was created by Topkaya (2011) in line with possible issues and problems that adults may experience and may seek psychological assistance. It consists of 12 items answered in the 4 Lycert type. Relational problems, traumatic problems, sensory and behavioral problems are comprised of sub-dimensions.

2.2.3. Attitudes Toward Seeking Psychological Professional Help Scale - Short Form: The attitude Scale for psychological Assistance - Short Form was developed by Fischer and Farina (1995). The 29-point original scale (Attitudes Toward Seeking Psychological Professional Help Scale, Fischer & Turner, 1970) is shortened. The short form consists of ten items. The conversion and validity of the scale to Turkish was carried out by Topkaya (2011). The scale is answered in the 4 type of Likert.

2.2.4.Thought Scale about Psychotherapy: The Prominution Scale on Psychotherapy has been developed by Kushner & Sher, (1989) to measure the fears that individuals experience in getting psychological help. The scale consists of three sub-dimensions and 19 substances in the form of the therapist's response, image problem, difficulty. The articles (1) are answered in the 5-type Likert that I

am not concerned about and (5) very concerned about. The conversion and validity of the scale to Turkish was carried out by Topkaya (2011).

2.2.5. Psychotherapy Overview Questionnaire: After the series has been followed, participants have been asked to answer a 5 question questionnaire about their opinions on ethical values such as confidentiality, respect for human rights, honesty, competence, and understanding of psychotherapy and psychotherapy and psychotherapy, which will be useful in their own problems to measure ideas of ethical attitudes of psychologists.

2.3. Collect Data and Analyze

The data was collected through the delivery of form, scales and survey from virtual to voluntary participants due to the process of the Coronavirus pandemic, and data entries were performed in the SPSS 21 program and analyzed.

Results

This chapter provides the statistical analysis results applied to the data collected for the purpose of the research. Table of participants in the example of the study 1. Table 2. And Table 3 contains the frequency and percentage values for the demographic information and the sequence they are monitoring.

Table 1: Participants' Demographic Information Trigger Statistics

	<i>N</i>	<i>Avg.</i>	<i>Sd</i>	<i>Min</i>	<i>Max</i>
<i>Age</i>	254	33,01	11,91	18	68

Table 2: Participants' Demographic Information Frequency

	<i>Frequency</i>	<i>Percent (%)</i>
Gender		
<i>Woman</i>	178	70,1
<i>Male</i>	76	29,9
Total	254	100,0
Age		
<i>18 -25 years old</i>	96	37,8
<i>25-35 years old</i>	68	26,8
<i>35-45 years old</i>	43	16,9
<i>45-55 years old</i>	33	13,0
<i>Over 55 years old</i>	14	5,5
Total	254	100,0

Place of Residence		
<i>Adana</i>	4	1,6
<i>Adiyaman</i>	18	7,1
<i>Gaziantep</i>	140	55,1
<i>Hatay</i>	12	4,7
<i>İstanbul</i>	29	11,4
<i>İzmir</i>	8	3,1
<i>Kahramanmaraş</i>	12	4,7
<i>Mersin</i>	8	3,1
<i>Other</i>	23	5,2
Total	254	100,0
Education Status		
<i>Primary school</i>	4	1,6
<i>Middle school</i>	7	2,8
<i>High school</i>	37	14,6
<i>University</i>	165	65,0
<i>Master's and above</i>	41	16,1
Total	254	100,0
Socioeconomic Status		
<i>Low</i>	6	2,4
<i>Middle</i>	214	84,3
<i>High</i>	34	13,4
Total	254	100,0

Table 3: Frequency Table of the Series Participants Follow

Followed Series	Frequency	Percent(%)
<i>Masumlar Apartmanı</i>	33	13,0

<i>Kırmızı Oda</i>	59	23,2
<i>Bir Başkadır</i>	33	13,0
<i>None</i>	85	33,5
<i>Other</i>	44	17,3
Total	254	100,0

Table 4: Relationship Between the Offered Series and Gender

Gender		Series				TOTAL
		<i>Masumlar Apartmanı</i>	<i>Kırmızı Oda</i>	<i>Bir Başkadır</i>	<i>Other</i>	
<i>Woman</i>	Frequency	28	54	18	35	178
	Percent (%)	20,7	40,0	13,3	25,9	100,0
<i>Male</i>	Frequency	5	5	15	9	76
	Percent (%)	14,7	14,7	44,1	26,5	100,0
Total		33	59	33	44	169
$\chi^2 = 18,668$				s.d = 3 , p = 0.000		

67% of respondents in the sample said they were following the series presented, while 33% said they were not following. Pearson Ki-Kare was tested to determine whether the sequence they followed differs from the gender. It is observed that the sequence followed by the participants was significantly different from the gender ($\chi^2=18,668$; $p<0.05$). According to this, 40% of the female audience prefers to watch the “Kırmızı Oda” series, while 44% of the male audience prefers to watch “Bir Başkadır” series from the shows presented.

Table 5: Relationship Between the Offered Series and Training Status

Education Status		Series				TOTAL
		<i>Masumlar Apartmanı</i>	<i>Kırmızı Oda</i>	<i>Bir Başkadır</i>	<i>Other</i>	
<i>Primary school</i>	Frequency	0	2	0	0	2
	Percent(%)	0,0	100,0	0,0	0,0	100,0
<i>Middle school</i>	Frequency	1	4	0	0	5

	Percent(%)	20,0	80,0	0,0	0,0	100,0
<i>High school</i>	Frequency	2	8	6	9	25
	Percent(%)	8,0	32,0	24,0	36,0	100,0
<i>University</i>	Frequency	22	41	16	29	108
	Percent(%)	20,4	38,0	14,8	26,9	100,0
<i>Master's and above</i>	Frequency	8	4	11	6	29
	Percent(%)	27,6	13,8	37,9	20,7	100,0
Total		33	59	33	44	169
$\chi^2 = 23,492$				s.d = 12 , p = 0.024		

It is observed that the series followed by participants differ significantly in relation to the level of training ($\chi^2=23,492$; $p<0.05$). According to this, 100% of the participants who follow the shows presented are those who are graduates of primary school, 80% of the people who are graduates of middle school, 36% of the high school graduates are watching the “Kırmızı Oda” series, 38% of the college graduates are watching the “Kırmızı Oda” series, and 38% of the graduate students are watching “Bir Başkadır” series.

Table 6: Normality Tests of Scales

	<i>Statistics</i>	<i>Sd</i>	<i>P</i>
<i>Series</i>	,948	167	,000*
<i>Attitudes Toward Seeking Psychological Professional Help</i>	,920	254	,000*
<i>Intention to Seek Psychological Help</i>	,936	254	,000*
<i>Thoughts of Psychotherapy</i>	,962	254	,000*

* $p<0,05$

According to the results of the normality test for scale scores, nonparametric statistical methods were used in comparison analysis due to the lack of normal dispersion of Inventory of Intention to Seek Psychological Help, Attitudes Toward Seeking Psychological Professional Help Scale and Thought Scale about Psychotherapy.

Table 7: Comparing Offered Series to Scales

	Series	n	Avg.	H	P
<i>Series</i>	<i>Masumlar Apt</i>	33	71,38	11,744	,008*

	<i>Kırmızı Oda</i>	59	97,66		
	<i>Bir Başkadır</i>	33	66,39		
	<i>Other</i>	44	82,99		
<i>Attitudes Toward Seeking Psychological Professional Help</i>	<i>Masumlar Apt</i>	33	96,64		
	<i>Kırmızı Oda</i>	59	85,24	6,185	,103
	<i>Bir Başkadır</i>	33	67,98		
	<i>Other</i>	44	88,72		
<i>Intention to Seek Psychological Help</i>	<i>Masumlar Apt</i>	33	80,00		
	<i>Kırmızı Oda</i>	59	96,79	8,470	,037*
	<i>Bir Başkadır</i>	33	66,74		
	<i>Other</i>	44	86,64		
<i>Thoughts of Psychotherapy</i>	<i>Masumlar Apt</i>	33	73,50		
	<i>Kırmızı Oda</i>	59	93,70	4,270	,234
	<i>Bir Başkadır</i>	33	78,80		
	<i>Other</i>	44	86,60		

*p<0,05

The Kruskal Wallis test has been performed to investigate the relationship of the scales and the monitoring status of the offered series. According to this, the sequence averages of the series show that the “Kırmızı Oda” series is at the highest score, the “Bir Başkadır” series is at the lowest score. There is a statistically significant difference between the series presented and the Intention to Seek Psychological Help. The sequence averages of the series show that the “Kırmızı Oda” series is at the highest score, with one set of other at the lowest score. There is no statistically significant difference between the presented series and the Attitudes Towards Seeking Psychological Help and Thoughts About Psychotherapy Scale ($p>0,05$).

Table 8: Comparison of Offered Arrays and Psychotherapy

	Series	n	Rank avg.	H	P
<i>After watching the series, my belief increased that psychotherapy would work for my own problems.</i>	<i>Masumlar Apt</i>	33	74,56		
	<i>Kırmızı Oda</i>	59	94,78	7,125	,068
	<i>Bir Başkadır</i>	33	72,52		
	<i>Other</i>	42	81,56		

	<i>Masumlar Apt</i>	33	78,71		
<i>After watching the series, my belief increased that psychologists would keep what I told secret.</i>	<i>Kırmızı Oda</i>	59	97,44	11,772	,008*
	<i>Bir Başkadır</i>	33	63,89		
	<i>Other</i>	42	85,07		
	<i>Masumlar Apt</i>	33	73,14		
<i>After watching the series, my belief increased that psychologists respect human rights.</i>	<i>Kırmızı Oda</i>	59	95,90	13,384	,004*
	<i>Bir Başkadır</i>	33	63,82		
	<i>Other</i>	42	91,68		
	<i>Masumlar Apt</i>	33	72,23		
<i>After watching the series, my thoughts on the honesty of psychologists were reinforced.</i>	<i>Kırmızı Oda</i>	59	96,91	10,237	,017*
	<i>Bir Başkadır</i>	33	69,86		
	<i>Other</i>	42	82,57		
	<i>Masumlar Apt</i>	33	69,21		
<i>After watching the series, my opinion that psychologists are competent in their work was reinforced.</i>	<i>Kırmızı Oda</i>	59	95,79	8,933	,030*
	<i>Bir Başkadır</i>	33	75,30		
	<i>Other</i>	42	84,19		

*p<0,05

The Kruskal Wallis test has been performed to check whether the views of the participants following the series presented differ from the sequence being monitored. After watching the show, there is a significant difference in the articles of psychologists that have reinforced their thoughts on privacy, respect for human rights, honesty, competence in their work. This means that the delegates ranking averages show the highest scores of the following participants in the “Kırmızı Oda” series. “After watching the show, I have increased my confidence that psychotherapy will work in my own problems.” there is no statistically significant difference between the rating of the statement ($p>0,05$).

Table 9: Relationship Between Gender and Scales

	Gender	n	Rank avg.	U	Z	P
Series	Woman	131	89,38	1653,5	-2,769	,006*
	Male	36	64,43			
Attitudes Toward Seeking	Woman	178	134,39	5537,5	-2,299	,022*

<i>Psychological Help</i>	<i>Professional</i>	<i>Male</i>	76	111,36			
<i>Intention to Psychological Help</i>	<i>Seek</i>	<i>Woman</i>	178	143,04	3997,0	-5,177	,000*
		<i>Male</i>	76	91,09			
<i>Thoughts of Psychotherapy</i>		<i>Woman</i>	178	123,89	6121,5	-1,199	,231
		<i>Male</i>	76	135,95			

*p<0,05

The Mann-Whitney U test has been performed to investigate whether the scales differ according to the gender of the participants. There is a statistically significant difference between gender and string score at 95% confidence level. This means that women have higher rank averages. There is a statistically significant difference at the 95% confidence level between the Attitude Towards Seeking Help and Intention to Seek Psychological Help score and gender. The average of women is higher than men, given their rank average. There is no statistically significant difference between the 95% confidence level and the gender rating of the Thoughts Scale on Psychotherapy (p>0,05).

Table 10: Comparison of Gender and the Look of Psychotherapy After the Series is Followed

	Gender	n	Rank avg.	U	Z	P
<i>After watching the series, my belief increased that psychotherapy would work for my own problems.</i>	<i>Woman</i>	131	87,24	1671,5	-2,402	,016*
	<i>Male</i>	34	66,66			
<i>After watching the series, my belief increased that psychologists would keep what I told secret.</i>	<i>Woman</i>	131	87,88	1744,5	-2,155	,031*
	<i>Male</i>	34	68,81			
<i>After watching the series, my belief increased that psychologists respect human rights.</i>	<i>Woman</i>	131	88,38	1678,5	-2,440	,015*
	<i>Male</i>	34	66,87			
<i>After watching the series, my thoughts on the honesty of psychologists were reinforced.</i>	<i>Woman</i>	131	88,01	1570,5	-2,807	,005*
	<i>Male</i>	34	63,69			
<i>After watching the series, my opinion that psychologists are competent in their work was reinforced.</i>	<i>Woman</i>	131	86,58	1838,0	-1,752	,080
	<i>Male</i>	34	71,56			

*p<0,05

The Mann-Whitney U test was performed to investigate whether the views of the participants in the series presented differ from the gender of the participants. After watching the show with gender at 95% confidence level, psychotherapy has a meaningful relationship between the belief that it will work in its own problems, the confidentiality of psychologists, respect for human rights, respect for honesty. The average of women is higher than men, given their rank average. "after watching the show, my opinion was that psychologists were competent in their work." There is no statistically

significant difference between the rating of her statement and gender at 95% confidence level ($p>0,05$).

Table 11: Relationship of Training Status with Scales

	Education Status	n	Rank avg.	H	P
<i>Series</i>	<i>Primary school</i>	2	139,00		
	<i>Middle school</i>	5	74,20		
	<i>High school</i>	24	79,40	9,879	,043*
	<i>University</i>	108	89,91		
	<i>Master's and above</i>	28	63,34		
<i>Attitudes Toward Seeking Psychological Professional Help</i>	<i>Primary school</i>	4	217,63		
	<i>Middle school</i>	7	165,86		
	<i>High school</i>	37	137,97	12,883	,012*
	<i>University</i>	165	118,04		
	<i>Master's and above</i>	41	140,79		
<i>Intention to Seek Psychological Help</i>	<i>Primary school</i>	4	86,63		
	<i>Middle school</i>	7	116,50		
	<i>High school</i>	37	121,58	4,941	,293
	<i>University</i>	165	125,25		
	<i>Master's and above</i>	41	147,77		
<i>Thoughts of Psychotherapy</i>	<i>Primary school</i>	4	215,75		
	<i>Middle school</i>	7	69,07		
	<i>High school</i>	37	126,03	10,469	,033*
	<i>University</i>	165	129,28		
	<i>Master's and above</i>	41	123,02		

* $p<0,05$

The Kruskal Wallis test has been performed to investigate whether the scales differ according to the training conditions of the participants. There is a statistically significant difference between the training status and the sequence score. Accordingly, it is seen that the sequence averages of the participants following the series presented are the lowest scores for those who have a primary school degree and those who have a master's degree and higher education level. There is a statistically significant difference between the training status and the Attitudes Toward Seeking Psychological

Professional Help score. According to this, it is seen that the average of the participants in the sequence is the highest of the primary school graduates and the lowest of the university graduates. There is a statistically significant difference between the educational status and the score of the Thoughts About Psychotherapy Scale. According to this, the average of the participants in the sequence is that those with primary school graduates have the highest score and those with middle school graduates have the lowest score. There is no statistically significant difference between educational status and Intention to Seek Psychological Help score ($p>0,05$).

Table 12: Compare Training Status and Look at Psychotherapy After Knees are Monitor

	Education Status	n	Rank avg.	H	P
After watching the series, my belief increased that psychotherapy would work for my own problems.	Primary school	2	131,50	10,386	,034*
	Middle school	5	43,50		
	High school	24	87,22		
	University	107	86,97		
	Master's and above	29	68,62		
After watching the series, my belief increased that psychologists would keep what I told secret.	Primary school	2	136,25	11,657	,020*
	Middle school	5	95,50		
	High school	24	72,85		
	University	107	90,34		
	Master's and above	29	64,24		
After watching the series, my belief increased that psychologists respect human rights.	Primary school	2	129,75	9,067	,059
	Middle school	5	87,10		
	High school	24	75,79		
	University	107	89,79		
	Master's and above	29	68,76		
After watching the series, my thoughts on the honesty of psychologists were reinforced.	Primary school	2	133,00	9,575	,048*
	Middle school	5	98,30		
	High school	24	88,26		
	University	107	85,61		
	Master's and above	29	62,41		
After watching the	Primary school	2	127,75	8,669	,070

<i>series, my opinion that psychologists are competent in their work was reinforced.</i>	<i>Middle school</i>	5	71,50
	<i>High school</i>	24	93,15
	<i>University</i>	107	86,12
	<i>Master's and above</i>	29	65,21

*p<0,05

The Kruskal Wallis test was performed to investigate whether the views of the participants in the series presented differ from the course status. There is a statistically significant difference between the educational situation and the belief that psychotherapy will work in their own problems after watching the show, and the substance that relates to the thoughts of psychologists about their privacy, their honesty. The average of the sequence is seen to have the highest grade for those who have a primary school degree. After following the series, there is no statistically significant difference between the substances related to psychologists respect for human rights and their competencies and the status of education at 95% confidence (p>0,05).

Table 13: Sequence Monitoring Status Comparison with Scales

	Watching Series	n	Rank avg.	U	Z	P
<i>Series</i>	<i>Yes</i>	164	84,51	163,0	-1,010	,312
	<i>No</i>	3	56,33			
<i>Attitudes Toward Seeking Psychological Professionel Help</i>	<i>Yes</i>	169	133,12	6232,0	-1,729	,084
	<i>No</i>	85	116,32			
<i>Intention to Seek Psychological Help</i>	<i>Yes</i>	169	137,23	5538,5	-2,985	,003*
	<i>No</i>	85	108,16			
<i>Thoughts of Psychotherapy</i>	<i>Yes</i>	169	123,91	6575,0	-1,100	,271
	<i>No</i>	85	134,65			

*p<0,05

The Mann-Whitney U test has been performed to investigate whether the scales differ depending on the monitoring status of the series presented. There is a statistically significant difference at the 95% confidence level between the Intention to Seek Psychological Help score and the status of watching the TV series presented. Those who watch the serials have higher mean rank points. There is no statistically significant difference at the 95% confidence level between the scores of the Attitudes Towards Seeking Psychological Help and Thoughts About Psychotherapy scales and the status of watching the presented TV series (p>0,05).

Table 14: Scaling Analysis

		Attitude	Intent	Thoughts
Attitude	r	1	,251	,095
	p		,000*	,131
Intent	r			,000
	p			,995
Thoughts	r			1
	p			

*p<0,05

As a result of the correlation analysis; It is seen that there is a weak positive relationship between the Attitude towards Seeking Psychological Help and the Intention to Seek Psychological Help ($r=,251$; $p<0,05$). There is no relationship between the Attitudes Toward Seeking Psychological Professional Help and the Thoughts About Psychotherapy ($p>0,05$). There is no relationship between Intention to Seek Psychological Help and Thoughts About Psychotherapy ($p>0,05$).

2. Discussion and Conclusion

It was seen that women, primary and middle school graduates preferred the “Kırmızı Oda” at a high rate, and men and participants with a master's degree or higher preferred the TV series Bir Başkadır. In the relationship between the series presented and the intention of receiving assistance, it appears that psychologists have achieved the highest score in the "Kırmızı Oda" series on privacy, honesty, respect for human rights, reinforce their thoughts on competency. These results suggest that new studies should be done on the fact that the series should reflect psychotherapy and psychotherapists, and that the series positively influences the ideas of psychologists ethical attitudes, but does not reinforce the belief that psychotherapy will work in their own problems.

After watching the series, it is seen that women have higher intentions and attitudes to receive psychological assistance, and their thoughts on issues other than the competency of psychologists are positively affected. Primary school graduates have higher scores on the scales of attitude towards help and thoughts about psychotherapy, and their opinions other than the competence of psychologists and their respect for human rights have been positively reinforced. This makes it necessary to explain the factors that strengthen the intention, attitude and opinions of men and individuals who have been educated at the university, master's and higher education about psychotherapy, psychotherapists, and to investigate how individuals have gained insight into the competence of psychotherapists.

There was a significant difference between the monitoring of the series and the intended psychological assistance, but there was no significant difference between the monitoring of the series presented and the attitude on psychological assistance and the thoughts on psychotherapy. This shows that the following have influenced their thoughts on psychotherapy and their intentions to seek help, although it does not affect the people's attitude toward getting help. In this study, it is known that there is a positive weak relationship between the intention and attitude of receiving psychological assistance, so new studies should be carried out that examine the impact of the following on attitudes, intents and thoughts. This study emphasized the importance of examining the process of turning intent and thoughts into attitude and behavior.

Another remarkable finding was that after watching the series, "after watching the show, my opinion was that psychologists were competent in their work." her statement is that she made sense in participants in the 45-55-year-old group at 95% confidence level. While there is no significant difference in the belief clauses that will work in honesty, privacy, respect for human rights and problems, the fact that the age group of adulthood has reinforce positive thoughts on competency emphasizes the importance and understanding of the concept of "competency" in psychologists.

Finally, the TV series followed in this study did not show a significant difference according to age and socioeconomic status. No significant difference was observed between age and socioeconomic status and the Attitudes Towards Seeking Psychological Help, Intention to Seek Psychological Help, and Thoughts About Psychotherapy scales.

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P-80 Improving Nursing Education in Covid-19 Pandemic Process

Nurten ALAN

Abstract

March 19, 2020 marked the beginning of the Safer at Home Order to slow the spread of COVID-19. Nursing schools usually rely on clinical learning environment to support students in the assimilation of didactic theory to application.

Many factors contribute to effective learning in an online setting, including the design of learning activities, support mechanisms and communication strategies. The construction of a learning environment needs also to be purposeful and well designed to effectively stimulate learning and adequately prepare undergraduate nurses for clinical practice. In an online setting effective communication strategies must be 'built in' to the design. When communication strategies are not well-defined nor appropriately utilised, restrictions to synchronous and asynchronous learning occur. Conversely, when communication is effective, relationships between the student and the staff are optimised and student satisfaction is increased.

Student achievement improves when students are confident, and have support with information technology. Educators need to scaffold students through learning activities, build in teacher presence and collaboration, and make transparent teaching and learning strategies. Nurse educators need to be significantly upskilled so that they are adequately prepared to teach effectively in an online setting. Learning objectives can utilize such as care plans, interactive case studies, web-based learning activities, written work, communication activities, and class discussions.

Key words; Distance learning; Nursing education; Pandemic process

Introduction and Aim

March 19, 2020 marked the beginning of the Safer at Home Order to slow the spread of COVID-19. Only essential services remained open and most hospitals closed their doors to clinical nursing rotations to manage the spread of the disease. Nursing schools usually rely on clinical learning environment to support students in the assimilation of didactic theory to application (Konrad et al. 2021). Nursing is recognised internationally as a high-risk occupation for graduates and students (Boucalt and Knobben, 2020). Because the nursing profession is a hands-on profession and the real learning takes place in the clinic, they are more exposed to the risk of infection. Examining the concepts affecting learning is necessary for identifying and solving problems.

In Literature;

- Student satisfaction with types of teaching methods utilised (such as podcasts, reading material, Online journaling),
- Training support for teachers,
- Barriers and facilitators to student engagement,
- Motivations,
- Lifeworlds,
- Student self-efficacy and confidence (Jowsey et al. 2020).

Four key themes were identified in the literature

- Active learning,
- Technological barriers,
- Support,

- Communication (Jowsey et al. 2020).

Students enrolled in distance education not only left the social environment, but also experienced isolation in terms of learning support. This is an obstacle to actively participating in online learning activities (Owens et al., 2009; Jowsey et al. 2020).

Challenges with information technology

Barriers, such as inadequate infrastructure to support effective use of computers and tablets. The difficulties experienced by students with poor internet and computer skills were low confidence and satisfaction. Technology, such as video-conferencing or Learning Management Systems (LMS), was also a key issue, as the learning experiences required full orientation to the technology platform for synchronous and asynchronous learning (Jowsey et al. 2020). With Covid-19, enormous online platforms such as Canvas, Zoom, and Google Drive (with over a billion users) are currently critical to supporting variously engaged blended learning. Teachers and students alike are dependants on strong stable internet connections and the continued successful running of such platforms (Jowsey et al. 2020). Institutional support of faculty who address student barriers is essential for increasing their students' opportunities for success (Custer, 2016; Li et al. 2021). When technical issues arise, students believed that it was the prime responsibility and role of the teacher to find a timely solution to these issues (Meyer et al., 2014). Students' ability to find their own way with technology influenced performance, motivation, and their ability to engage with self-directed learning tasks (Jowsey et al. 2020). Student support was frequently noted in the literature as being crucial for student success. When self-regulation was not well-managed or controlled, blended learning negatively impacted everyday life (Smyth et al., 2012). Academic requirements and high occurrences of issues such as anxiety, dissatisfaction, stress, resistance to innovation, isolation, and attitudes related to transitional changes indicator of student achievement barriers (Bruce et al., 2010; Dacanay et al., 2015; Dorrian and Wache, 2009; Poon, 2013). Mechanisms of support and socialization influence students' focus and integration. Family support was reported as affecting reducing learner stress, as did the role of supportive peers and colleagues (Lyons and Evans, 2013; Munich, 2014; Zepke et al., 2010). Learners who maintained multiple roles in addition to their studies (such as breadwinner) reported high levels of stress and personal pressure (Dacanay et al., 2015). This stress increased learner pressure to achieve particularly when participating in clinical learning experiences and preparing for a professional nursing role (Jowsey et al. 2020).

Literature reported a need for open and prompt communication to reduce anxiety and minimize resistance to online learning, and the importance of communication when implementing innovative teaching strategies (Dorrian and Wache, 2009). Furthermore, if a student perceives a lack of direct contact and communication with staff, it affected their (Students') interaction, orientation, and focus on studies, which, in turn, impact negatively on assessment and feedback (Jowsey et al. 2020). The role of peer support between students and the use of effective communication when engaging in active learning is important (Coose, 2010).

Nursing fundamentals learning objectives

- The objectives for passing the fundamentals course and being prepared for the second semester included competent communication and collaboration;
- implementation of holistic, evidence-based, patient-centered care;
- providing safe patient care;
- and demonstration of professional values of caring: altruism, human dignity, and social justice.

Therefore, the strategies focus on application-based patient-care scenarios to maximize the clinical reasoning aspects of nursing care.

Core technologies utilized

- The use of technology in educational practices creates a learning environment where students learn via exploration.

- A major factor when considering the use of a technology tool is whether it supports learning and facilitates meeting the course objectives (Konrad et al. 2021).
- Teachers were expected to be competent with technology such as facilitation of discussion boards, functioning purposely and effectively (Jowsey et al. 2020).

Practice

- The affective domain is assessed by asking questions about students' feelings about patient care through simulation.
- The cognitive domain is evaluated by considering the documentation and answers to the questions regarding the nursing care plan (Garretson et al 2021).

How should clinical practice be?

- Student nurse's evaluations for clinical courses are based upon achievement and maintained the performance of student learning objectives.
- This multifactorial process includes evaluations of care plans, direct observation of patient care, simulation case studies, reflection activities, and professional behaviors (Konrad et al. 2021).

Recommendations

Factors that reduce the effect of distance;

- The flexibility of the program (students can learn whenever they want),
- Effective communication tools such as telephone and internet,
- Online technologies for feedback,
- Self-motivation level,
- Time management to ensure the student's work-life balance (Jowsey et al. 2020).

Success motivations;

When online interaction and discussion board activities are supported by actions such as online conferences and group work, it has been shown that students take responsibility for their own learning and engage in active learning (Jowsey et al. 2020).

Students feel supported and motivated when the teacher takes the time to regularly provide constructive feedback and gives the impression that they are invested in the overall quality of learning (Jowsey et al. 2020).

Conclusions

- The construction of any learning environment needs also to be purposeful and well designed to effectively stimulate learning and adequately prepare undergraduate nurses for clinical practice.
- The role of communication (also called teaching behavior) to effectively promote learning is known.
- When communication strategies are not well-defined nor appropriately utilized, restrictions to synchronous and asynchronous learning occur (Anderson, 2008; Chant et al., 2002; Schaefer et al., 2003; Jowsey et al. 2020).
- Student achievement improves when students are confident, and have support with information technology.

- This aspect of the learning experience is of particular importance to the success of any blended learning experience as it reduces other barriers for students, particularly around accessibility and flexibility.
- With adequate support, students can learn at a time and place which is convenient to them and benefit from online collaboration with teachers and peers.
- Educators need to support students through learning activities, enhance teacher presence and collaboration, and create transparent teaching and learning strategies (Jowsey et al. 2020).
- Nurse educators need to be significantly upskilled so that they are adequately prepared to teach effectively in an online setting.
- This requires time and resources to implement, evaluate, and refine courses offered as part of any undergraduate nursing studies curriculum (Jowsey et al. 2020).
- Learning objectives can utilize such as care plans, concept maps, interactive case studies, web-based learning activities, written work, communication activities, and class discussions (Konrad et al. 2021).
- Performing risk analysis of clinical environments and trying to reduce risks,
- Planning the application with the consent of the students,
- Identifying strategies to monitor student welfare in case of any problems,
- Providing psychological counseling to students by the university,
- Supporting students who do not prefer to cooperate,
- Recording of undesirable events affecting students,
- Establishing an evidence-based origin that will guide the identification of students who will practice in the clinical field,
- Clarifying the legal responsibilities of institutions in order to ensure the safety of students,
- Reducing clinical practice hours and ensuring standardization with simulation applications or homework. There is a need for criteria to be determined by education authorities and policymakers in light of evidence-based data.
- Support in terms of technological and other infrastructure resources to increase access to distance education,
- Conducting the lessons in the form of live lessons in order to ensure mutual interaction,
- Instructors to strengthen their technological skills,
- Creating alternative channels that will enable interaction with students,
- It is necessary to develop new approaches for an equal and fair evaluation of students' performances.
- Continuous feedback from teachers and students to make e-learning effective,
- Joint cooperation of government, health institutions and universities to always be prepared to respond to new epidemic situations in the future,
- Laboratory and clinical practices can be carried out face-to-face by taking measures to protect against COVID-19 (such as providing protective equipment, reducing the number of faculty members and students per clinical area) (İlaslan & Demiray 2021; Kaya & Akın Işık 2021; Singh et al., 2021; Keener et al., 2021; Li et al., 2021; Lira et al., 2020; Dewart et al., 2020; Agu et al., 2021).

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P-81 Evaluation of the Effect of the Pandemic Process on Nursing Education

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Abstract

The COVID-19 pandemic has a positive effect on many aspects of education, such as training. In the training processes of the training programs for the education of the epidemic, training for the training programs is obtained. In the conditions in the countries that emerged with the pandemic, it is necessary to proceed in a positive way. Mandatory cancellation of face-to-face training has not accustomed educators and practice. One of the most impact areas of the pandemic is passed through nursing fabrics. The COVID-19 pandemic has been in a difficult situation due to business continuity in all work areas in which the practice is located. Nursing educators perform a role in education and training in contemporary health care and in the preparation, training and completion of preparation over critical preparation. Helping to improve their education on this healing path is on the path to be improved to optimize and improve. Strategies are sought to continue the education of nursing students in the future. There are many topics to be discussed in this pandemic show. One of the challenges complements the pedagogical concepts, foundations and renewals of nursing examples. Without getting used to the training and the new system in the continuity of education and education. Pandemic time is made of many discounts. This study aims to talk about education and training broadcasting and innovations that benefit from the pandemic process.

Keywords: Pandemic, Nursing Students, Nursing Education.

Introduction

Covidien-19 pandemic, all over the world health system leading term a make to the economy, social life and education fields can affect quite important changes cause has been. Virus propagation control to and the community's health to maintain order so many countries, large -scale measures were taken. The most important example of education in the area taken in the measures we can see. These measures are covered by our country in education call given and schools were closed. Schools closing with combination of training continuity to provide in order to distance education was introduced. High Education Board (YOK), which takes decisions with the 2019-2020 academic year spring period with distance education in the process of transition has been made. Remote training system known used a method, though the Covidien-19 pandemic with together than the active one it has ^{1,2,3,4,5}.

During the COVID-19 process, the education and training process in the field of health stopped studying in the clinical field. On top of that, many methods have been developed (virtual reality, augmented reality, Moby's Nursing Skills, practical simulation methods, etc.) and solutions such as. It is known that simulation training in particular improves nursing school students' nursing skills as well as increasing their confidence, satisfaction, anxiety, stress and academic motivation. Despite these advantages, nursing students may not be able to apply the skills acquired in practical simulation training in practice. In the practice of the nursing profession, there are skills such as clinical reasoning, care plan, examining and analyzing patient clues, acquiring problem-solving skills, health management, clinical reasoning. These nursing students include the development of the self-sufficiency because higher self-efficacy, nursing leads to confidence in bringing skills instead of nursing tasks to solve the problems, it also nursing the overall quality you can contribute to increase ii ⁶.

Nursing education is an education system based on theory and clinical practice, supporting students' cognitive, sensory and psychomotor skills. In particular, the development of clinical skills as well as theoretical knowledge are the goals of the nursing education process. Clinical education enables the student to integrate theoretical knowledge and practice in health care settings and learn by experience. Clinical training of students in the process of vocational professionalism, professional competence, communication, team work, critical decision making, critical thinking such issues their skills develop

^{7,8}. It is expected that this lack of clinical training in nursing education, which is carried out entirely with distance education during the pandemic period, will have negative effects in the future. Applied science is the focus point of people with nursing profession remote training by granting both educators both in terms of students' education on the nature for so many problems in together in the run can bring ^{9,10}.

Nursing Student pandemic in the Process of Remote Education Oriented they live in Positive and Negative Back Notifications

Sharp and Kurtgöz's (2020) nursing students distance education for the attitudes they examined a study, students pandemic lasted ec remote training for problems; Internet has access to that, or the limited being, remote tilt the university's use educational problems stemming from the system, lack of computers at home, sourced from the instructor walked into class problems, inability to focus due to the lack of classrooms, lack of appropriate home environment, time -related problems, lessons assets course is not interactive stated that they could not participate¹. In another study by Kurduncu and Kurt (2020), the problems experienced by students; “ Problems in the distance education infrastructure of the university ”, “the lack of face-to-face education”, “limitation of opportunities”, “ the mood caused by the pandemic ” and “exam anxiety” ¹⁰. Looking at international studies; It has been reported that students are worried about how the exams will be with the transition from face-to-face courses to web-based courses, access to classes, psychological effects of the pandemic, and limited opportunities in internet access ¹¹. In these studies carried out with nursing students during the pandemic period, it was determined that the students could not attend the classes and could not get efficiency, mostly due to the lack of infrastructure ¹². This situation can be explained by the inability of the emergency action plans prepared for our country regarding emergency situations to be put into effect quickly and in an organized manner, and the inadequacy of the infrastructure systems of the universities for distance education. At the same time, in this case too many students in the same time period by use of similar systems for distance learning in me said that due to the density. Besides asynchronous learning model, students instant as an instructor with communication theories performed, the student is not alone in this process, to be away from the classroom interaction, the idea of living situations are communication problems such as inability to exchange n and motivation reduction causes ¹³. For this reason, feedback from students should be evaluated, solutions to the problem should be produced, and arrangements should be made to increase the efficiency and quality of education. In addition, the biggest disadvantage of distance education is that all students cannot receive education equally in the absence of access equipment. Students who live in rural areas, have problems in the internet network, do not have the necessary materials for access (computer, smart phone, etc.) or use this material at home by more than one person will have a different perspective on distance education ¹. In the study of Kurduncu and Kurt (2020), the students had difficulty in following the lessons and preparing homework due to limited opportunities on the internet and computers, some students stayed in rural areas, had limited internet access, and due to the urgent decision to close schools, the course materials were not distributed in different provinces. was found to be ¹⁰. In a comprehensive study conducted in Turkey, it was found that only 63% of undergraduate students had an internet connection at home during the Covid-19 period, one-third of the students did not have a computer or tablet, therefore they could not continue their education ¹². Similarly, in a study conducted in China, it was stated that university students experienced anxiety due to being in rural areas during the pandemic and uncertainty in family income ¹⁴.

In the study of Keskin and Kurtgöz (2020), it was found that among the positive opinions of nursing students about distance education, they felt safe and experienced less stress by not being in the classroom environment and not doing an internship during the pandemic period ¹. Pandemic period a study on nursing students in the majority of students pandemic -induced anxiety, stress, such as negative emotions experienced and the feelings they are experiencing difficulty in coping with the situation, because the yla classes determined to have difficulty in tracking en ¹⁰. Similar evil planted in the pandemic period, the international structures that worked with a trowel when examined, in case

of student illness due to close the Covidien-19 lived their stress and is found to postpone their academic studies, the uncertainties of the process during this period and illness k Orkun the cause of intense concern, adverse psychological effects such as stress classes in focusing age names have been reported ^{14,15} . Milk and Küçükkaya (2016) ' s nursing students with accomplishments related to distance education im a study, students' opinions about the positive aspects of distance education are good; It has been reported that it is economical in obtaining information, constantly updating information, enabling cooperation over the internet, enabling continuous education after graduation in nursing, and facilitating family life ¹⁶ . Sharp v e Kurtgöz (2020) studies themati students and for distance education; eliminate the time and space limitations, classes multiple listens able to, find easy access to the course material resources and more opportunity handed to good direction reported positive views ¹ .

Advantages of online education; staying at home, reducing accommodation and transportation costs, distance ^{17,18,19} .

Disadvantages of online education; internet problems, technical problems, reluctance to use online education among academicians and students, lack of clinical environment ^{20,21} .

When the effectiveness of online learning is evaluated against the traditional face-to-face learning method; online learning was found to be less effective for participants than traditional face-to-face learning ^{22,23,24,25} . The most important reason for this is; Nursing students are more familiar with traditional learning methods and online learning methods are insufficient in gaining applied skills. Another study conducted in Taiwan, the presence of all the social face-to-face learning, student satisfaction in terms of social interaction and online as more effective than learning a demonstrated lgılan ²⁶ . In nursing education online learning A review conducted to evaluate the use of the programs in the study, students teaching methods from online not learn to be happy than to find was un ²⁷ . Contrary to the findings, online learning on an earlier systematic review also online learning academic context in terms of coming to the conclusion that was reached was equivalent to learning Contextually ²⁰ . In a study conducted in India, students face to face and online a combination of educational learning they prefer to use ²³ . In a study conducted among undergraduate students in Indonesia, dental medicine students by online instead of learning class learning n is more preferable, because the second learning method has resulted in problematic communication and provide more satisfying than learning ²⁸ .

However, a study, the teaching of ncie of face-to-face learning and online learning in combination (hybrid) found that they prefer ²⁹ .

It has been determined that theoretical courses can be taught with distance education, but this situation will cause problems in applied courses ¹¹ . It was determined that most of the students (84.4%) did not find web-based distance education as effective as face-to-face education, and the contribution of web-based distance education to students' theoretical knowledge level was higher than its contribution to practical skills ⁹ . In a study conducted on nursing students for distance education, it was reported that 87.5% of the students did not approve of distance education in nursing, and stated that it would cause deficiencies in laboratory and clinical practices, which have an important place in an application-oriented profession such as nursing ¹⁶ . As can be seen, face-to-face education is thought to be very important and effective in helping students gain psychomotor skills in the clinical practice process in applied disciplines such as nursing . The realization of clinical practice with distance education creates difficulties for both students and educators and may negatively affect the quality of education.

Attitudes Towards Online Learning

Students said that online education saves time and facilitates their access to learning materials ²⁹ . Still, the majority found that online learning can never replace other forms of teaching and learning. About two-fifths of students were neutral on the adoption of online learning by universities. Online Another study conducted to understand the difficulties of learning, almost half of nursing students, nursing curriculum, e-learning, including the about the importance of being both is the idea du ³⁰ . PM about

one-third of Defoamer, an easy course to follow when participating in online courses notes had planned to take the computer. In contrast to these findings, another study, participants in future only 23% of online learning that they prefer y reported ²². Pandemic students during online research conducted to understand the perception of learning, showed that want to continue this kind of learning majority of respondents ³¹.

A study conducted in Jordan determined that the application of online learning in medical education is difficult because while online learning can replace theoretical knowledge, it is not as easy as it seems to replace clinical medical skills. A combination of traditional and online learning classes (hybrid) may be the preferred way of teaching medicine in the future ²¹.

Developing countries with online research conducted to identify the problems of adapting the learning, students in high Information Communication and Technology read my writing know my rates and online insufficient as the underlying cause of failure in learning to adapt users / technical support, it has found ³².

One study, students were comfortable when they use the Internet, In conventional hand compared to face to face learning online argues that drew them to prefer learning ³³.

Institutional support corporate strategy and basic skills to run implementation and online learning plays a vital role in adapting the methodology ³¹.

In a study to evaluate the attitude of medical students in Iran, 43.4% found e-learning useful for medical education ³⁴. In another study, about 59% of the students had a positive attitude towards e-learning ²⁹. Another study conducted in Pakistan in students a positive attitude showed that exhibit ³². However, in a study conducted in India, overall only 30.8% showed positive attitudes ²³. In addition, the University of Jordan in overall satisfaction rate in distance education in one of the studies carried out n that is only 26.8% and in medical schools, distance e was found to be Implemented for students who experience significantly higher ^{21.29}.

Solution Suggestions for Improving Clinical Skills

The use of the “ hybrid system model” has been considered in order to improve clinical skills and reduce limited clinical exposure ³⁵. When appropriate equipment is available, video demonstrations are recommended to supplement the lack of clinical exposure . However, if adequate resources are not available, students will need to acquire these skills in the future; as a result, to help students complete their clinical rotations required of high-quality simulation to include the use in the nursing curriculum changes are needed ³⁶.

Recommendations for Nursing Education in the COVID-19 Pandemic

The Nursing Education Association (HEMED) has made various suggestions to support quality nursing education practices, based on the problems experienced in nursing education during the COVID-19 pandemic;

- Institutions should maintain their institutional policies and efforts to meet program objectives and learning outcomes .
- Simultaneous (synchronous) and asynchronous (asynchronous) education figure r, to learning and teaching, will be offered support services (to troubleshoot connection problems, training materials in reviewing passing, receiving suggestions and demands on the system and value deductible of, system logs such as processing and evaluation) Methods of supporting self-confidence, motivation and self-expression skills in educational processes, ways to ensure and improve the functionality of all these processes should be determined and necessary systems should be established.
- The distance education system should be accessible for students and instructors not only on the internet, but also on the phone or individually. In this direction, sufficient physical space,

technological equipment and facilities are provided, where distance education services are coordinated, information processes are managed, access and usage support for students and instructors can be provided simultaneously and asynchronously, as well as support for teaching methods and material development for instructors. Distance education centers with human resources are very important.

- Students enrolled in distance education programs should have adequate access to and make effective use of learning resources, including the library, information resources, laboratories and equipment.
- Regarding applied courses, new strategies should be developed in line with the possibilities of the schools, covering the following periods.
- Institutions should review the infection control and prevention content in the training curriculum and make up for its deficiencies. In this program, basic subjects such as basic infection control, isolation, quarantine, standards, contact, air contact precautions, hand washing, selection and use of personal protective equipment should be included.
- Crisis Management course should be added to the nursing curriculum.
- Training on distance education methods should be organized for students and instructors.
- Each institution should take the necessary precautions and ensure that they are complied with, according to the latest sources of information on the COVID-19 pandemic from the World Health Organization (WHO) and the Ministry of Health .
- Nursing schools and health institutions where our graduates are employed can contribute to what will be done in the upcoming period and strengthen their efforts by maintaining their communication in cooperation ³⁷.

Conclusion

The training of qualified manpower, which is one of the most important problems in the pandemic process in the world and in our country, is an issue that needs to be addressed more seriously when it comes to nursing. Qualified nurse manpower means a healthy society. All stakeholders have important responsibilities in maintaining quality nursing education. Nursing education institutions, instructors and students are also expected to make an effort and contribute to the common struggle by being aware of their responsibilities in this process.

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P-82 Carpal Tunnel Syndrome and Physical Therapy- Scooping Review

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Abstract

Carpal tunnel syndrome (CTS), is a clinical picture that occurs when the median nerve is compressed within the carpal tunnel. CTS is the most common neuropathy in upper extremity neuropathies. It affects 0.6%- 5.8% of the general population. The pathophysiology of CTS is generally based on traction and compression mechanism. Electrodiagnostic tests are gold standard in the evaluation of CTS. The tests we can do in the clinic are the phalen test, the tinell test, the elavation test and the durkan test. There are surgical and non-surgical techniques in the treatment of carpal tunnel syndrome. Non-surgical techniques include platelet-rich plasma (PRP) application, steroid injection, use of splint and physiotherapy. Conservative treatment should be applied before surgery in patients with low and moderate CTS. The efficacy of ESWT, electro acupuncture, cupping therapy, interferential current and neurodynamic techniques have been proven in non-surgical conservative treatment. However, using these treatment modalities together gives more effective results than using them alone. Therefore, the comprehensive rehabilitation program will increase the effectiveness of the treatment.

Keywords: Carpal, tunnel, syndrome, rehabilitation.

Introduction

Carpal tunnel syndrome (CTS), defined by Sir James Patt in 1865, is a clinical picture that occurs when the median nerve is compressed within the carpal tunnel. Carpal tunnel syndrome is the most common neuropathy in upper extremity neuropathies. It affects 0.6%- 5.8% of the general population (Lin, Chen, Chang, Wu, & Özçakar, 2019).

Carpal Tunnel Anatomy and Biomechanics

Carpal tunnel (CT) is the canal under the transverse ligament which is a length of 3 cm, adhering to the tubercle of the scaphoid bone at lateral, the pisiform bone and the hook of the hamatum at medial. 9 tendons 1 nerve passes through the carpal tunnel. Of these 9 tendons, 4 belong to Flexor digitorum profundus, 4 to flexor digitorum superficialis, and 1 to flexor pollicis longus. The only nerve that passes through the carpal tunnel is median nerve (Manoharan, Sudhakaran, Goyal, Srivastava, & Ansari, 2020).

The pressure in the carpal tunnel varies according to the movement and position of the forearm, wrist and fingers. In healthy individuals, the pressure in the neutral position of the wrist is between 25 and 35 mmHg. In patients with CTS, the pressure may rise 140-150 mmHg in the neutral position of the wrist. Studies show that wrist extension increases the pressure in the carpal tunnel more than wrist flexion. Pressure also appears to increase in 20 degrees of radial and ulnar deviation of the wrist. The angle of flexion and extension of the metacarpophalangeal (MCP) joint also affects the pressure. Accordingly, when the highest pressure is 0 degrees of MCP flexion, the least pressure appears at 45 degrees of MCP flexion. The pinch grip is the type of grip that increases the pressure in the CT most compared to other types of grips. Briefly, 45 degrees forearm pronation, wrist radial deviation, wrist extension and pinch grip are the movements that increase the pressure the most for CT (Keir, Bach, & Rempel, 1998; NUZUMLALI, TUNCER, & Dalci, 2004; Rempel, Keir, & Bach, 2008).

Pathophysiology of the Carpal Tunnel Syndrome

The pathophysiology of CTS is generally based on traction and compression mechanism. As the pressure in the carpal tunnel increases, local edema increases due to the decrease in venous blood flow in the median nerve. Therefore, impairment occurs in the intraneural microcirculation of the median nerve. With nerve dysfunction, damage occurs in the myelin sheath and axon of the nerve. Repetitive traction movements and wrist movements contribute to this situation (Sevy & Varacallo, 2021).

Epidemiology and Risk Factor of Carpal Tunnel Syndrome

CTS is reported between 0.18% and 5% annually. In epidemiological studies, the incidence in women is 3 times higher than in men. In addition, conditions such as 45-60 age, frequent repetitive wrist movements, pregnancy, rheumatoid arthritis, hypothyroidism and obesity are risk factors for CTS. In a study, it is said that 30% of diabetic patients develop CTS. In some studies, it is said that race may also be a risk factor for CTS. According to these studies, the Caucasian race is reported as the highest risk group (Alimehmeti et al., 2020; Genova, Dix, Saefan, Thakur, & Hassan, 2020; Y. Li et al., 2020). In addition to these factors, psychological factors are also risk factors for CTS. High psychological workload, high workload, low seniority at work, high psychological distress, low social support, low social environment and A-type behavior are positively associated with the development of CTS. High position in the work, high social environment and support, being in harmony with colleagues are negatively correlated with the development of CTS (Mansfield, Thacker, & Sandford, 2018). Briefly, CTS has biopsychosocial risk factors.

Symptoms of Carpal Tunnel Syndrome

In the early stages of CTS, the patient tends to wake up from sleep due to paresthesia and pain in the hand, and when he shakes his hand after waking up, patients say that their paresthesia have passed. Paresthesia and pain occur in the first 3 fingers of the hand and the radial half of the 4th finger. In the later stages of CTS, symptoms start to appear during the day. Patients' symptoms increase with repetitive wrist movements that will increase the pressure in the CT. In the last stage of CTS, the patient can drop the object in patient's hand due to the decrease in the grip strength of the patient and atrophy develops in the thenar area of the hand. In some cases, there may be pain radiating to the elbow and shoulder (Genova et al., 2020; Urits et al., 2019).

Evaluation in Carpal Tunnel Syndrome

Electrodiagnostic tests are gold standard in the evaluation of CTS. In addition to electrodiagnostic tests, ultrasound images are also a safe method that can be used in the diagnosis of CTS. The tests we can do in the clinic are the phalen test, the tinell test, the elavation test and the durkan test.

Phalen Test: The wrist is in maximum flexion, the fingers are in maximum extension and the forearm is in pronation for 1 minute. Tingling, numbness and pain in the first 3 fingers makes the test positive. The sensitivity and specificity of the Phalen test are 84.4%, 86.7%, respectively (Ma & Kim, 2012).

Tinell Test: Tingling, numbness and pain in the first 3 fingers by tapping 4-6 times on the carpal tunnel makes the test positive. The sensitivity and specificity of tinell's test are 82.2%, 88.9%, respectively (Ma & Kim, 2012).

Hand Elavation Test: The patient raises both hands above head level. He maintains this position for 2 minutes. If tingling, pain and numbness occur in the first 3 fingers within 2 minutes, the test is positive. The sensitivity and specificity of the hand elavation test are 86.7%, 88.9%, respectively (Ma & Kim, 2012).

Durkan Test: With the patient's hand in supination, the therapist applies compression on the CT for 30 seconds. The appearance of tingling, numbness and pain within 30 seconds makes the test positive. The sensitivity and specificity of the Durkan test are 84.4% and 82.2%, respectively (Ma & Kim, 2012).

There is a Boston carpal tunnel syndrome questionnaire for patients with CTS to submit their self-reports. The questionnaire evaluates the symptoms with 11 questions and the function each item, across both the scales, has 5 possible response options ranging from 1 to 5 with 1 being no concerns and 5 being the worst status. The questionnaire has translation and adaptation into different languages such as Swedish, Chinese, Japanese, Turkish, Korean, Greek, Spanish, Hong-Kong and Polish. The minimal clinical significance change of the questionnaire is 0.85 for symptom severity, 0.86 for

functional status and 0.96 for the total score (Mehta, Weinstock-Zlotnick, Akland, Hanna, & Workman, 2020).

Treatment in Carpal Tunnel Syndrome

There are surgical and non-surgical techniques in the treatment of carpal tunnel syndrome. Non-surgical techniques include platelet-rich plasma (PRP) application, steroid injection, use of splint and physiotherapy.

Surgical Treatment

In CTS surgery, a release surgery is performed on the transverse carpal ligament. This technique can be done by both open and endoscopic methods. Complications such as scar formation, slow healing and constant pain may occur in open surgery. Endoscopic surgery is good for incision, but it is difficult to do and is likely to damage surrounding tissues. According to meta-analysis studies, surgery performed with the endoscopic method is more effective than open surgery in terms of functionality, less scar tissue complications, and time to return to work (Hu, Zhang, & Xu, 2016; Y. Li et al., 2020; Vasiliadis et al., 2015).

Platelet Rich Plasma

PRP has been a frequently used treatment option for orthopedic problems recently. It is shown as the best non-surgical treatment option for CTS. According to a meta-analysis study including 4 randomized controlled trials, PRP gave better results in the short term compared to steroid injection, placebo group and conservative treatment methods. However, there are few studies showing long-term results (Catapano et al., 2020; Dong et al., 2020).

Steroid injection

In studies, it is said that corticosteroid injection improves pain and function in patients with CTS in the short term. However, its long-term consequences are uncertain. Local steroid injection is more effective than systemic injection. High doses of steroid injections in the middle period are more effective. However, steroid injection is used not to treat CTS, but to control the symptoms. For this reason, it is recommended to be done together with the rehabilitation program (Huisstede, Hoogvliet, Franke, Randsdorp, & Koes, 2018; Marshall, Tardif, & Ashworth, 2007).

Splint

There are very few meta-analyses stating that the splint used in the treatment of CTS is effective. In studies, it is said that the volar supported splint that keeps the wrist in neutral position is more effective than other splints in the treatment of CTS. There is no difference between using splint at night and using splint all day. Therefore, the use of splints that keep the wrist in neutral position in patients with CTS is recommended to be given at night in addition to other treatments (Huisstede et al., 2010; Jothi & Bland, 2019; Page, Massy-Westropp, O'Connor, & Pitt, 2012).

Exercise

In the treatment of CTS, tendon shifting and median nerve shifting exercises are most commonly used. For tendon gliding exercises, the fingers were put into five different positions as regular grip, hook grip, punch, tabletop, and regular punch. During median nerve gliding exercises, the fingers, hand, and wrist were put into six different positions. The evidence levels of tendon shift and median nerve shift exercises are limited. However, studies have reported that it reduces pain and improves function. The recommendation of the literature is that exercise will give more effective results with other treatment modalities (Ballesterio-Pérez et al., 2017; S. D. Kim, 2015; Lim, Chee, Girdler, & Lee, 2017; Page, O'Connor, Pitt, & Massy-Westropp, 2012; Yıldırım, Dilek, Şahin, Gülbahar, & Kızıl, 2018).

Paraffin

The number of studies investigating paraffin therapy in the treatment of patients with CTS is very few. However, according to the results of the studies, paraffin improves pain, electrophysiological parameters and functionality. In the studies, a total of 9-15 sessions, 5-10 times of immersion in each session, 15-20 minutes of waiting and a total of 3-8 weeks of treatments were applied (Mansiz Kaplan, Akyuz, Kokar, & Yagci, 2019; Ordahan & Karahan, 2017; Chang et al., 2014). According to the literature, using paraffin therapy together with other treatment modalities in the treatment of patients with CTS may give better results.

Therapeutic Ultrasound

In the studies conducted with ultrasound therapy in the literature, it is stated that patients with CTS show improvement in terms of symptoms, pain and function. In 2 studies comparing ultrasound frequencies, it was stated that 1 MHz and 3 MHz are not superior to each other. According to a low-quality study comparing ultrasound intensity, it says that it is more effective in terms of pain and function than 1.5 MHz, 0.8 MHz. However, some sources mention that they are not superior to each other. Studies comparing ultrasound to low-intensity laser therapy and paraffin indicate that ultrasound provides greater improvement (Chang et al., 2014; Huisstede et al., 2010; Page, O'Connor, Pitt, & Massy-Westropp, 2013; Rayegani et al., 2019).

Low Intensity Laser Therapy

There are conflicting results in the literature review of low intensity laser therapy (LILT). It is stated that in the systematic review studies examined, clear results cannot be drawn due to the heterogeneity of clinical studies. Studies show that while LILT increases grip strength in patients with moderate CTS, it does not provide a change in terms of pain and symptoms. There is no clear information about LILT's treatment duration and dosage. However, in studies, generally 780-860 nm laser, 9-11 J / cm² and total energy 135-945 J are used (Bekhet, Ragab, Abushouk, Elgebaly, & Ali, 2017; Cheung et al., 2020; Franke, Koes, Geelen, & Huisstede, 2018; Z. J. Li et al., 2016; Taylor, Winfield, & Wynd, 2020).

Electrotherapy

Most studies have used transcutaneous electrical nerve stimulation (TENS) and interferential (IF) current. According to the results of these studies, both groups improved, but IF current is more effective than TENS current in terms of improvements in pain, symptoms, and median nerve conduction velocity. In the studies, the IF current was chosen as 4000 Hz and the transition time of 1 to 1 was given. IF current was applied 5 times a week for 3 weeks. The frequency of the TENS current was chosen as 100 Hz and applied 5 times for 3 weeks. As a result, IF current is a safe and effective method in the treatment of patients with CTS (Casale, Damiani, Maestri, & Wells, 2013; Huisstede, Randsdorp, et al., 2018; Koca, Boyaci, Tutoglu, Ucar, & Kocaturk, 2014).

Acupuncture- Electro Acupuncture

There are few studies investigating the effectiveness of acupuncture and similar treatments in patients with CTS, but studies are said to be effective. In studies comparing acupuncture with sham acupuncture, night splint, oral steroid, vitamins B1 and B6, it is stated that it is more effective in terms of pain and Boston carpal tunnel questionnaire. According to studies on electroacupuncture, it provides improvement in terms of pain, grip strength, disabilities of the arm, shoulder, and hand score (DASH), boston carpal tunnel questionnaire. In the studies conducted, the treatment session varies between 6-20 sessions and the treatment duration varies between 2-17 weeks. More studies are needed (Chen, Wu, Su, Shen, & Chen, 2019; V. C. Chung et al., 2017; V. C. H. Chung et al., 2016; Dimitrova, Murchison, & Oken, 2017; Hadianfard, Bazrafshan, Momeninejad, & Jahani, 2015; Juan et al., 2019).

Cupping Therapy

Studies on cupping therapy are very few. However, studies have provided relief in patients' symptoms and an increase in median nerve conduction velocity. In the study conducted by Mohammadi et al. it shows that 4 minutes of cupping therapy at 50 mmHG pressure applied on the carpal tunnel gives better results than the control group (Mohammadi, Roostayi, Naimi, & Baghban, 2019). In the study by Michalsen et al. 5-10 minutes of cupping therapy on the trapezius muscle shows that it is more effective than hot treatment (Michalsen et al., 2009). According to the study conducted by Sucher et al., 5 minutes of cupping therapy on the carpal tunnel shows good results (Sucher, 2019). According to the results of the literature, cupping therapy gives good results in the treatment of patients with CTS, but more studies are needed.

Extracorporeal Shock Wave Therapy (ESWT)

Focus ESWT and Radial ESWT provide improvement in pain, function, grip strength and electrophysiological parameters in patients with low and moderate CTS. The literature states that radial ESWT is more effective than focus ESWT in patients with moderate and low-grade CTS (Xie et al., 2020). However, there is no consensus about the frequency, number of beats and treatment sessions. In a study conducted by Ke et al. radial ESWT was applied in 3 sessions to the A group and as one session to the B group. According to the results of this study, it is said that there was more improvement in the group that received 3 sessions of ESWT due to the cumulative effect (Ke et al., 2016). In the studies, the number of beats was chosen between 1000-5000 beats, the treatment session between 1-4 sessions, the frequency between 4-6 and the bar pressure between 1.5-4. ESWT, 2 cm proximal to the pisiform bone in 3 studies, half of the beats were applied to the medial of the carpal tunnel and the other half to the lateral of the carpal tunnel in 1 study. As a result, ESWT performed at 2000 beats, 3 sessions, 5Hz, 4 bars, 2 cm proximal to the pisiform bone is an effective method in the treatment of patients with low and moderate CTS (J. C. Kim, Jung, Lee, & Lee, 2019; Notarnicola et al., 2015; Paoloni et al., 2015; Wu et al., 2016; Xu et al., 2020).

Kinesio Taping

Kinesio tape (KT) has recently come to the fore as a method used in the treatment of orthopedic diseases. There is no systematic review study measuring the effectiveness of KT on patients with CTS. However, there are recently randomized controlled studies. According to the study by Güner et al. LILT combined KT appears to be an effective and reliable method (Güner, Altan, & Kasapoğlu Aksoy, 2018). According to the study by Yıldırım et al. KT combined with tendon and nerve gliding exercises provides an increase in median nerve conduction velocity in 3 and 6 weeks (Yıldırım et al., 2018). According to the study conducted by Kaplan et al., It is stated that the use of splint and KT is effective clinically, ultrasonographically, and electrophysiologically in patients with mild and moderate CTS (Mansiz Kaplan et al., 2019). According to the results of the study conducted by Geler et al., It is said that KT can be used as an alternative in the treatment of patients with CTS (Geler Külcü et al., 2016). The number of studies investigating the efficiency of KT alone is quite low. In studies conducted, the most commonly used relaxation technique and neural technique in KT. KT was generally applied 2-3 times a week and for a total of 3 weeks. According to the literature results, it is shown that better results can be obtained if KT is applied in addition to other treatment options. Further studies are needed.

Manual Therapy

Many studies have been conducted on manual therapy (MT) in patients with CTS, but the number of isolated studies is very few. In the literature, there are studies on manual treatment techniques such as nerve mobilization, mobilization of carpal bones, neurodynamic techniques, soft tissue mobilization with and without an aid, massage therapy and facial manipulation in patients with CTS. In the study conducted by Fernandez et al., It was stated that in addition to cervical mobilization, soft tissue mobilization on scalene muscles, pectoralis minor muscle, bicipital aponeurosis, biceps brachii, pronator teres and transverse carpal ligament related to the median nerve gave results equivalent to surgeons in terms of self-reporting and pinch grip strength (Fernández-de-Las-Peñas et al., 2017). In

studies that stated that MT was effective, manual treatment was generally performed in the form of neurodynamic mobilization, soft tissue mobilization to the areas related to the median nerve, and mobilization to the carpal bones. The heterogeneity of the studies and the few studies involving isolated MT require careful interpretation of the results (Page, O'Connor, et al., 2012; Wolny, Saulicz, Linek, Myśliwiec, & Saulicz, 2016; Wolny, Saulicz, Linek, Shacklock, & Myśliwiec, 2017).

Ergonomic Keyboard and Mouse

Studies show that the use of keyboard and mouse has an effect on the median nerve (Thomsen, Gerr, & Atroshi, 2008). In the study conducted by Loh et al. they investigated the effects of a flat keyboard and a 20 degrees inclined keyboard on the median nerve. Since the wrist is in extension with a keyboard that is inclined at 20 degrees, it has more effect on the median nerve than a flat keyboard (Yeap Loh, Liang Yeoh, Nakashima, & Muraki, 2017). In the study conducted by Schmid et al. the activity of normal mouse, wrist supported mouse pad, normal mouse pad and vertical mouse was examined. According to the results of the study, the vertical mouse makes more wrist extension movements, but less ulnar deviation than the normal mouse. The wrist-supported mouse pad makes less extension movements than the normal mouse pad (Schmid, Kubler, Johnston, & Coppieters, 2015). According to the literature results, the use of keyboard, mouse and mouse pads that keep the wrist in neutral position does not increase the pressure on the median nerve.

Conclusion

In the evaluation of CTS, the phalen test, tinell test, durkan test, arm elavation test, which have high sensitivity and specificity, are among the tests that can be used safely in the clinic. Conservative treatment should be applied before surgery in patients with low and moderate CTS. The efficacy of ESWT, electro acupuncture, cupping therapy, interferential current and neurodynamic techniques have been proven in non-surgical conservative treatment. However, using these treatment modalities together gives more effective results than using them alone. Therefore, the comprehensive rehabilitation program will increase the effectiveness of the treatment.

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P-83 Investigation of the Early Results of Patients Who Had Simultaneous Bilateral Total Knee Replacement Surgery During the Covid-19 Pandemic Period: The Pilot Study

Nezih ZIROGLU, Yasemin SAHBAZ

Abstract

Aim: The study aims to evaluate the early period pain, functional capacity, kinesiophobia, and quality of life of patients who underwent simultaneous bilateral total knee replacement surgery during the Covid-19 pandemic period.

Methods: Twelve volunteer patients who had a simultaneous bilateral total knee replacement and agreed to participate in the study were included. The patients were evaluated in the early phase after the operation. Demographic data of the patients were evaluated with the demographic data form prepared by us, pain status was evaluated with Visual Analog Scale, knee functionality was evaluated with Western Ontario Mc Masters Universities Osteoarthritis Index (WOMAC), kinesiophobia status was evaluated with Tampa Kinesiophobia Scale and quality of life was evaluated with SF 12.

Results: The mean age of the participants was 65.33 ± 7.25 years, and the disease duration was 10.58 ± 4.35 years. It was observed that the rest, activity, and night pains of the patients were at minimum levels (0.16 ± 0.57 ; 1.91 ± 2.71 ; 0.25 ± 0.62 , respectively). According to the WOMAC score with a cut-off point of 39, it was found that the knee functions of the patients were in good condition (14.52 ± 7.96). According to the Tampa Kinesiophobia Scale with a cut-off point of 37, it was determined that the patients had a high fear of movement (42.33 ± 6.16). According to the SF 12 Quality of Life Scale with a cut-off point of 48.9, the patients were found to be at a good level in both physical and mental categories (47.94 ± 7.54 ; 44.61 ± 8.38 , respectively).

Conclusions: It was determined that the early period pain, functional capacity, and quality of life evaluation results were good, but the results of the fear of movement evaluation were poor. This may be due to curfew because of the Covid-19 pandemic.

Keywords: total knee replacement, Covid-19 pandemic, gonarthrosis

Introduction and Aim

Osteoarthritis(OA); is a non-inflammatory chronic degenerative disease characterized by erosion of the articular cartilage, osteophyte at the margins of the joint, subchondral sclerosis, and biochemical and morphological changes in the synovial membrane and joint capsule (Lane N, 2011). Since individual differences such as diet, anamnesis, and physical activity play a role in epidemiological studies on humans, the exact pathogenesis and etiology are unknown. This disease, which causes pain and loss of function and impairs the quality of life, is one of the main causes of disability in adults (Arden N, 2006).

Treatment approaches for osteoarthritis are aimed at reducing pain, increasing functionality, reducing disability, preventing or slowing the progression of the disease. Pharmacological and non-pharmacological methods are used in the treatment. Surgical treatment is considered in patients with persistent pain despite medical treatment and severely restricted activities of daily living. Applied surgical approaches are frequently arthroscopy, osteotomy, and arthroplasty (Bilge A, 2018).

Today, total knee replacement (TKR); is accepted as the gold standard treatment method in the treatment of end-stage knee arthropathy with its developing prosthesis designs (Song E. K, 2013). This procedure can significantly reduce pain, restore physical function and improve quality of life (Liu, L, 2019). TKR can be performed simultaneously on both sides under the same anesthesia, or it can be performed in two unilateral stages under separate anesthesia. Concurrent TKR has been described as a safe and convenient procedure associated with higher patient satisfaction, faster recovery, and lower cost (Sheth DS, 2016).

The study aims to evaluate the early period pain, functional capacity, kinesiophobia, and quality of life of patients who underwent simultaneous bilateral total knee replacement surgery during the Covid-19 pandemic period.

Method

In this cross-sectional study, 12 volunteer patients who had a simultaneous bilateral total knee replacement at Beylikdüzü State Hospital between April 2020 and May 2021 and agreed to participate in the study were included.

Patients between the ages of 50 and 80 who had undergone TKR surgery for osteoarthritis, who could speak and understand Turkish, and who agreed to participate in the study were included in the study. Those who will undergo revision TKR surgery, have undergone major surgery on the extremity to be operated on, have comorbid diseases such as rheumatoid arthritis, cancer, neurological disease-causing functional disability, diagnosed psychiatric disorder, alcohol or drug addiction, verbal and/or auditory uncooperative patients who could not cooperate psychologically and/or perceptually were excluded from the study.

All surgical operations were performed by the same surgeon and surgical team using the same brand and type of prosthesis.

The patients were evaluated in the early phase after the operation (9-12 months after the operation). Demographic data of the patients were evaluated with the demographic data form prepared by us, pain status was evaluated with Visual Analog Scale, knee functionality was evaluated with Western Ontario Mc Masters Universities Osteoarthritis Index (WOMAC), kinesiophobia status was evaluated with Tampa Kinesiophobia Scale and quality of life was evaluated with SF-12.

Evaluation of Demographic and Clinical Information

Participants' personal information and clinical status (duration of disease, presence of comorbidity, medical treatment, etc.) were recorded.

Visual Analog Scale (VAS)

Participants are asked to select the point where they feel their pain on a 10-centimeter (cm) horizontal line. 0 - no pain, 10 - unbearable pain. Pain conditions are evaluated separately at night, during activity, and at rest (Reed M. D, 2014).

Western Ontario Mc Masters Universities Osteoarthritis Index (WOMAC)

WOMAC is a disease-specific, multidimensional, self-administered health status tool used in hip or knee OA. It consists of a total of 24 questions, with three sub-headings on pain (5 questions), stiffness (2 questions), and physical disability (17 questions). Each sub-parameter is scored between 0-4 points. An increasing score indicates worsening health status, decreasing score indicates improving health status. Turkish validity and reliability was done by Tüzün et al. (Tüzün E.H, 2005).

Tampa Kinesiophobia Scale

The scale developed by Miller, Kori, and Todd assesses patients' fear of movement or re-injury (Miller R. P, 1991). It consists of 17 items including injury, re-injury, fear, and avoidance parameters in work-related activities. An increasing score indicates higher kinesiophobia status. Its Turkish validity and reliability were performed by Yılmaz et al. (Yılmaz T. Ö, 2011).

S-12 Quality of Life Scale

Developed by Ware et al., the SF-12 Quality of Life Scale is a scale to evaluate the quality of life by taking 12 questions from 8 different sub-dimensions of the SF-36 Quality of Life Scale. The shorter the scale, the easier it is in terms of applicability. The scale has a different scoring method than the SF-36. In the short form SF-12, physical (SF12-PCS) and mental (SF12-MCS) component summary scores are calculated as sub-dimensions. The total score of the physical and mental component

summary of the scale varies between 0-100. An increase in the score indicates well-being, and a decrease indicates a state of disability. The validity and reliability study of the scale was conducted (Çelik D, 2016).

Results

The mean age of the participants was 65.33 ± 7.25 years, and the disease duration was 10.58 ± 4.35 years. It was observed that the rest, activity, and night pains of the patients were at minimum levels. According to the WOMAC score with a cut-off point of 39, it was found that the knee functions of the patients were in good condition. According to the Tampa Kinesiophobia Scale with a cut-off point of 37, it was determined that the patients had a high fear of movement. According to the SF 12 Quality of Life Scale with a cut-off point of 48.9, the patients were found to be at a good level in both physical and mental categories. Evaluation results are given in Table-1.

Table-1: Evaluation results	
Mean Age	65.33 ± 7.25
Disease Duration (Years)	10.58 ± 4.35
Woman/Man	11 W/1 M
Pain Rest	$0,16 \pm 0,57$
Pain Activity	$1,91 \pm 2,71$
Pain Night	$0,25 \pm 0,62$
WOMAC	$14,52 \pm 7,96$
Tampa	42.33 ± 6.16
SF-12 Physical	47.94 ± 7.54
SF-12 Mental	44.61 ± 8.38

Discussion

Osteoarthritis, an epidemiologically common disease, affects all races and both sexes. More than 80% of individuals over the age of 55 have radiographic findings of OA. Data from the Framingham osteoarthritis study report a prevalence of 11% in women and 7% in men (Felson D. T, 1987). In a study conducted in our country in a population aged 50 and over, the prevalence of symptomatic knee OA was 14.8%, and it was reported as 22.5% in women and 8% in men (Kacar C, 2005). In our study conducted during the pandemic period, the rate of women who underwent surgery was found to be more than the rate of men and the average age of the patients was found to be more than 55 years, in line with the literature.

In studies, simultaneous bilateral total knee replacement was associated with a similar reduction in pain intensity and improved function compared to unilateral total knee replacement (Alghadir A. H, 2020). In addition, it has been found that simultaneous bilateral total knee replacement in patients with bilateral knee osteoarthritis reduces the costs and rehabilitation process (Jenny J. Y, 2013). For this reason, we considered simultaneous bilateral knee replacement appropriate for the patients. We have demonstrated that postoperative pain management practices reduce pain and increase functional recovery in the early period.

In the literature, it has been found that TKR surgery successfully reduces pain, improves the functional level and quality of life in patients with severe knee OA (Baker P. N, 2007). Similarly, in our study, we revealed that the pain was at a minimum level in the early period evaluation results, and the physical and mental dimensions of the functional status, quality of life were in good condition.

As far as we know, there is no study in the literature examining the early stage fear of movement in patients with concurrent TKR. Our examination results showed that these patients had high levels of fear of movement. We think there may be several reasons for this. The fact that the pain that the patients felt before the operation is included in their memory and that these pains can be remembered depending on the movement. On the other hand, it can be taken into consideration that my patients who stayed at home due to the adverse conditions of the pandemic process did not have the opportunity to reach a sufficient level of physical activity. We think that more detailed evaluations with more participants should be made to fully reveal the reason for this.

Conclusions: It was determined that the early period pain, functional capacity, and quality of life evaluation results were good, but the results of the fear of movement evaluation were poor. This may be due to curfew because of the Covid-19 pandemic.

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P-84 A Drop Foot Case due to Herpes Zoster Infection During the Covid 19 Pandemic Period

Ozge TAHRAN

Abstract

Aim: Herpes zoster (HZ) is a common viral disease that typically presents a characteristic painful skin lesion. However, motor neuropathy is an infrequent complication of HZ infection. Current literature provides limited information about its evaluation and management. Therefore, here I report the physiotherapy practise in a case of a HZ patient who presented with sciatica and foot drop.

Methods: I describe a 61-year-old man who developed a severe right common peroneal nerve mononeuropathy after a rash consistent with HZ in the territory of distribution region of this nerve. The patient stated that he postponed going to the hospital due to the anxiety of Covid-19 contamination during the pandemic period. After nerve decompression surgery, patient was treated with physiotherapy program in addition to the medical treatment and ankle foot orthosis (AFO). Physiotherapy program consisted of transcutaneous electrical nerve stimulation; neuromuscular electric stimulation; hotpack; range of motion, stretching and strengthening exercises; walking training and AFO adaptation. Before and after the physiotherapy program pain was evaluated with Visual Analogue Scale (VAS), muscle weakness with manuel muscle test, functional impairment with Lower Extremity Functional Scale (LEFS) and quality of life with Short Form-36 (SF-36).

Results: At the end of the physiotherapy program that lasted for 5 months, pain intensity decreased by 1/10 from 9/10; dorsiflexor muscle strength reached 3-/5 from 1/5; evertor muscle strength reached 3-/5 from 2/5, plantar flexor muscle strength reached 5/5 from 4/5 in the affacted side; function improved by 43/80 from 19/80; quality of life improved in each subscore.

Conclusions: Applied physiotherapy program after nerve decompression surgery improved pain, muscle strength, function and quality of life in this case. To the best of my knowledge, this is a first-time report on the physiotherapy management of drop foot associated with HZ.

Keywords: Drop foot; herpes zoster; pain; peroneal nerve; physiotherapy.

Introduction and Aim

Herpes zoster (HZ) is a common disorder due to reactivation of the varicella zoster virus, which usually presents with a self-limiting vesicular rash (Arcos et al., 2019; Wolfe et al., 2006;). Sensory and motor complications of HZ are rare: 3 (1.5%) of 205 patients with HZ recently developed motor complications (Latheef et al., 2011). I present a case of peroneal nerve entrapment associated with HZ.

The purpose of this case report is to investigate the effectiveness of the physiotherapy program applied in addition to the medical treatment after surgery to the patient who developed drop foot due to HZ; and to contribute to the literature in terms of physiotherapy management of these case samples.

Case

A 61-year-old male patient was admitted to the hospital 6 months ago with the complaint of drop foot after sciatic nerve injury due to HZ infection. While the patient's sciatica complaints began earlier, he said he avoided going to the hospital during the pandemic period because he was afraid of COVID-19 contamination. He underwent peroneal nerve decompression surgery after detection of entrapment around the caput fibula in the right peroneal nerve in the EMG follow-up at the end of 15 sessions of physiotherapy treatment. Patient was referred to the physiotherapy program due to loss of strength and sensory problems in the right foot. The medical treatment the patient received during the physiotherapy program was as follows: He used 75mg Alyse tablet for 1 week; the dose was gradually increased to 300 mg and used for 4 months. In addition, he used 250 mg of Benexol tablet for 5 months.

Initial clinical evaluation showed muscle weakness (according to manuel muscle test) in the right tibialis anterior (1/5), peroneus longus (2/5), and gastrocnemius, (4/5) muscles, and tactile hyperalgesia in the right superficial peroneal nerve territory. The visual analog scale (VAS), lower extremity functional scale (LEFS) and Short Form-36 (SF-36) were used as other outcome measures. The VAS is a valid and reliable tool to assess pain intensity (Bijur et al., 2001; Price et al., 1983) where on a 10-cm line, “0” indicates “no pain” and “10” indicates “worst imaginable pain. The patient rated his pain intensity at 9 cm on the VAS. The Turkish version of LEFS, was used to evaluate functional impairment (Citaker et al., 2016). The LEFS is scored between 0 and 80, and a lower score indicates more disability. On initial evaluation, a score of 19 points in the LEFS was obtained. For SF-36, a high score indicates good health condition. The SF-36 is a reliable and valid scale to measure quality of life (Ware et al., 1992). The subscales (8 sub-dimensions) evaluate health between 0 and 100; and 0 (zero) points indicate poor health, while 100 (hundred) points indicate good health. The Turkish version of SF-36 was used in my study (Kocyigit et al., 1999). All the results of the patient's evaluations are shown in Table 1.

Table 1. Assessment results of the case before and after the physiotherapy programme

	Before Treatment	After treatment
Pain (VAS)	9	1
<u>Muscle strength</u>		
Right Tibalis Anterior	1	3-
Right Peroneus Longus	2	3-
Right Gastrocnemius	4	5
LEFS	19	43
<u>SF-36</u>		
Physical functioning	20	65
Role physical	0	25
Bodily pain	0	67,5
General health	5	40
Vitality	10	70
Social functioning	24	76
Role emotional	0	100
Mental health	12,5	50

VAS: Visual Analogue Scale; LEFS: Lower Extremity Functional Scale; SF-36: Short Form-36.

To manage pain the physical therapy program was started with transcutaneous electrical nerve stimulation (TENS): A biphasic symmetrical stimulus with pulse duration of 50µs and frequency of 100 Hz for 20 minutes was used. The intensity of stimulation was increased until the patient reported a mild tingling over their foot without pain. In addition to protect and increase muscle strength, 15 minutes of neuromuscular electrical stimulation (NMES) was applied to the tibialis anterior and peroneal muscles of the paretic foot once a day. A surge-alternating current with a frequency of 80 Hz was used. The 10-second stimulator consisted of 2 seconds of ramp up and 1 second of ramp down. The off time was 50 seconds. The amplitude was adjusted to induce muscle contraction without

affecting the patient's comfort. I also asked patient to contract their muscles voluntarily during NMES application. In the exercise program, exercises for the foot progressed from passive range of motion (ROM) to passive assistive, active, active resistant, and strengthening exercises. Towel scrunches with toes, marble pick-up with toes, toe-to heel rock, foot stretch, isometric dorsiflexion were also added to the program. A hotpack, as a superficial heating modality was used for 15 minutes before the stretching. The physiotherapist guided Achilles stretching exercises and walking adaptation. The patient was trained to properly use a rigid plastic ankle foot orthoses to prevent plantarflexion contracture. The positioning of the ankle in dorsiflexed was also taught to prevent further plantarflexion.

At the end of the physiotherapy program that lasted for 5 months, pain intensity decreased by 1/10 from 9/10; dorsiflexor muscle strength reached 3-/5 from 1/5; evertor muscle strength reached 3-/5 from 2/5, plantar flexor muscle strength reached 5/5 from 4/5 in the affected side; function improved by 43/80 from 19/80; quality of life improved in each subscore.

Discussion

To date, there is limited evidence on the physiotherapy treatment effectiveness for HZ infection resulting peroneal nerve entrapment and foot drop. However, this case evaluates the results of post-surgery physiotherapy treatment in 1 patient with a HZ infection resulting in foot drop. My findings showed that after 5 months of physiotherapy treatment my patient's pain relived; ankle muscles power increased; function and quality of life improved.

In a recent case study with bilateral peroneal nerve paralysis after gunshot injury; it was shown that physical therapy and rehabilitation program including neuromuscular electrical stimulation of denervated muscles and exercises, strengthened ankle muscles and improved symptoms and function (Saglam, 2020). Basakci Calik et al. (2017) showed that in a patient with drop-foot developed due to vasculitic neuropathy, applied physiotherapy program significantly improved functioning and quality of life by creating positive results in muscle strength and balance. This case report is notable for healthcare providers, especially for physiotherapists, due to the lack of experimental research on effective treatment of drop foot due to HZ.

Conclusion

Applied physiotherapy program after nerve decompression surgery improved pain, muscle strength, function and quality of life in this case. Further studies with large sample sizes are needed to determine the effects of physiotherapy in patients with peroneal nerve entrapment resulting foot drop.

Research should conduct on new methods that will enable patient-clinician communication, such as telemedicine applications, during periods when patients cannot leave the house and cannot reach the hospital, such as during the epidemic period.

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P-85 The Importance of Telemedicine Applications Increasingly Widespread with Covid-19

Fatma Meltem YURTSEVEN

Abstract

Aim: Pandemics such as Covid-19 can cause very challenging situations in health care delivery. The aim of this study is to examine the existing literature on telemedicine applications, whose impact we are increasingly feeling in our daily lives with the pandemic. Another aim of this study is to examine the place, importance, difficulties and opportunities of telemedicine applications in Turkey and in the world. Thus, a framework for telemedicine applications, which are increasingly taking place in routine health practices with the pandemic, will be presented.

Method: The literature research was made on TR Index, Pubmed and Google Scholar databases. Researches on telemedicine applications were compiled.

Results: During Covid-19 Pandemic, telemedicine applications have become increasingly widespread in the field of health services. As a result, it is seen that telemedicine applications are gradually increasing and on the way to becoming mainstream.

Conclusions: Infrastructure studies, information technologies, service quality criteria, legal frameworks and many other issues that will facilitate the use of telemedicine applications at every education level and age will need to be studied.

Keywords: Telemedicine, Covid-19, Health Care Delivery.

Introduction And Aim

Telemedicine applications, whose impact we are increasingly feeling in our daily lives with the pandemic, have an important place in routine health applications with the development of information technologies. The aim of this study is to examine the existing literature on telemedicine applications, whose impact we are increasingly feeling in our daily lives with the pandemic. Another aim of this study is to examine the place, importance, difficulties and opportunities of telemedicine applications in Turkey and in the world. Telemedicine applications can generally be defined as the use of telecommunication technologies to provide medical information and services (Lurie and Carr, 2018; Hollaneder and Carr, 2020). WHO has defined telemedicine as “health care provided when patients and health care providers are far from each other”. The determining factor in the creation of an environment for telemedicine practices is the distance between healthcare professionals and patients. In this context, the aim of telemedicine service is to overcome geographical barriers and deliver the required medical service to patients with information technologies. Tele-medicine applications have become a necessity in cases where it is not possible to access medical treatment due to the Covid-19 pandemic. Thanks to telemedicine, remote health counseling services have become an important service delivery on a global scale, as they contribute to social isolation, manage resources correctly, and prioritize patient admissions to the hospital. Therefore, telemedicine applications have increased with the pandemic. E.g; According to the data of New York University Langone Medical Center, hospital visits of patients decreased by more than 80% in March and April 2020, while the number of applications to telemedicine services increased in the same time period. Looking at the increase in telemedicine service, it was seen that the volume of emergency care increased to 1336, 15 days after 82 visits. Considering that extraordinary processes such as the pandemic have caused the emergency service applications to peak, the use of virtual emergency care offered by telemedicine reveals the critical role of the use of emergency service capacity in expanding. In this way, a mandatory transition to video visits in non-emergency situations was made and effective use of much-needed resources was ensured (Mann et al, 2020). In the Covid-19 pandemic, it was seen that federal institutions in the USA support telemedicine applications in terms of regulatory elements and financing. Various legal additional appropriation decisions were put on the agenda, and reimbursements were put into effect in

equal units for video telemedicine meetings and traditional face-to-face meetings. In addition, laws on medical licensing for out-of-state patient care were relaxed in some areas. Telemedicine equipment and high-quality internet access were increased for patients living in rural areas with various financial funds. In addition, the telemedicine enabled surgeons to perform many clinical applications via telemedicine with the regulations made in July 2019 in the USA. (Contreras et al, 2020). With the spread of telemedicine applications after the Covid-19 pandemic, great advances are expected for telesurgery in the next ten years. Telesurgery refers to the operation performed with the aid of a robot, provided that the surgeon and the patient are remote and separate. With the rapid change experienced after Covid-19, the positive contribution of 5G technology to data transmission in robotic surgery is a sign that telesurgery applications such as telemedicine can also affect the mainstream (Boabang et al, 2020).

Multimodal telemedicine in Sinjuhan province of West China can be given as another application example. The scope of the service consists of 5G technology, smartphone application and telemedicine network. In this way, various applications can be made. e.g; More than 800,000 medical personnel in local hospitals were able to receive tele-training on Covid-19. The training subjects were sample collection methods, standard diagnosis-treatment, prevention and infection control trainings for hospital infections, personal protection techniques and methods of disposal of medical wastes. In addition, with the establishment of multidisciplinary medical teams, rapid examination could be made to patients 24/7 via remote consultation networks. Out of those who were given tele-consultancy services, 75% were given arrangement of antiviral treatments, 68% were given complications management, 55% were given arrangement of respiratory treatments and 15% were given the service of confirmation of Covid-19 diagnoses. The telemedicine system was able to increase the accurate detection of the diagnosis of particularly difficult cases. It was also observed that online consultations and internet-based drug prescribing and distribution services are provided to eliminate the risk of cross-infection by ensuring that patients do not accumulate in outpatient clinics during Covid-19. Although there was an increasing trend of telemedicine in the last decade, the compulsory transition to telemedicine applications with the Covid-19 pandemic shown that; telemedicine can support long-distance clinical care, training and health management. In this context, the benefits expressed for telemedicine applications can be listed as follows (Hjelm, 2005).

- Better access to information
- Providing care that cannot be given due to long distances
- Improving access to service and increasing care delivery
- Development of vocational training
- Quality control of screening programs
- Reduction in healthcare costs

Although telemedicine is not a magic wand for now, it was seen through sample applications that it has the capacity to solve many problems in pandemic conditions. Telemedicine provided quick access to specialists who could not be reached physically. With the internet and smart phone applications, a transition to a versatile paradigm that provides more possibilities and comfort was achieved. Telemedicine processes applied in China and America can also be referenced for other countries and regions. The basic prerequisites of this process will be the transfer of sufficient financial resources to telemedicine applications, the technological infrastructure, the necessary political and legal regulations. When we look at the telemedicine carried out in Turkey during the pandemic process, it was seen that systems for live physician examinations were established in various units of some private institutions. Live interviews are provided in live and video format by appointment and through the equipment offered by information technology (www.ohsad.org.tr). Telemedicine applications facilitated access to health services during the pandemic process in Turkey. The directive related to telemedicine is the "Directive on Telehealth Service Implementation Procedures and Principles" which came into force in 2015. The scope of this directive covers the sea and air vehicles under voyage, the service provided by all public and private institutions, directly or indirectly, in the search and rescue activities in the Turkish Search and Rescue Zone. (www.noroloji.org.tr). In addition,

within the scope of telehealth and teleradiology services, regulations were made on E-Nabiz applications with Telemedicine and Teleradiology Circular 2019/16. Processes such as web-based access to the image of radiological examinations 7/24, image reporting, tele-consultation by radiologists, and evaluation of report quality can be done through the E-Nabiz application. Thus, telemedicine began to find ground in Turkey, especially in the field of radiology. E-Nabiz service can provide access to the relevant health records of both citizens and health professionals via the internet and various mobile devices by collecting the health data of citizens from health institutions (www.enabiz.gov.tr).

Although telemedicine potentially provides many possibilities and comforts, it also has its downsides. The main ones are; Deterioration of relations between health professionals and patients and their relatives, deterioration of relations between health professionals, problems regarding the quality of information in health, bureaucratic and institutional difficulties. It is a situation that is necessary to foresee the problems that were experienced and to be experienced today and to deal with the necessary regulations holistically. Because telemedicine applications may become mainstream in the near future for routine health applications, public health applications, emergencies (Zhen et al, 2020).

Conclusion

Telemedicine is developing rapidly with the development of technology. This development is followed closely by many countries. Telemedicine can improve the health access of individuals in remote areas, and contribute to the country's economy by reducing travel to distant areas to receive consultancy services (Amin and Gher, 2011). Telemedicine applications carried out during the Covid-19 pandemic made it possible to slow down the spread of the coronavirus epidemic, maintain social distance, focus on personal care practices, and provide limited supply for emergency patients. In addition, in this process, examples of opportunities and difficulties for telemedicine applications were formed, thus creating a learning opportunity. It seems that with the existing simple telemedicine infrastructure, it will be possible to make communication more fluent and facilitating in daily health service delivery. For example, by informing the patients about the laboratory results, the list of applications to the specialist physician can be shortened. Thanks to more advanced technological devices, monitoring and follow-up of patients receiving homecare can make patient-doctor communication more accessible. Such telemedicine services may continue as the opportunity arises for day-to-day clinical practice, even as the coronavirus subsides (Alaball et al., 2020). It is predicted that the next decade will bring telemedicine applications not only to routine clinical applications but also to the maturation of telesurgery due to the proliferation of healthcare-related connected devices and smartphone applications, as well as advances in 5G data transmission (Contreras et al, 2020). However, the importance of physical examination was emphasized in the declaration published by the World Medical Association. In the declaration, it is stated that telemedicine applications can be applied in the follow-up of chronic diseases in cases where it is not possible to access the physician. Protecting patient data, ensuring confidentiality in telemedicine applications, and obtaining consent of patients through informed consent forms for the features of this service is another subject mentioned (World Medical Association, 2018).

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P-86 Do Robots Used in Healthcare Replace the Nurse?

Kubra DIRI, Melek DEMIRAL, Hamiyet KIZIL

Abstract

Today, the importance of scientific knowledge is increasing rapidly and health care practices are in a process of constant change. In this process of change, nurses can achieve effective, functional and desired results only if they progress by integrating innovation studies into nursing services. In this sense, robots that can make quick decisions, save Money and achieve high success in dangerous ventures have taken their place in the field of nursing. However, with the introduction of robots in our lives, it has been a matter of debate whether robots can replace nursing care. This study was conducted to provide a perspective on whether robots can replace nurses.

Robots are machines that consist of electronic and mechanical units, can be programmed, and have the ability to perceive, learn, plan and act in order to interact with their environment. Robots for humanity are used and developed in many areas such as industrial, military, operational, cybernetic and health. In the field of health, there are fields such as surgery, rehabilitation and hospital robots. In addition, studies have concluded that communication robots can encourage the elderly to activate their communication connections with others and help care workers to effectively reduce their workload in the night shift. In addition, it is reported that care robots will be effective in integrated nursing care services, especially "measurement / monitoring".

As a result, it is thought that robots cannot replace health workers, but by integrating them into nursing care, they can reduce the workload in health care and increase the quality. Robots used in healthcare provide benefits in many ways such as reducing costs, reducing waste, improving patient care, providing enhanced measurability and traceability, but machines cannot replace nurses or human decisions. No matter how perfect the nursing robots are, they must cooperate and be controlled by nurses. Nursing, which is a Professional profession, should adapt to our changing world and it is necessary to equip the education of nurses with informatics for the use of such technologies. In order to fill this field, academic nurses and administrators involved in nursing education should take care that future nurse candidates benefit from technology.

Keywords: Health, Nurse, Robot, Technology,

Introduction

A robot is an electro-mechanical device that can perform autonomous or pre-programmed tasks. With its current definition, robots are devices consisting of electronic and mechanical units, capable of sensing and programmable. In another definition, robots are engineering products that can imitate the functions and behaviors of living things, have physical abilities and artificial intelligence, and contain interdisciplinary elements. Robots can work directly under the control of an operator or independently under the control of a computer program. Although human-like machines come to mind when robots are mentioned, very few robots are human-like. (Köse and Albayrak, 2020) Studies in the field of robotics today; industrial robotics, operational robotics, robotics in medicine and health, cybernetics, toy robots and hobby robots. (Köse and Albayrak, 2020) In the 21st century, the development of technology and the integration and integration of artificial intelligence into all areas of our lives have begun. Today, one of the most common areas of use of these robots has been health, with increasing innovation efforts. Innovation in nursing consists of various applications and processes, including determining patient needs and providing care, reducing costs, shortening the hospital stay of patients, and reducing the workload of nurses. (Sahan and Yıldız, 2020). During the care and treatment process, nurses have faced many problems throughout the profession. The high number of patients per nurse has been reached and the care times allocated to the patients have been shortened due to this, the nurses need to use a serious muscle power during the positioning of the patient, especially the elderly and overweight (obese) patients, and many nurses suffer from low back pain. While these problems

support the need for the use of robots in the field of nursing, it is a matter of debate whether these robots can work instead of nurses.

This work; It was made to provide a perspective on whether robots used in medicine and health can replace nurses.

Artificial Intelligence and Robots in Healthcare

Artificial intelligence in healthcare is a broad term used to describe machine learning algorithms, software, or artificial intelligence (AI) to mimic human cognition in the analysis of complex medical and healthcare data. Specifically, AI is the ability of computer algorithms to approximate outcomes based on input data alone.

The primary goal of health-related AI applications is to analyze the relationships between prevention or treatment techniques and patient outcomes. Artificial intelligence programs are applied for applications such as diagnosis processes, treatment protocol and drug development, personalized medicine, patient monitoring and care. AI algorithms can also be used to analyze large amounts of data through electronic health records for disease prevention and diagnosis. In addition, hospitals may need AI software to increase cost savings, increase patient satisfaction, meet staffing and workforce needs, and support initiatives. Currently, the United States is investing billions of dollars to advance the development of artificial intelligence in healthcare. Companies are optimizing staffing levels by reducing the number of inpatients and length of stay. In this way, technologies are developed to help health managers improve their work.

Among artificial intelligence systems, robots first entered our lives with the surgical assistance offered by robot arm technologies that emerged in the 1980s. Over the years, artificial intelligence (AI)-powered image processing and data analysis has developed medical robots and allowed them to operate in other areas of healthcare.

Artificial Intelligence in Nursing Care

Nursing is a knowledge discipline and practice profession based on ideal values as an integral part of human health and well-being. The development of robot technology and artificial intelligence in the twenty-first century also affects nursing practices. "How is nursing practiced today and who can practice nursing?" The answer to this basic question is critical to understanding how nurse robots can replace human nurses in practice or how much they can change nursing (Locsin and Ito, 2018). Artificial intelligence is used in many areas in nursing, from preparing treatment plans to facilitating repetitive work and creating drugs (Pepito and Locsin, 2018). The integration of the developed robots into the profession and the progress of the nursing profession by adapting to this innovative innovation process can offer a solution for the problems experienced. The employment problem in our country, especially in the nursing profession, A small number of nurses who have to take care of too many patients, high workloads and laying the groundwork for professional errors are among the big problems we face and continue to face. A study shows that an increase in the number of patients per nurse will cause an increase in patient deaths and burnout experienced by nurses. (Saraee, Joshi and Betke, 2017)

These robots are now used not only in the operating room, but also in clinical settings to support healthcare workers and improve patient care. During the COVID-19 pandemic, hospitals and clinics began using robots in a wider variety of tasks to reduce their exposure to pathogens. The fact that health robots increase operational efficiency and reduce risk provides benefits in many different areas. For example, robots can independently clean and prepare patient rooms. In this way, they help limit human contact in the infectious disease departments of hospitals. Robots with drug identifier software using artificial intelligence; it saves time in identifying the right drug, matching it with the patient and distributing it to the patients. (Intel, 2020)

Will robots replace nurses?

Today, in a nurse robot; It is considered necessary to have functions such as mobility, orientation, and the ability to speak at a level of intelligence that will allow the evaluation of patient conditions, and the importance of developing these functions according to the service to be given is emphasized. E.g; While low speaking ability and mobility are considered sufficient for a guidance robot in a hospital lobby, scientific competence and competence based on nursing theories are defined as important requirements for a nurse robot. Nurse robots have to have functions that can evaluate the patient from the patient's facial expression, tone of voice and body language and empathize with the patient. At the same time, the nurse robot should be able to speak specific to different patient characters and adjust it automatically. By deciding whether the patient is a child or an elderly person, he should be able to shape his communication accordingly (Huang et al., 2011). In this case, will nurse robots have these competencies? When a robot nurse makes a mistake, who will take responsibility for it? problems such as One of the main reasons artificial intelligence technologies seem to threaten the nursing profession is the possibility of outperforming humans. However, these machines cannot perform better than humans. Human performance in most cases includes a subjective, ever-changing, and especially individual and holistic quality (The Economist, 2016).

For this reason, it is the optimum combination of manpower and artificial intelligence. Combining the advanced analysis of artificial intelligence with nurses' experience, knowledge and critical thinking skills will enable better quality patient care at lower costs (Neill, 2013). Nurses will become involved in the finer parts of patient care as they leave personalized nursing interventions such as vital signs, medication management and bed care to the machines. Tanioka (2017) argues that the tasks of robots used in healthcare will be limited to simple applications such as cleaning and transportation. In order for nursing to continue to serve humanity and survive as a profession and practice discipline, the nature and knowledge of nursing must be redefined based on the conditions of the period. (Lee et al., 2013).

Conclusion

As a result, the nursing profession, which has insufficient employment and excessive workload, needs to reduce this workload by integrating with innovative products. In patient care, there are applications that need many support mechanisms such as positioning the patients and moving the patient. The support of technology and robots in both the care and treatment process will reduce this workload and increase the possibility of holistic evaluation by approaching the patient more empathetically. However, it is not possible to leave this profession group, which constantly updates its knowledge and is in one-to-one communication and contact with humans, to independent robots. However, nurses will have to take a responsibility to supervise these robots, and to fill this field, academic nurses and administrators involved in nursing education should take care that future nurse candidates benefit from technology.

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P-87 Evaluation of the Covid-19 Vaccination Status of Healthcare Workers

Zuhal EMLEK SERT, Sevcen TOPCU

Abstract

Aim: Health workers, trusted by their communities, can be a valuable resource to promote successful vaccination campaigns and manage expectations. Therefore, health workers' attitudes as sociated with Covid-19 vaccination directly affect the community's vaccination status.

Methods: The aim of this review study is to examine studies evaluating attitudes of health workers towards the covid-19 vaccine. All studies were included in this review study if they met the following criteria: (a) conducted with health workers, (b) evaluating attitudes of health workers towards the covid-19 vaccine, (c) conducting between December 2019-May 2021. MEDLINE, CINAHL, COCHRANE, SCOPUS, EBSCOhost, PubMed, Web of Science, DergiPark, Google Scholar data bases we researched to identifyeligible studies. 11 studies were deemedeligible for inclusion in the study.

Results: Studies showed that the Covid-19 vaccine acceptance rate is higher for physicians, environmental health workers, and health administrators than for nurses. Health workers stated that the reasons for their vaccine hesitancy were the lack of adequate clinical studies, concerns about complications, that the COVID-19 vaccine would not provide immunity for a long time, distrust of pharmaceutical companies, and development of natural immunity against the COVID-19.

Conclusions: Vaccine hesitancy and rejection is a major obstacle to the implementation of vaccination programs. Healthcare workers play a key role in reducing the burden of the pandemic, being a role model for preventive behavior, and also in vaccinating the community. More data on vaccine safety may be provided by assessing doubts about vaccinesafety in order to increase vaccine acceptance among health workers.

Keywords: Covid-19, Healthcare workers, Vaccination, Rejection, Hesitancy.

Introduction and Aim

At the end of 2019, a highly contagious new corona virus (SARS-CoV-2, Covid19) that causes severe acute respiratory syndrome emerged in Wuhan, China, and quickly spread to other countries around the world. The World Health Organization (WHO) declared COVID-19 a pandemic in March 2020 and has since infected millions of people around the world. The COVID-19 pandemic has had a negative impact on people's health, psychology, behavior and quality of life, and has also impacted the world economy (Pataka A. et. all., 2021).

In order to be protected from all these negativities, many applications have been used so far to slow down and protect the transmission of Covid-19. These; various measures and protocols such as wearing masks, social distance, washing hands frequently with soap and water, travel/curfews (Pataka A. et. all., 2021; Agyekum et. All., 2021; Qattan et. all., 2021). However, it has been seen that these measures are not sufficient to stop the spread of Covid-19. Therefore, vaccine development and administration is one of the most promising public health interventions (Agyekum et. All., 2021; Dzieciolowska S. et. all., 2021; Qattan et. all., 2021). For decades, vaccines have been recognized as the best method for controlling rapidly spreading infectious diseases (El Hadi et., all., 2021). Vaccines are among the greatest achievements of medical science to mankind, ranking eighth on the list of "greatest inventions since the invention of the wheel" in The Atlantic Journals' poll of distinguished historians, and fifth among "ten inventions that changed the world" according to National Geographic. . WHO advocates that vaccines are "one of the most successful and cost-effective interventions to improve health data" (Yıldız et., all., 2021).

Many vaccines for Covid-19 have been recognized globally as safe and effective for human use, including Pfizer, Oxford/AstraZeneca, Moderna, Janssen, Sputnik V, Sinovac, and Sinopharm

(Agyekum et. All., 2021). However, for social immunity, it is not enough to develop a vaccine, it is necessary to vaccinate a sufficient number of people (Gallup, 2019; Hornsey, Harris and Fielding, 2018). To control viral contamination, to provide necessary social immunity and to stop the pandemic; It is very important that more than 82% of the population is vaccinated. To reach this conclusion, the vaccine must have strong acceptance among the population and a low level of hesitation (Elhadi et. all., 2021). WHO has recognized vaccine hesitancy as one of the top ten health threats globally (Gasmelseed A. et. all., 2021; Fares et. all., 2021; Pataka et. all., 2021). However, the success of any vaccination program depends on high vaccine acceptance and implementation (Qattan et. all., 2021).

Governments globally have given priority to high-risk groups in vaccination. Healthcare workers are at high risk of contracting COVID-19 because of their direct or indirect contact with bodily secretions, COVID-19 patients, visitors, and other healthcare workers who may have been exposed to COVID-19 (Agyekum et. All., 2021; Elhadi et al. . all., 2021; Paudel et. all., 2021). However, the attitudes of healthcare workers towards the vaccine and their intention to use the vaccine and recommend it to their patients play a decisive role (Pataka et. all., 2021; Qattan et. all., 2021). It has been determined that some healthcare workers in the world and in our country have hesitations against vaccines (Elhadi et. all., 2021). This is a major concern for the world (Dzieciolowska S. et. all., 2021; Elhadi et. all., 2021). They are the most reliable sources of information and their doubts about vaccines will affect other people as well (Elhadi et. all., 2021). It has been reported that healthcare workers can convey their negative attitudes and hesitations towards vaccines to their patients or recommend fewer vaccines (Pataka et. all., 2021; Qattan. et. all., 2021). Patients rely on the opinions of healthcare workers when it comes to vaccination (Pataka et. all., 2021) Measures to increase acceptance of COVID-19 vaccines are critical to prevent the spread of COVID-19 (Paudel et. all. , 2021; Gasmelseed A. et. all., 2021) and the success of the immunization program depends on the acceptance of the vaccine by healthcare workers, who play a crucial role in vaccination. Factors that may contribute to the acceptance and rejection of the d-19 vaccine are very important, especially the opinion of doctors and nurses about vaccines, known as "prevention advocates" (Gasmelseed A. et. all., 2021). Therefore, it is vital to address vaccine hesitancy among healthcare workers (Dzieciolowska S. et. all., 2021; Qattan et. all., 2021).

In order to overcome vaccine hesitancy; It is necessary to determine the current situation by conducting research on this subject and to know the exact reasons behind it. In addition, healthcare workers represent vaccine guidance and a reliable source of information for the general population. Healthcare workers can protect the individual and society against misleading and confusing information. Therefore, the attitudes of healthcare workers will affect their health and the health of the community (Fares S. et. all., 2021).

Recent reports show that many healthcare workers are hesitant to get the COVID-19 vaccine or delay getting it. For example, according to a study conducted in December 2020; it has been determined that 29% of healthcare workers are reluctant to have the Covid-19 vaccine (Biswas et. all., 2021). Studies have shown that not all healthcare workers are ready to accept Covid-19 vaccines when available in their country. For example, a study conducted in the Democratic Republic of Congo found that only 28% of healthcare workers are willing to get the COVID-19 vaccine. Among the reasons for hesitation in accepting Covid-19 vaccines are; Concerns about vaccine safety, side effects, and speed of vaccine development/approval have been identified (Agyekum et. All., 2021).

Conclusion

Vaccine hesitancy remains a widespread problem worldwide (Dzieciolowska S. et. all., 2021). People often rely on the knowledge and actions of healthcare workers to guide their decisions (Agyekum et. All., 2021). Healthcare workers are a reliable source of information on vaccination to patients. For all these reasons, it is clear that the acceptance or rejection of the Covid-19 vaccine by healthcare workers will highly affect the acceptance of the Covid-19 vaccine in the society.

Therefore, reducing the acute pandemic burden, meeting general health challenges in Covid-19, determining vaccine acceptance and hesitation among the general population and healthcare workers; it is very important in formulating policy plans and evaluating available resources (Elhadi et. all., 2021).

Consequently, hesitancy and rejection of the COVID-19 vaccine among healthcare workers could reverse hard-won progress in public confidence in the COVID-19 immunization program. Urgent and specific strategies need to be developed to address their concerns to ensure optimal vaccine acceptance among healthcare workers.

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P-88 Investigation of Nurses' Care Behaviors for Individuals with Infectious Diseases

Melek DEMIRAL, Kubra DIRI, Hamiyet KIZIL

Abstract

Introduction and Aim: Nursing is a profession that takes care professionally. Patients' needs Quality care is important in order to meet the needs of the people and increase their well-being. Nursing care quality of patients satisfaction is one of the important factors affecting the quality of care. To maintain and improve the quality of care nurses encounter many different infections during their work. infectious diseases microorganism They are diseases caused by very small creatures called Infectious diseases with high risk of transmission of the modern world among its serious problems. Although there are various protection methods against infectious diseases, 100% effective protection cannot be provided. In our country, caregivers of patients with high-risk infectious diseases, which are increasing day by day, Nurses are more at risk of contracting infectious diseases. In our society, people with these diseases how the nurses who care for the patient directly approach these patients and led to the examination of the care behavior they gave. Stigma is often associated with the spread of disease and prevent the emergence of the disease and prevent patients' right to access treatment. In the war against stigma It is known that nurses will take the lead in breaking down this wall of stigma and silence. In this respect, nurses important duties and responsibilities. In this study, nurses care for individuals with infectious diseases. The descriptive study was conducted to determine their behavior.

Method: The sample of the study consists of 200 nurses working in various clinics of a hospital in Istanbul. "Structured nurse information form" and "Care Behavior Scale" were used to collect data. Data SPSS With the 21.0 program, frequency was analyzed using independent groups t-test and one-way variance.

Results: 64.7% of the nurses participating in the study had sufficient knowledge about infectious diseases, 41% stated that they comply with the rules of safe use of medical supplies. 50.7% of the nurses Having a contagious disease partially affects the willingness to give care, 51.7% of the respondents stated that the behavior of giving care to the individual stated that it was not affected. 48.8% of the nurses have an infectious disease while opening the vascular access of the patient / taking blood He stated that he had not asked. While 41.8% of the participants care for individuals with contagious diseases, 87% of them are satisfied with their care-giving behaviors even if they are in the place of individuals with contagious diseases. stated that he will stay. When the answers given to the Care Behavior Scale were examined, the highest mean ($77.1\% \pm 0.76$) While it was given for the expression "knowing how to administer interventions such as injection and intravenous", the lowest mean It was determined as ($13.4 \pm 1.30\%$) "Ensuring the participation of the patient in the planning of care". Assurance with the overall scale, The sub-dimensions of respect and commitment sub-dimensions of individuals with infectious diseases It was seen that there was a significant difference according to the effect status and Cronbach's alpha value of the scale was 0.867. ($p < 0.05$).

Conclusion: Nurses' concerns while giving care to individuals with contagious diseases and their care behaviors was found to be affected. Increasing awareness of nurses about infectious diseases through in-service training recommended.

Keywords: care, infectious disease, stigma

Introduction and Aim

Infectious diseases; Caused by exposure to microorganisms, parasites or their toxic products. It can cause infection by entering the human body through inhalation, contact, droplets or blood (Ogun and Akkoyunlu, 2019). Microorganisms need a living or non-living environment to survive. Many of the environments where microorganisms multiply are sources of infection and can threaten public health (Aksoy and Arıkan, 2016).

The society's learning that an invisible microbe causes illness and death can lead to unrealistic fears and panic (Sarı and Khorshid, 2008). In this respect, infectious diseases can be stigmatized in society (Özdoğan, 2007).

Nursing care is a professional process founded on scientific foundations since Florence Nightingale. Leninger emphasized the importance of care in the nursing profession with the discourse “care is nursing and nursing is care” (Karaca and Durna, 2018). Factors related to the patient and factors related to the provider determine the quality of care. The satisfaction of patients with nursing care behavior depends on the bond between patient and nurse and the progress of care (Birol, 2013).

While practicing their profession, nurses are faced with traumas, physical, chemical, biological and psychological/social harms caused by work and working environment (Polat et al. 2017).

Both the presence of infectious disease agents in the working environment and the frequent necessity of close contact with people with these agents and infected material cause biological diseases and infectious diseases to be seen frequently in healthcare workers (Hasde and Oğur, 2011). While the sharp-drilling medical instruments used by nurses during care may cause injuries, various infectious agents that can be transmitted from person to person through blood, droplets and respiration constitute a risk source for nurses working in the hospital environment (Okutan and Saritaş, 2016).

Stigmatization can be experienced in HIV/AIDS, Hepatitis-B/C, tuberculosis, syphilis, mental diseases, epilepsy, physical anomalies, alcohol and drug addictions, physical and sexual abuse, race and gender (Terzioğlu, 2004). The basis of stigmatization and discrimination behaviors stems from fear and lack of sufficient information. Bayrak et al. In a study they conducted with 126 nurses and physicians working in a training and research hospital, it was determined that the reason for the prejudice against HIV/AIDS among healthcare professionals was due to the lack of knowledge about the disease (Bayrak et al. 2014). The incurability of some diseases, fear of death, false information and beliefs can cause stigmatization among nurses (Terzioğlu, 2004).

The presence of prejudice against these diseases among nurses who play a role in the prevention and treatment of diseases with a high risk of transmission can cause problems (Ataç and Buzlu 2008). Care, which is the basis of the nursing process, is a mechanism that reveals professionalism by revealing knowledge and skills. Patient satisfaction is a direct indicator of the quality of care. Many studies in the nursing literature show that; nurses are not willing to care for individuals with infectious diseases or they express that there will be a change in their behavior and attitude. In order to increase the quality of care and to carry the professional profession of nursing forward, it was planned and carried out in order to learn the thoughts of the nurses who work one-on-one with the patients in the clinic and to examine the care behavior of individuals with infectious diseases.

Method

Type of Research

The research was conducted in a descriptive type.

Places of Research

The research was conducted with nurses working in two different public hospitals in Istanbul/Turkey. Written permission was obtained from the relevant institutions in order to conduct the research.

The Universe of the Research

The population of the research consisted of nurses working in the service and intensive care units of the hospitals mentioned between November-December 2019 and January 2020. In the research, the universe was studied. The sample of the research; The purpose of the study was explained and 201 nurses who were given permission to participate in the research after the information were formed.

Data Collection Tool

"Nurse Descriptive Information Form" and "Caring Behaviors Scale" developed by the researchers were used for the data. Nurse Introductory Information Form consists of a single section. In this form, the education level of the nurses, the data on the disease and infectious diseases are included. It consists of 14 questions in total.

Caring Behaviors Scale, Wolf et al. (1994), it is a 42-item, 5-dimensional and bi-directional scale. Wu et al. (2006) was created by. In the study, the Care Behavior Scale consisting of 24 questions was used in order to evaluate the care behavior of nurses. The scale consists of a 6-point Likert-type scale (1=never, 2=sometimes, 3=sometimes, 4=usually, 5=often, 6=always). It takes an average of 20 minutes to answer the Nurse Descriptive Information Form and the Care Behaviors Scale.

Data Collection

Before applying the Nurse Descriptive Information Form and the Care Behaviors Scale, each nurse was interviewed, informed about the research, and written consent was obtained from the nurses about participating in the research. The questionnaire form was left to the nurses who agreed to participate in the study in the same interview and the questionnaire was taken back on the same day.

Evaluation of Data

The data obtained from the research were analyzed using the SPSS 21.0 program using frequency, independent groups t test and one-way variance. In the analysis of data; numerical variables are shown as mean±standard deviation, median (minimum-maximum) value. Categorical variables are shown as numbers and percentages. For sub-dimensions that differ significantly, TUKEY test was applied to determine from which group the difference originated. Among the independent variables of the study, there are variables such as age, gender, educational status, and the duration of continuing the profession. The dependent variable is the Caring Behaviors Scale. The significance level was taken as $p<0.05$. Reliability analysis was performed to determine the reliability levels for the overall scale and its sub-dimensions used in the study, and the cronbach alpha coefficient was obtained.

Ethical Dimension of Research

For the ethical suitability of the study, approval was obtained with the decision numbered 2121 of the Istanbul Training and Research Hospital Ethics Committee. Official permissions were obtained from the institutions where the research would be conducted, and written consent was obtained from the nurses.

Results

In our study, 51.7% (n=104) of the nurses were between the ages of 26-35, 76.6% (n=154) were female, 60.2% (n=121) were undergraduate graduates, and 66.7% (n=134) working period varies between 1-5 years.

Table 1. Socio-demographic characteristics of nurses (n=201)

Groups	Frequency(n)	Percent (%)
Age		
19-25	30	14,9
26-35	104	51,7
36-50	67	33,3
Gender		

Man	47	23,4
Woman	154	76,6
Education Status		
High school	50	24,9
Degree	121	60,2
Master's Degree	30	14,9
Working Year		
1-5 year	134	66,7
5-10 year	45	22,4
10+ year	22	10,9

64.7% (n=130) of the nurses thought that they had sufficient knowledge about infectious diseases, 56% (n=112) had sufficient knowledge about the safe use of sharps and punctures, and 81.6% (n=164) would participate in the training in case of in-service training. (Table 2)

50.7% (n=102) of the nurses stated that having a contagious disease partly affected their willingness to give care, 51.7% (n=104) did not affect their behavior towards the patient, 41.8% cared for an individual with a contagious disease. 87% (n=174) stated that they would be satisfied with their care behavior. (Table 2)

51.2% (n=103) of the nurses did not ask the patient whether he had a contagious disease while establishing an intravenous line/drawing blood, 97.5% (n=195) used special disposal waste bins after the use of sharps, 87%. 0.6 of them (n=176) changed their gloves or washed their hands after caring for the patient, 76.5% (n=153) had a serological test within 6 months - 1 year, and 78.1% (n= 157) was found to apply to the infection control committee in cases of doubt. (Table 2)

Table 2. Nurses Introductory Information form Response Distribution

Features	n	%
Status of Having Sufficient Information on Infectious Diseases		
Yes	130	64,7
Partially	71	35,3
The state of having sufficient knowledge about the safe use of sharp medical instruments and complying with the rules of safe use		
I have enough knowledge	112	56,0
I don't have enough information	6	3,0

I follow the rules of safe use	82	41,0

In case of in-service training, participation in training

Yes	164	81,6

No	37	18,4

The situation in which the patient's infectious disease affects the willingness to provide care

Yes	46	22,9

Partially	102	50,7

No	53	26,4

The effect of the disease on the behavior of individuals with a contagious disease

Yes	30	14,9

Partially	67	33,3

No	104	51,7

Anxiety when caring for people with communicable diseases

Yes	84	41,8

Partially	78	38,8

No	39	19,4

The state of being satisfied with the self-care behavior of individuals with infectious diseases

Yes	174	87,0

Partially	26	13,0

The situation of asking if the patient has a contagious disease while opening the vascular access / taking blood

Yes	98	48,8

No	103	51,2

The use of special disposal waste boxes after the use of sharp and piercing medical instruments

Yes	195	97,5
Sometime	5	2,5

Glove change / hand washing status after care

Yes	176	87,6
No	25	12,4

Frequency of serological testing

6 month - 1 year	153	76,5
1-3 year	47	23,5

Application to the infection control committee in cases of doubt

Yes	157	78,1
No	44	21,9

When the distribution of the answers given to the items of the care behavior scale was examined, the highest average was given for the expression "Knowing how to administer interventions such as injections and intravenous", while the item with the lowest average was determined as "Ensuring the participation of the patient in the planning of care".

When the change of the care behavior scale according to education level was examined, it was seen that the sub-dimensions of knowledge, skills and commitment differed significantly according to the education level. ($p<0.05$) For knowledge and skill sub-dimension; While the average of nurses with high school graduates was found to be significantly higher than those with a master's degree, for the sub-dimension of commitment; It was determined that the mean of nurses with undergraduate and graduate degrees was significantly higher than those with high school graduates. (Table 3)

When the change in the care behavior scale according to the effect of the patient's contagious disease on the willingness to give care was examined, it was observed that the total of the scale and the sub-dimensions of being respectful and commitment differed significantly according to the effect of the patient's contagious disease on the willingness to give care. ($p<0.05$) For the overall scale; the mean of those who do not affect the willingness to give care because of the patient's infectious disease is significantly higher than those who affect and partially affect them. For the sub-dimension of being respectful; for the sub-dimension of commitment; It was found that the patients' having a contagious disease affected the willingness to give care and those who did not partially affect the average of those who stated that it was significantly higher. (Table 4)

When the variation of the care behavior scale according to the working time was examined, the sub-dimensions of assurance and commitment showed a significant difference according to the working

time. ($p < 0.05$) For the sub-dimension of commitment; The average of those working for 10+ years is higher than the group working for 1-5 years and 5-10 years.

When the caring behavior scale is examined according to the state of anxiety while giving care to individuals with infectious diseases, there is no significant difference between the overall scale and the sub-dimension of being respectful ($p > 0.05$).

		n	Mean	SS	t	p
Total	High School	50	4,97	0,33	1,661	0,193
	Degree	121	5,09	0,42		
	Master's Degree	30	5,05	0,40		
	Total	201	5,05	0,40		
Assurance	High School	50	5,05	0,32	2,243	0,109
	Degree	121	5,19	0,43		
	Master's Degree	30	5,12	0,45		
	Total	201	5,14	0,41		
Knowledge and skill	High School	50	5,51	0,46	3,425	0,034*
	Degree	121	5,36	0,44		
	Master's Degree	30	5,24	0,53		
	Total	201	5,38	0,47		
Be respectful	High School	50	4,87	0,49	2,250	0,108
	Degree	121	5,05	0,54		
	Master's Degree	30	5,07	0,47		
	Total	201	5,01	0,52		
Loyalty	High School	50	3,18	1,32	5,933	0,003*

Degree	121	3,85	1,26		
Master's Degree	30	4,00	1,20		
Total	201	3,71	1,30		

P<0,05

Sub-dimensions of the scale		n	Mean	SS	F	p
Total	Yes	46	5,10	0,43	3,256	0,041*
	Partially	102	4,99	0,37		
	No	53	5,14	0,39		
	Total	201	5,05	0,40		
Assurance	Yes	46	5,19	0,47	1,679	0,189
	Partially	102	5,09	0,40		
	No	53	5,21	0,36		
	Total	201	5,14	0,41		
Knowledge and skill	Yes	46	5,33	0,50	0,528	0,591
	Partially	102	5,41	0,44		
	No	53	5,35	0,49		
	Total	201	5,38	0,47		
Be respect	Yes	46	5,12	0,53	5,788	0,004*
	Partially	102	4,89	0,50		

	No	53	5,14	0,49		
	Total	201	5,01	0,52		
Loyalty	Yes	46	3,98	1,24	5,633	0,004*
	Partially	102	3,41	1,27		
	No	53	4,04	1,29		
	Total	201	3,71	1,30		

P<0,05

Discussion

In this study, which examined the care behavior of nurses for individuals with infectious diseases during individualized care, it was determined that most of the nurses (64.7%) had sufficient knowledge about infectious diseases, and their participation in training (81.6%) in case of in-service training about infectious diseases. has been determined. Kostak et al. (2009) suggested in-service training to change attitudes towards AIDS in a positive way.

While it was determined that the majority of the nurses participating in the study (97.5%) used special disposal waste boxes after the use of sharps, it was determined that they had sufficient knowledge about the safe use of sharps and medical instruments and complying with the safe use rules (97%). In the study conducted by Uçan et al. (2006), it was determined that 49.9% of the nurses did not know how the wastes of patients with positive serological tests were disposed of.

In the study, it was found that nurses (87.6%) (n=176) changed gloves/washed their hands after giving care, while (76.5%) routinely had serological tests within 6 months - 1 year and (78.1%) in cases where it was suspected. It was determined that he applied to the infection control committee. Uçan et al. (2006), it was found that 69.7% of the nurses did not have them done regularly. Considering the year of the study, it is seen that nurses have changed in a positive way in order to be protected from infectious diseases and to take precautions.

It was found that the majority of the nurses (50.7%) (n=102) had a contagious disease that partially affected the patient's willingness to provide care, and (51.7%) the illness did not affect the behavior of individuals with a contagious disease. =84) was found to be anxious while giving care to the patient. In a study by Ataç and Buzlu (2016), it was determined that the majority of nurses did not want to share the same room with a patient diagnosed with HIV/AIDS, did not want to work in the same environment with individuals diagnosed with HIV/AIDS, and were undecided about being friends with patients diagnosed with HIV/AIDS. In addition, 53.7% of the nurses participating in the study stated that there would be no difference between the care they gave to patients with HIV/AIDS and the care they gave to other patients in the service, which supports the findings of our study. (Ataç and Buzlu, 2016).

When the care behavior scale was examined, it was determined that undergraduate and graduate nurses were more committed, while high school graduate nurses were found to be higher in skill than the undergraduate group. In the literature related to this research result, Tercan et al. (2017), it was seen that there is a significant difference between high school nurse students in continuing the

profession after graduation. It can be deduced that undergraduate nursing education increases the sense of commitment to the profession on the students (Tercan et al. 2017).

When the distribution of the answers given by the nurses participating in the study to the items of the care behavior scale was examined, the highest average was determined as "Knowing how to administer interventions such as injection and intravenous". From here, it can be explained that nurses have the necessary knowledge about invasive interventions in care and use them as skills.

Conclusion

As a result, it was determined that the majority of the nurses participating in the study increased their anxiety while giving care to individuals with infectious diseases and negatively affected the desire to care. The negative attitude of nurses towards the patient during the care period may affect the treatment process of the patient and the quality of care. Patients who feel that they are discriminated against may decrease their adherence to treatment, become depressed, and may be reluctant to seek support from health institutions. In order to prevent these problems, it is recommended to increase the knowledge and awareness of the nurses working in the clinic by organizing in-service training programs about infectious diseases.

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P-89 Investigation of Nurses Perceptions of Spirituality and Spiritual Care

Mujgan SOLAK

Abstract

Aim: This study was conducted as a descriptive study to examine nurses' perceptions of spirituality and spiritual care.

Method: Research İzmir Province T.C. It was done in a State Hospital belonging to the Ministry of Health. The universe of the study consisted of all nurses (n=187) working in this State Hospital. Since it was aimed to reach the entire universe, sample selection was not made. 130 nurses who accepted the study constituted the sample of the study. Data were collected using a questionnaire containing socio-demographic characteristics and the "Spiritual and Spiritual Care Perception Scale (MMPS)". Written and verbal permissions were obtained from the necessary institutions and nurses participating in the study in order to conduct the study.

Results: 47.7% of the nurses participating in the study were in the 29-38 age group, and the mean age was 35.06 ± 0.56 . Of the nurses participating in the research, 82.3% were women, 86.9% were married, 53.1% had a bachelor's degree, 55.4% worked as a service nurse, 72.3% worked 40-50 hours, 58.5% worked more than 10 years. determined to be in the profession. In the scale of nurses' perceptions of spirituality and spiritual care; 'I think that nurses can provide spiritual care by being compassionate, interested and friendly while giving care' item score average is the lowest (=1.75), 'I think spirituality only includes going to any place of worship (mosque/church)' item score average is the highest (=3.57).

Conclusion: According to the results of the research, it was determined that the nurses' perceptions of spirituality and spiritual care were moderate. As a result of the statistical analysis, a significant difference was found between the education level and marital status of the nurses participating in the study and the average score they got from the spirituality and spiritual care scale.

Keywords: Nursing; Spiritual Care; Spirituality

Introduction and Aim

Humans are creatures with biological, psychological, spiritual, social and cultural dimensions. A problem in one area can affect all other areas. If there is harmony in all human dimensions and there is no problem, one can talk about health (Hutchinson, 1997; Öz, 2004).

Although spirituality in nursing is not a new concept, efforts to explain the concept intensified in the 19th century, when modern medicine began. In the 1980s, interest in the nursing literature increased and spiritual, psychosocial and emotional aspects of nursing began to be expressed. Nursing theorists of this period saw people as a whole combined with their ability to perceive the world in and around them (Ergül and Bayık 2007; Martsof and Mickley, 1998; Tanyi, 2002). For a long time in the nursing literature, information on spiritual care has been discussed in a narrow framework, especially in Muslim and Christian societies, as it is associated with faith and religious practices. For this reason, spiritual coping strategies are mostly limited to religious belief. However, spirituality is a concept that includes religion but is not limited to religion and has a wider dimension than the concept of religion. Spirituality includes the search for meaning and purpose in life, while religion includes beliefs and practices related to god. (Arslan and Şener, 2009).

In the nursing literature, the term spirituality is defined as a search for meaning, devotion to religion, balancing energy and basic trust (Uğurlu, 2014). It is emphasized that it has an important role in the recovery of diseases (Kavak et al., 2014). Başbakal and Uğurlu (2013), in their study with 115 nurses to evaluate the events that require spiritual care, the care provided and its results, determined that the nurses could not provide adequate spiritual care (Başbakal and Uğurlu 2013). In the literature, it is reported that spiritual values have positive effects on illness and health, as they reduce anxiety, enable

the individual to demonstrate himself at a high level by supporting a positive lifestyle, and be hopeful, strong and in peace (Tanyi , 2002; Uğurlu , 2006).

In the nursing care plan, which is used as a tool in providing care to the individual with a holistic approach, it is important to evaluate and meet the spiritual needs of the individual. For this purpose, data is collected by evaluating the spiritual dimension of the individual. This information can be obtained primarily from individuals, if this is not possible, help from their families can be obtained. In addition, the spiritual needs of the individual can be determined by communicating with other team members, nurses, and religious officials in the hospital (Eğlence and Şimşek 2014, Uygur,2014). As a result of active listening, effective communication and sensitive examination, it is possible for the nurse to obtain clues that reveal the spiritual needs of the patient (Ergül and Bayık 2007). In this direction, this research was conducted to examine "Nurses' Perceptions of Spirituality and Spiritual Care".

Method

This study was conducted as a descriptive study to examine nurses' perceptions of spirituality and spiritual care.

Research İzmir Province T.C. It was done in a State Hospital belonging to the Ministry of Health. The universe of the study consisted of all nurses (n=187) working in this State Hospital. Since it was aimed to reach the entire universe, sample selection was not made. 130 nurses who accepted the study constituted the sample of the study. Data were collected using a questionnaire containing socio-demographic characteristics and the "Spiritual and Spiritual Care Perception Scale (MMPS)".

The "Spirituality and Spirituality Perception Scale" was developed by McSherry, Draper, and Kendric in 2002. In the original study, the Cronbach a value of the scale was 0.64 (McSherry et al., 2002). "The validity and reliability of the scale of perception of spirituality and spiritual care in our country was conducted by Ergül and Temel in 2007, the alpha value of the first part of the scale is 0.61, for the second part it is 0.63". Within the scope of internal consistency, the Cronbach Alpha coefficient is 0.76. It is a Likert-type scale consisting of spirituality, spiritual care, religiosity and individual care sub-dimensions and answered with a five-point score. Items are scored as "1-strongly agree", "2-agree", "3-undecided", "4-disagree" and "5-strongly disagree". Thirteen items are scored straight and four items reverse scored. The fact that the total score average is close to 5 indicates that the perception level of the concepts of spirituality and spiritual care is high.

The data obtained in the study were analyzed with the Statistical Package for the Social Sciences 18.0 (SPSS) program. Number, percentage, mean, Anova test, tukey test and the significance test of the difference between two means were used to evaluate the data. The results were evaluated at the 95% confidence interval, at the $p < 0.05$ significance level.

Written and verbal permissions were obtained from the institutions and nurses required for the study in order to carry out the study.

Results

The distribution of the nurses participating in the study according to their socio-demographic characteristics is given in Table 1.

Table 1. Distribution of Nurses Participating in the Study by Socio-Demographic Characteristics

Socio-Demographic Characteristics	N	%
<u>Age group</u>		
19-28 years	24	18.5
29-38 years	62	47.7
39-48 years	44	33.8

<u>Gender</u>		
Woman	107	82.3
Male	23	17.7
<u>Education level</u>		
Health vocational high School	30	23.1
Associate Degree	29	22.3
Licence	69	53.1
Graduate	2	1.5
<u>Marital status</u>		
Married	113	86.9
Single	17	13.1
<u>Family Type</u>		
Core	119	91.5
Large	11	8.5
<u>Number of children</u>		
no	25	19.2
one	35	26.9
Two	61	46.9
three and above	9	6.9
<u>Working Time in the Profession</u>		
less than a year	2	1.5
1-5 years	21	16.2
6-10 years	31	23.8
11 years and above	76	58.5
Total	130	100.0

18.5% of the nurses participating in the study were in the 19-28 age group, 47.7% were in the 29-38 age group, 33.8% were in the 39-48 age group, and the mean age was 35.06 ± 0.56 . It was determined that 82.5% of the nurses were women, 86.9% were married, 53.1% had a bachelor's degree, 91.5% had a nuclear family, 46.9% had two children, 58.5% had been working in the profession for 11 years or more (Table 1).

Table 2. Distribution of Nurses Participating in the Study by Position in the Institution

Role in the Institution	N	%

Service Nurse	72	55.4
Intensive Care Nurse	21	16.2
Responsible Nurse - Executive Nurse	14	10.8
Outpatient Clinic Nurse	5	3.8
Emergency Nurse	10	7.7
Operating Room Nurse	4	3.1
Pediatric Nurse	4	3.1
Total	130	100.0

According to the findings in Table 2, when the duties of the nurses in the institution are examined; 55.4% were service nurses, 16.2% were intensive care nurses, 10.8% were responsible/management nurses, 3.8% were polyclinic nurses, 7.7% were emergency nurses, 3.1% were operating room nurses, 3.1% were pediatricians. She was found to be working as a nurse.

Table 3. Distribution of Nurses' Perceptions by Marital Status Average Scores

Spirituality and Spiritual Care	Marital status	N	$\bar{X}$	SS	t	P
	Married	119	2.44	0.53	3.296	0.001 P < 0.05
	Single	11	3.01	0.70		

As a result of the statistical analysis, a significant difference was found between the marital status of the nurses participating in the study and the average scores they got from the spirituality and spiritual care scale ($t=0.3296$, $p<0.05$).

Table 4. Distribution of Nurses' Average Perceptions of Spirituality and Spiritual Care by Education Level

Spirituality and Spiritual Care	Education level	N	$\bar{X}$	SS	F	P	Tukey
	Health vocational high School	30	2.21	0.45	3.490	0.018	(1-2) (1-3)
	Associate Degree	29	2.65	0.75			
	Licence	69	2.53	0.49			
	Graduate	2	2.64	0.08			

As a result of the statistical analysis, a significant difference was found between the education level of the nurses participating in the study and the average scores they got from the spirituality and spiritual care scale ($F=3.490$; $p<0.05$). As a result of the Tukey test, which was conducted to determine from which group the difference between education level and perception of spirituality and spiritual care originates, it was determined that the perception of spirituality and spiritual care of the participants with an associate degree education was higher.

It was determined that the level of spirituality and spiritual care perceptions of the nurses participating in the study was "MEDIUM" ($=2.49 \pm 1.09$). When the averages of the items of perceptions of spirituality and spiritual care are examined; The item "I think that nurses can provide spiritual care by being compassionate, interested and smiling while giving care" is the lowest ($=1.75 \pm 0.79$), "I think that spirituality only includes going to any place of worship (mosque/church)." item average was determined to be the highest ($=3.57 \pm 1.213$).

Discussion

The age range of 47.7% of the nurses participating in our study group was between 29-38 years, and the mean age was 35.06 ± 0.56 . 82.3% of the nurses participating in the research are female and 17.7% are male nurses. It was stated that 82.7% of the nurses participating in the study conducted by Kavak et al. (2014) were female and 17.3% male. On the other hand, 96.4% female and 3.6% male nurses participated in the research conducted by Yılmaz and Okyay (2009). Nursing profession in the world and in our country is due to the fact that it is a profession group that women prefer more.

It was determined that 55.4% of the nurses worked as service nurses. 16.2% are intensive care nurses, 10.8% are responsible-administrative nurses. As a result of the statistical analysis, no significant difference was found between the education level of the nurses participating in the study and the average scores they got from the spirituality and spiritual care scale. In Okyay's (2008) study, no significant difference was found between the mean spirituality score variable and the clinical variable that nurses work with ($F=1.327$; $p>0.05$). In the study of Yılmaz and Okyay (2009), mean perceptions of spirituality and spiritual care rating scale did not find a significant difference according to the clinical variable it works ($F=0.85$; $p>0.05$).

It was determined that the level of the nurses' perception of spirituality and spiritual care from the scale of perceptions of spirituality and spiritual care was "MEDIUM" (General average = 2.49). When the averages of the items of perceptions of spirituality and spiritual care are examined; The item 'I think that nurses can provide spiritual care by being compassionate, caring and smiling while giving care' is the lowest ($=1.75$), and the item 'I think that spirituality only includes going to any place of worship (mosque/church)' is the highest ($=3.57$) has been determined. Başbakal and Uğurlu (2013), in their study with 115 nurses to evaluate the events requiring spiritual care, the care provided and its results, determined that the nurses could not provide adequate spiritual care.

As a result of the t-test conducted to determine whether the mean perceptions of spirituality and spiritual care of the nurses participating in the study show a significant difference according to the marital status variable, a significant difference was found between the variables of spirituality and spiritual care and marital status when the average perceptions were examined ($t=-3.296$; $p<0.05$). As a result of the t-test conducted to determine the source of the differentiation in the perceptions of spirituality and spiritual care, when the average perception was examined, it was determined that the participants with single marital status had higher perceptions of spirituality and spiritual care.

There was no statistically significant difference between the age groups of the nurses participating in the study and the mean scores of spirituality and spiritual care ($F=0.744$; $p>0.05$). As a result of the statistical analysis, a significant difference was found between the education level of the nurses participating in the study and the average scores they got from the spirituality and spiritual care scale ($F=3.490$; $p<0.05$). It was determined that this difference was due to the fact that the participants with an associate degree education had higher perceptions of spirituality and spiritual care. In their study, Yılmaz and Okyay (2009) showed a significant difference according to the education level variable of the average perceptions of the spirituality and spiritual care rating scale according to the characteristics of the nurses. ($p<0.05$). Our study is similar to the findings obtained from this study.

As a result of the statistical analysis, no significant difference was found between the working years of the nurses participating in the study and the mean perception score of spirituality and spiritual care ($F=1.277$; $p>0.05$). Our study is similar to the results of the Okyay (2008) study. **Conclusion**

According to the results of the research, it was determined that the nurses' perceptions of spirituality and spiritual care were moderate. As a result of the statistical analysis, a significant difference was

found between the education level and marital status of the nurses participating in the study and the average score they got from the spirituality and spiritual care scale. It is recommended that these studies be supported and repeated by other studies.

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P-90 Mental Problems of Nurses in Covid-19 Pandemic

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Abstract

Introduction and Aim: The Covid-19 pandemic process negatively affects both the work performance and personal lives of healthcare personnel, as well as their physical and mental health. It is stated that the mental health of nurses who work with patients for a long time and in the closest working group among healthcare personnel in the fight against pandemic is more negatively affected than other health personnel. In this process, it has been reported that in nurses working in high-risk areas with an intense working tempo, mental health may be negatively affected and suicidal thoughts may increase with the effect of stress and burnout. In addition, it is emphasized that the suffering of the patients and death of the patients whom nurses provide care services leads to an increase in fear and anxiety in nurses. In the literature, it has been reported that the mental problems experienced by nurses in the early stages of the pandemic are fear, helplessness, hopelessness and anxiety. Long-term effects of the pandemic on the mental health of nurses were found to be depression, post-traumatic stress disorder, obsessive-compulsive disorder, panic disorder and somatic disorders. Therefore, in this review the mental problems of nurses in COVID-19 Pandemic were mentioned.

Conclusion: As a result, various studies conducted in different countries have revealed that the mental health of nurses who actively serve patients at the forefront of combating the pandemic is at risk. In order for nurses to protect their physical and mental health and to provide better quality care services in this difficult process; It may be suggested that working hours can be regulated, providing sufficient number of health personnel and protective equipment in working environments, developing the necessary strategies by the authorities to solve the problems, counseling service and professional mental health support in order for nurses to manage the stress they are exposed to.

Key Words: Covid-19; mental health; nursing,

Introduction and Aim

From the beginning of the Covid-19 pandemic, such as limited information about the disease, lack of health personnel and protective equipment, care for critical patients, emergency management, not being ready for the health burden brought by the pandemic, and the lack of effective treatment methods, in addition to these reasons the virus has mutated recently and the rate of transmission increase. So this situation has put a lot of pressure on hospitals and institutions providing health care services all over the world (Arnetz et al., 2020; Lanteri et al., 2021; Öcalan et al., 2020). During the pandemic process, the risk of health personnel being exposed to the virus by taking an active role in the care of patients and being more virus carriers than other segments of the society affects both their work performance and personal lives, as well as their physical and mental health (Duarte et al., 2021; Pala and Metintas, 2020). The studies show that healthcare professionals are at higher risk for mental health than the general population (Arpacioğlu et al., 2021). There are factors such as working in high-risk units and in contact with infected people, increased working hours, the necessity of working with protective equipment for a long time, the uncertainty of the process, both social and professional isolation during the pandemic process, and stigmatization as the main cause of mental problems experienced by health personnel (Aktura and Özden, 2020; Ergün and Maçça, 2020; Ertem, 2021). In the studies, it is stated that the mental health of the nurses, who are at the forefront among the health personnel in the fight against the pandemic, and who work closely with the patients for a long time and in the closest working group, is affected more negatively than the other health personnel (Marshall, 2020; Murat et al., 2021). Therefore, in this review, the mental problems experienced by nurses during the COVID-19 Pandemic have been mentioned.

Mental Problems Experienced by Nurses During The Pandemic Process

In the fight against the Covid-19 pandemic, nurses put their lives at risk, especially in units such as emergency services, infection control units, intensive care units, and Covid-19 patient services, making an effort beyond their capacity (Catton, 2020; Hiçdurmaz and Üzar-Özçetin, 2020). It has been reported that in nurses who work intensively in high-risk areas during the pandemic process, mental health may be adversely affected and suicidal thoughts may increase due to stress and burnout (Okechukwu et al., 2020; Raudenská et al., 2020). In addition, the fact that the nurses witness the suffering and death of the patients cared for, cause an increase in fear and anxiety in nurses (Yeşil Bayülgen et al., 2021). In the literature, it is emphasized that the pandemic affects women health workers and nurses more mentally, in the early stages of the pandemic, nurses have more fear, helplessness, hopelessness and anxiety, and in the long periods, depression, post-traumatic stress disorder, obsessive-compulsive disorder, panic disorder and psychophysiological symptoms are observed (Kang et al., 2020; Shah et al., 2021; Stelnicki et al., 2020; Yeşil Bayülgen et al., 2021;).

In a study conducted with nurses who took an active role in the fight against Covid-19 in the city of Wuhan, Hubei Province of China, the starting point of the epidemic, it was determined that sleep disorders, depression and anxiety symptoms were very common among nurses (Tu et al., 2020). In a study conducted with 695 nurses in the US State of Michigan, it was determined that a significant portion of the participants reported symptoms of depression, anxiety and Post-Traumatic Stress Disorder (PTSD), the frequency of exposure to Covid positive patients and the lack of adequate protective equipment were important risk factors for mental health (Arnetz et al., 2020). In another study conducted to determine the psychological impact of the pandemic on nurses in one of the provinces with the highest incidence of Covid-19 in Iran, it was found that during the Covid-19 epidemic, nurses experienced significant mental problems, not being able to access adequate personal protective equipment and working with suspected coronavirus infection are associated with anxiety and depressive symptoms (Pouralizadeh et al., 2020). In another study conducted with 768 nurses in Portugal, it was reported that long working hours had a negative effect on the mental health of nurses, that nurses had a fear of getting an infection and transmitting the infection to their relatives, and this fear led to higher levels of depression, anxiety and stress (Sampaio et al., 2020). Crowe et al., in their study with intensive care nurses in Canada, found that 73.3% of the nurses participating in the study reported mild to severe PTSD symptoms, 67% anxiety and 56.9% depressive symptoms. In the same study, nurses have stated that they have experienced anxiety and fear for reasons such as constantly changing information about the disease and the policies developed accordingly, uncertain communication between the institutions and people responsible for the process management, the restriction of the time given to the patient in order to ensure their own safety, trying to meet their care needs in new ways, and the anxiety of infecting themselves or their family members (Crowe et al., 2021).

Considering the studies conducted in our country on the subject, Murat et al. found high levels of stress and burnout and moderate depression in nurses in their study with 705 nurses (Murat et al., 2021). In another study conducted with 368 people who worked actively in the first 3 months of the pandemic in Turkey, it was determined that the burnout was higher in healthcare personnel working directly with Covid-19 patients, and nurses experienced more fear and depressive symptoms compared to other healthcare personnel (Arpacioğlu et al., 2021). In another study, it was reported that nurses working actively during the pandemic period experienced high levels of anxiety and moderate hopelessness (Yeşil Bayülgen et al., 2021).

Conclusion and Recommendations

As a result, it has been demonstrated by various studies conducted in different countries that the mental health of nurses who work actively in the fight against the pandemic and provide services to patients are at risk. It has been reported that the most common mental problems experienced by nurses during the pandemic process are anxiety, depression, post-traumatic stress disorder, sleep disorders, burnout, hopelessness, fear and helplessness. In order for nurses to protect their physical and mental health and to provide better quality care during this challenging process; It may be suggested that they

receive counseling services and professional mental health support in order to manage the stress they are exposed, to regulate their working hours, to provide sufficient number of health personnel and protective equipment in their working environment, to develop necessary strategies by the authorities to identify and solve the problems they experience.

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P-91 Assessment of Physicians' Awareness of Child Abuse and Neglect: A Qualitative Study

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Abstract

Aim: Health professionals have very important responsibilities in determining child abuse cases. It is a fact that by increasing the awareness of healthcare professionals about child abuse and neglect, cases will be reduced. Our aim in this qualitative study is to evaluate physicians' awareness of child abuse and neglect in common and different aspects.

Methods: Our qualitative study was conducted with 14 physicians in the fields of pediatric health and diseases, family medicine, orthopedics and traumatology, and ophthalmology who have a high probability of encountering child abuse and neglect. The data were collected through in-depth interviews. In this study, a semi-structured questionnaire consisting of open-ended questions about child abuse and neglect prepared in the light of literature review were used as data collection tools. The interviews were recorded with the permission of the participants.

Results: Most of the physicians defined the concept of abuse, as an act made intentionally, mostly physically and sexually; whereas neglect as an act made unintentionally and as a failure to meet the needs of the child. Most physicians thought that child abuse and neglect was inversely related to education level and income level of the families. Most of the participants think that parents will reflect their upbringing on their own children and that the relationship between mother and father has an important place in terms of abuse and neglect. The physicians thought that the abused/neglected child can have psychosocial problems in the future; furthermore, they can have substance use and even fatal health problems.

Conclusion: It was observed that physicians could not fully define child abuse and neglect and did not have information about its types. Although all of the physicians were aware that they were obliged to report cases of child abuse and neglect, we see that they are not fully informed about the procedure.

Keywords: Awareness; child abuse and neglect; physician

Introduction and Aim

World Health Organization (WHO), states Child abuse and neglect mostly occurring to children under 18 years of age. It includes all types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitation, which results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power.' (WHO, 2020)

Physical abuse is the most common type of abuse that is the easiest to diagnose and is defined as "non-accidental injury of the child" (Hancı, 2002; Polat, 2004). Physical abuse includes attacks such as biting, shaking, pushing, kicking, burning and hitting the child. These attacks cause burns, stab marks, bruises and bone fractures in the child (Güler et al., 2002; Turan & Traş, 2016). Emotional abuse is another, of the most common types of abuse; It is defined as "mother, father or other adults in the environment of a child, having desires and expectations above the child's abilities and displaying aggressive behavior" (Runyan, 2002). Unlike physical and sexual abuse, no physical findings are encountered on children in emotional abuse. But it causes devastating damage at least as much as physical abuse (Kütük & Bilaç, 2017).

Sexual abuse is the most difficult type of abuse to detect among types of child abuse. The effects of sexual abuse, which are often kept secret and are difficult to explain, are very important in the short and long term (Yücel, 2017). Child sexual abuse can be defined as when a large age or maturational difference exists between the partners, the partner is in a position of authority over or in a care-taking

relationship with the child and the acts are carried out against the child by using violence or trickery (Finkelhor, 1984).

Neglect means that the child's physical or mental health or physical, emotional, moral or social development is hindered as a result of the neglect of the child's primary needs such as nutrition, sheltering, clothing, education, health and love by the parents responsible for the child's development (Altunsu, 2004). When distinguishing between neglect and abuse, it should be known that neglect is a passive behavior and abuse is an active behavior (Tıraşçı & Gören, 2007).

The perception of abuse and neglect creates difficulties in the diagnosis and early detection of problems in our country due to socio-cultural structure, and the lack of adequate knowledge and education of health professionals (Altunsu, 2004). Health professionals have very important duties and responsibilities in identifying and treating child abuse cases, reporting them to relevant institutions, identifying risk factors, and providing education and consultancy services. Our aim in this qualitative study is to evaluate physicians' awareness of child abuse and neglect in common and different aspects.

Method

Our qualitative study was conducted between April-June 2021 in Istanbul. Six pediatric physicians, five family physicians, two ophthalmologists, and one orthopedics and traumatology physician were included in this study. Data was collected via in-depth interviews with the physicians. In our study, a semi-structured questionnaire consisting of questions about socio-demographic characteristics and open-ended questions about child abuse and neglect prepared in the light of literature review were used as data collection tools. Each interview lasted approximately 30 to 45 minutes. Informed consent was obtained for tape-recording and for fully transcribing all the interviews. Each interview was transcribed verbatim on the same day of the interview. The full transcription consisted of a total of 76 pages. Thematic content analysis was used for the subjective interpretation of the content of textual data through the process of coding and the identification of themes. All of the researchers who conducted the interviews participated in the process of data analysis: first, each researcher analyzed the transcription of the interview individually and after that they discussed it with other researchers. The ethics committee approval of our study was obtained from the Ethics Committee of Marmara University School of Medicine (protocol number: 09.2021.470, approval date: 02.04.2021).

Results

Fourteen physicians were interviewed about child abuse and neglect. The ages of the participants ranged from 24 to 52 years. Three of the physicians were mothers and one was a father. Medical experience ranged from 1 year to 33 years. Five of the physicians worked in family medicine, six in pediatric health and diseases, two in ophthalmology and one in orthopedics and traumatology. These features are shown in Table 1.

Table 1. Demographic characteristics of participants

Participant	Age	Gender	Specialty	Parent Status	Experience
1	38	Female	Family medicine	Parent	14
2	28	Female	Ophthalmology	Not Parent	3
3	26	Male	Orthopedics	and Not Parent	1

traumatology					
4	40	Female	Pediatric health and diseases	Parent	14
5	52	Female	Pediatric health and diseases	Not Parent	33
6	25	Female	Pediatric health and diseases	Not Parent	1
7	25	Female	Pediatric health and diseases	Not Parent	1
8	24	Female	Ophthalmology	Not Parent	1
9	50	Female	Family medicine	Parent	26
10	36	Male	Family medicine	Parent	11
11	27	Male	Family medicine	Not Parent	3
12	27	Male	Pediatric health and diseases	Not Parent	3
13	28	Female	Pediatric health and diseases	Not Parent	4
14	29	Female	Family medicine	Not Parent	4

The three main themes and their sub-themes, shown in Table 2, were created from content obtained from interviews.

Table 2. Created themes and sub-themes

1.Description and Level of Knowledge**1. 1. Concept and Types**

Most physicians defined the concept of abuse as an act that occurs intentionally, mostly physically and sexually. Neglect is defined as an unintentional failure to meet the needs of the child. Most physicians do not have sufficient knowledge about types of abuse. Physicians who defined it also categorised abuse as physical, psychological, and sexual. Most physicians think that being a girl is a risk factor for abuse. This is followed by doctors who say that gender is not a risk factor.

“I can define neglect as neglecting care, not doing enough, Abuse as taking advantage of full care or forcing someone to do something against their will.” (50 years old Female, Family Physician, Parent)

	THEMES		
	DESCRIPTION AND LEVEL OF KNOWLEDGE	MEDICAL PRACTICES	FAMILIAL STATUS
CODES	Concept and Types Intentional in abuse but unintentional in neglect Neglect means not meeting the needs Types of abuse: physical psychological sexual Being a girl is a risk factor for abuse	Education and Qualification Level Awareness that physicians are obliged to report Feeling inadequate about the procedure for reporting cases	Spending time with family outside of work Asking your child about his day Engaging in the child's development
	The Role of the Family Education level is inversely proportional to abuse/neglect Income level is inversely proportional to abuse/neglect Parents reflecting their own upbringing to their child Positive effect of good family relationship	Existence of reasons to prevent reporting Physicians' competence in recognizing abuse/neglect The need for physicians to be informed about abuse/neglect	Getting to know the child Neglecting the child
	Effects on Children Adverse effect on social life Psychological problems and suicidal thoughts Neglect can cause morbidity and mortality Substance use and its ability to cause various health problems	Experience Change in the rate of encountering child abuse/neglect depending on the specialty Some abuse cases affecting physicians	

“I can't remember anything about the varieties right now.” (28 years old Female, Ophthalmologist, Not Parent)

“So the types of abuse and neglect are the same, not just as a child, but in general. It can be physical, psychological, social.” (24 years old Female, Ophthalmologist, Not Parent)

“There is also in Turkey, especially for religious reasons, inequality between men and women that is more common in society, and naturally, the perception of sexuality in women comes to the fore. I don't think there is a difference in neglect, a boy can be neglected too.” (27 years old Male, Family Physician, Not Parent)

“Certainly. gender also plays a role in the society we live in. I think it's more towards girls. (27 years old Male, Pediatrician, Not Parent)

1.2. The Role of the Family

Most physicians think that child abuse and neglect was inversely related to education level and income level of the families. Most physicians stated that parents reflect their own upbringing on their children. It is thought by physicians that a good relationship between parents will affect children in a good way and reduce abuse/neglect cases.

“A parent reflects on their children what they have received from their parents, and what is given from the family is extremely important in the child's role both outside and within the family.” (50 years old Female, Family Physician, Parent)

“Having family togetherness may allow this neglect and abuse to be less. These possibilities may increase when there is no family unity.” (27 years old Male, Pediatrician, not Parent)

“If he was exposed to violence from his own parents as a child, I think that there is a high probability of inflicting it on his own child, since he grew up in a normalized way.” (24 years old Female, Ophthalmologist, Not Parent)

“Of course, neglect and abuse generally occur in families with lower education levels.” (25 years old Female, Pediatrician, Not Parent)

1.3. Effects on Children

When physicians were asked about the effects of child abuse/neglect, most of them think that children exposed to abuse/neglect will experience psychological and social problems in their future lives. In addition, they are concerned that it will cause substance use and diseases that will cause morbidity and mortality.

“Personality disorders, substance use, problems in raising their own children, problems in establishing a family, problems in self-confidence.” (50 years old Female, Family Physician, Parent)

“An abused child may abuse his children in the future, unfortunately, we hear about such incidents a lot. If he is abused, he grows up as an antisocial person, especially obesity and metabolic syndrome are seen in these people. Unfortunately, their physical and mental health is not very good. If he has been neglected and does not perceive it as neglect, he can apply the same upbringing to his own children. A neglected person can also do their best by thinking, 'I have been neglected, my children should not experience this'. Of course, this varies from person to person.” (38 years old Female, Family Physician, Parent)

“can cause PTSD, anxiety, depression, suicidal thoughts, eating disorders.” (28 years old Female, Pediatrician, Not Parent)

2. Medical Practices

2.1. Education and Qualification Level

All of the physicians participating in the study think that when they encounter child abuse/neglect, they are obliged to report this to the competent authorities. However, the vast majority of physicians stated that they do not have knowledge about the procedure to be applied in reporting these cases. Many physicians stated that they would first report the encountered cases to the police. While most physicians said that they would not hesitate to report cases to the necessary authorities, some physicians stated that they would have some hesitations. Majority of these hesitations was caused by

the lack of certainty that the case was a concise case of abuse/neglect. Then, the fear of being subjected to violence by the relatives of the child prevented the physicians from reporting the case. Most of the physicians did not consider themselves sufficient in terms of child abuse/neglect. Situations that made physicians suspect of child abuse/neglect were as follows: fractures, ecchymoses, injuries that were not compatible with the story, depressed mood of the child, lack of energy, family suppression/silencing of the child, or anal fissures and hemorrhages.

“To be honest, I do not consider myself very competent in this regard. For example, brochures with well-prepared concise information about the process of recognizing and informing about child abuse and neglect can be prepared. Besides, it can be at hand whenever I want, and it can be useful as a guide to look at when I need it.” (38 years old Female, Family Physician, Parent)

“Maybe I have something in my mind in theory about how I should approach when I come across with it, but I have no idea of what I should do in practice. Even if I know what to do forensically when faced with such a situation, I have no idea how to deal with its psychological burden within myself.” (25 years old Female, Pediatrician, Not Parent)

“The findings that I will obtain in the physical examination about abuse make me suspicious. Erythematous areas, bruises, burns. Of course, these are not always due to abuse. Children are energetic by nature and may occur as a result of falls and sprains. There would be wounds in unexpected places that I would look at here, and injuries that are inconsistent with the story in particular make me suspicious. Especially in children, anal fissure rectal bleeding makes me suspicious of sexual abuse. In neglect, the relationship that the child establishes with his environment, his mental state according to his age, and even his gaze may be suspicious for neglect.” (38 years old Female, Family Physician, Parent)

“I don't think that the education given in the medical faculty is very useful, but there can be training like seminars in the postgraduate medical period. We don't know where to report it.” (28 years old Female, Ophthalmologist, Not Parent)

2.2. Experience

Physicians' encounters with child abuse/neglect, within a year, varies from department to department. While up to 3-4 cases are encountered per month in pediatrics and orthopedics departments, 4-5 cases are encountered per year in departments such as family medicine and ophthalmology. Some cases can change the perspective of some physicians.

“Yes, I did. Not during my specialization, but especially when I was a resident. For those times, I faced 7-8 abuse cases a year.” (38 years old Female, Family Physician, Parent)

“For example, there were two children who were beaten by their father just yesterday. I see it every day. 1-2 times a day.” (26 years old Male, Orthopedist, Not Parent)

“A 17-year-old girl was physically abused by her father. It was really bad, there were cigarette marks on many parts of her body, such scars from previous wounds, and when she came to us, she had bruises, beatings, bite marks, etc., who did it – his father.” (29 years old Female, Family Physician, Not Parent)

3. Familial Status

Almost all of the physicians who were parents tried to devote their spare time to their children. They asked their children about their day and spent time on their problems. They said that they monitored the development of their children closely. Many thought that they knew their child very well. Some were worried that they were neglecting their children because they did not have enough time for their children.

“...there are times when I'm on night shift or during busy times when I don't play with them. I may be neglecting these times. I think they feel it, I think they realize it.” (40 years old Female, Pediatrician, Parent)

“Almost every day when I arrive home, I ask ‘How was your day?’.” (38 years old Female, Family Physician, Parent)

“Sometimes I may have neglected my child. Due to our profession, some days can be very busy and extremely stressful. We can go home very tired and with a headache. Sometimes all I want is a little rest. That's when I don't have much contact with my son or there are times when I can't focus while listening to him.” (38 years old Female, Family Physician, Parent)

“I have information about my child's mental and physical development. Both his father and I follow his physical, mental and spiritual development.” (38 years old Female, Family Physician, Parent)

Discussion

Our aim in this qualitative study was to evaluate the awareness of physicians about child abuse and neglect in common and different aspects. All of the participants stated that they encountered cases or suspected cases of abuse and neglect throughout their medical career. Kara et al. (2014) stated that 82% of the pediatricians, 70.5% of the pediatric residents and 54.8% of the general practitioners encountered cases or suspected cases of abuse and neglect (Kara et al., 2014).

When physicians receive training on child abuse and neglect in any period, the rate of encountering child abuse and neglect will be increased. Every case caught is of great importance for the child and society. Every physician who will receive training on recognizing abuse and neglect will increase their awareness of the issue and they will miss fewer cases. In the study of Kocaer (2006), almost half of the physicians stated that they received training on child abuse and neglect during their education, but more than half of the physicians stated that this training was not sufficient. This situation suggested that the content of the training provided was not found sufficient by the health professionals (Kocaer, 2006).

In this study, all of the participants stated that they would report the case if they met a child abuse and neglect case. Most of the participants stated that they would report child abuse/neglect cases to the police. Participants in the study of Türker (2017) think that in cases of child abuse and neglect, forensic reports should be kept and the police should be informed in particular (Türker, 2017).

Most of the physicians who encountered child abuse and neglect cases, face various problems in reporting cases. The foremost of these problems is being unsure of the diagnosis of the abuse or neglect case. Secondly, exposure to violence by the child's relatives may prevent physicians from reporting. Physicians stated that they did not know exactly the legal procedures about where to report child abuse and neglect cases. In the study of Kara (2014), the main reason why doctors do not report is the lack of sufficient information about child abuse and neglect. This is followed by not knowing where to report (Kara et al., 2014).

In this study, few of the participants consider themselves sufficient in recognizing and reporting child abuse and neglect. In the study of Taş (2017), half of the participants stated that they found themselves partially sufficient. This result indicates that the participants were aware of their lack of information (Taş, 2017).

Limitations

As the time of the study coincided with the COVID-19 pandemic, there were difficulties in reaching some departments and physicians sometimes felt uncomfortable with private questions and could not answer every question in detail.

Conclusion

This study was conducted to evaluate the level of knowledge and awareness of physicians, as they have a critical role in the definition and prevention of child abuse and neglect. It was observed that physicians could not fully define child abuse and neglect and did not have full information about its types. It was seen that the education of the participants about child abuse and neglect at the medical school life was insufficient. A significant part of them stated that they would participate in case of any training. Although all of the physicians were aware that they were obliged to report cases of child abuse and neglect, they were not fully informed about the procedure for doing so.

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P-92 Covid-19 Infection from the Perspective of Intern Doctors that Have Had Covid-19 Infection in a University Hospital in Istanbul

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Abstract

Aim: In our study, we aimed to analyze the experiences of interns/phase 6 medical students working in a university hospital in Istanbul during Covid-19 pandemic and who have contracted this disease.

Methods: Our qualitative research (in-depth interview) was conducted via online video interviews with ten volunteer interns in November-December 2020 prior to vaccination. The interviews lasted around 45 minutes and recordings were analyzed for thematic content after transcription.

Results: All participants were single and the mean age was 23.7. Six participants were males. Interns working in the emergency department declared to have more close contact with Covid-19 patients, compared to other departments. Although all interns stated that they complied with the infection precautions, most of them could not remember the source where they got the infection from. Two participants declared to have taken their facemasks off during breaktime, and one participant stated that he/she may have acquired the disease from a roommate at the hospital. Two participants stated that their clinical training was delayed due to infection risk. Three participants used public transportation during this period. According to the participants, the social distance could not be maintained in the hospital settings. Some emergency services, dining halls, elevators, canteens, intern and resident physician rooms were not suitable for social distancing. Majority stated that their psychology was negatively affected by the isolation during the quarantine process.

Conclusions: With the Covid-19 pandemic, both the health status and quality of medical education of interns have been negatively affected. According to the participants, it is possible to conduct the training in clinical practice more safely and efficiently by improving the working conditions of interns and rearranging social areas in the hospital (e.g., dining halls, canteen, intern room) to reduce the risk of Covid-19 transmission.

Keywords: Covid-19, Medical students, Qualitative research.

Introduction and aim

Coronaviruses (CoV) are a large family of viruses that can cause mild, self-limited infections, such as the common cold, to more serious infections such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) (Çalışması, 2020). The new Coronavirus disease (Covid-19) is caused by the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) virus. Due to the rapid spread of the infection, the World Health Organization (WHO) declared a pandemic in March 2020 (Buran & Dikmen, 2021).

Covid-19 infection spreads from person to person through droplets and contact with mucous membranes (mouth-nose-eye) (Buran & Dikmen, 2021). Covid-19 infection can cause infection in all age groups (Buran & Dikmen, 2021); however, the elderly population, pregnant women and healthcare workers are considered to be more risky groups (İlker, Gereklioğlu, & Bozdemir).. Being a healthcare worker is the occupational group most likely to encounter the SARS-CoV-2 virus. (Çalışması, 2020). In a study compiled of health worker deaths related to the Covid-19 pandemic, data from more than seventy countries were examined and the death toll was reported to be at least 17,000 people (International, 2021). WHO recommended education on the diagnosis of respiratory diseases to protect healthcare workers, mental health support, and access to adequate personal protective equipment (PPE) (Lacina, 2020).

In our study, we aimed to analyze the experiences of interns/phase 6 medical students working in a university hospital in Istanbul during COVID-19 pandemic and who have contracted this disease.

Method

Our study was designed as a qualitative type of research.. Intern physicians who were studying at a medical school on the Anatolian side of Istanbul, had Covid-19 infection, completed the quarantine period, and are currently actively continuing their pre-infection life were included in the study. Interviews were conducted with ten intern physicians who voluntarily wanted to participate in the research. Participants were determined by the snowball method.

The research was carried out between November and December 2020 in the pre-vaccination period. After determining the people who meet the participation criteria and being informed about the study; Intern physicians, were interviewed via the video online platform with the people who agreed to be interviewed. Interviews were recorded with the permission of the participants. Interviews were conducted with in-depth interview technique.. While the first part of the interview consisted of mini-questionnaires containing sociodemographic data, the second part consisted of semi-structured open-ended questions aimed at understanding Covid-19 awareness, transmission routes, post-covid period and vaccine thoughts, which were created as a result of literature review.

Interviews were terminated after the responses reached saturation (10 participants) in terms of content during data collection. The duration of the interviews was approximately 45 minutes. The recordings of the interviews were transcribed by the researcher who conducted the interview on the same day.

By anonymizing the names of the participants, thematic content analysis was used to subjectively interpret the content of the textual data with the coding process and to determine the themes. All researchers who conducted the interviews participated in the data analysis process.

Ministry of health, local ethics committee approval was obtained for the research. The informed consent form of the study was verbally explained to the participants and their consent for the study was obtained.

Results

The study included 10 intern physicians who were studying at a medical school on the Anatolian side of Istanbul, had Covid-19 infection, completed the quarantine process, and are currently actively continuing their pre-infection life. The demographic information of the participants is shown in Table 1.

Table-1: Demographic Characteristics of Participants						
Participant	Age	Sex	Who do you live with?	Transportation	Chronic Diseases	Regular Drug use
A	23	M	Family	by car	No	No
B	24	F	Friend	on Foot	Allergic asthma	No
C	24	M	Alone	on Foot	Asthma	Inhaler spray
D	24	F	Alone	on Foot	Varicose Veins	No

E	24	M	Family	Public Transport	No	No
F	24	F	Alone	on Foot	No	No
G	24	M	Friend	Public Transport	No	No
H	24	M	Friend	Public Transport	Allergic asthma	Antihistamine
I	23	M	Alone	by Car	No	No
J	23	F	Family	by Car	No	No
M: Male, F: Female, All participants were single.						

In our study, six themes were emerged from the data ; During the diagnosis period, the quarantine process, the home environment during the Covid-19 pandemic, the hospital environment during the Covid-19 period, the social life during the pandemic and education during the pandemic were investigated.

Table-2 Themes and Subthemes

Theme	Subtheme
During the diagnosis period	▪Suspicion and getting tested ▪Transmission routes
The quarantine process	▪Quarantine period ▪Gains and Losses of Covid-19
The home environment during the Covid-19 pandemic	
The hospital environment during the Covid-19 period	▪Cafeteria-Canteen ▪Intern-assistant rooms ▪Contact with Patients
The social life during the pandemic	▪Transport ▪Interactions with the social environment ▪Community places (TUS course, Gym)
Education during the pandemic	

Theme-1 : Diagnosis Period

Participants usually had a PCR test due to their Covid-19 compatible complaints and were diagnosed. Two participants had a test due to a history of contact.

“... We work in the ED, there is a night shift every two days. I had an extra night shift instead of my friend that week, it was a week when I was extra tired. Such muscle aches neck pain the next morning weakness and I had chills. I had a night shift in the evening, I had to go. I said probably because of tiredness or something, I went to the shift, but after a point, I couldn't stand anymore. When I stepped on the ground like this, my feet hurt, then I looked at it, I immediately took my temperature, it was 38.5, then I told the resident and he said go get tested right next to me. That's how I got tested, the result came out in the morning, then quarantine....” (PC)

“...I have not had any symptoms. At first I was kind of sure I had it from my family, but when I calculated it according to my family, my symptoms appeared on the 12th day.. Just a headache or something. That's why I can't distinguish this situation very much. With my positive test, there were many covid cases in the service, so I can't tell where it might have been transmitted. ...” (PD)

Participants could not fully explain their reasons for contracting Covid-19 infection, but most had a history of close contact with patients. One participant stated that although he was not in the hospital, he may have been infected by his **roommate** working in the hospital. Most of the participants stated that they were in a public environment only because of the hospital.

“... I was already in the emergency room when the first symptoms appeared, I thought it was very possible that I had the disease, so I went to get tested right in the evening and it was positive... ” (PG)

“... I already live in the same house with G, I already had a history of contact from him, so as soon as the symptoms started, I was immediately alerted....” (PH)

“...Out-of-hospital contagion didn't make much sense to me. Because no one was positive but me. Probably in the canteen or between two emergencies, I took off my mask and drank tea or coffee. Most likely infected with one of them....” (PA)

Theme-2: Quarantine Process

The course of the disease in the participants was asymptomatic or mild. No participant was followed in the hospital. Most of the participants spent the quarantine process alone in their home environment, and one of the participants shared the same house with her family during the quarantine period. Many of the participants stated that they had difficulties because they were isolated during the quarantine process, and the psychology of seven people was negatively affected. Almost all of the participants stated that they were afraid of transmitting the disease to their families.

“... Well, that process scared me a lot, it can get worse in a moment, people, I don't know, it's a disease that you don't know how to go if there is a house accident and you are afraid (her face is a little tense). After the seventh day, I felt a little relieved because I'm finishing it now, but you are looking for someone who was in isolation with yourself at first (laughs) so that you can remember the situation. I normally have a roommate, but when I tested positive, she stayed with her family. ...” (PB)

“... I wonder if my fear was transmitted to my parents because I was with them for a few hours in the days before the test. That was my only fear.. My father took the test three days after I came back positive, and he got the advice of his place of work. He was negative.. But I was most afraid of my mother. My mom has asthma or something, she also had Wegener's. It was psychologically difficult.. You're alone, you're home alone or something.. Of course, my family called, tried to support, brought food or something, I didn't have much problem with that, but you say something to yourself at home for 12 days, it's not very nice. The first days were a bit long, am I really sick or something, the next days I'm going to read something and watch a movie.. I've been so bored for the last few days. There were no symptoms anyway...” (PA)

They stated that there were changes in the perspectives of the participants in general after they had Covid-19. While some of these had negative effects on the participants, some of them were gains. Some participants stated that they were relieved because they thought that antibodies were formed due to the disease. Increased sensitivity to the use of PPE in many

“...I started to pay more attention to hand hygiene and wearing a mask., I researched my stay at home because the illness process was stressful for me and frankly, I don't want to experience it again....” (PG)

“...When the disease was over, I felt comfortable, I have antibodies, I'm more protected, I think it's like being sick. My body has produced a little bit of antibodies so I guess. So I feel better. It was difficult to stay at home during the illness, yes, but I am comfortable now. ...” (PH)

Theme-3: Home Environment during the Covid-19 Pandemic

During the Covid-19 period, there have been changes in the home life of many people, such as life isolated from people living together at home, personal hygiene measures at home.

“ ... I don't go down to my mothers without a mask since I started the ED I have immunity but I don't want to carry them We separated the dishes, we separated the laundry, I took it to the intensive ” (P)

“...I was throwing away the things I bought from outside and washing my hands. Fruits and vegetables stand on the balcony for six hours. I disinfect my phone, purse etc..” (PA)

Theme -4 : Hospital Environment

According to the participants, the cafeteria, canteen, emergency cafeteria, intern rooms and assistant rooms were perceived as risky areas in terms of Covid-19 in the hospital . Due to the density of people in these places, it was found risky by the participants that social distance could not be maintained even if the precautions were followed.

“...I went to the hospital cafeteria 5 times in total until 14 October. I didn't want to eat much because I think it's a dangerous area. Elevators are the same.. Ten people ride an elevator.. People were sitting very closely at the tables in the dining hall. But we were very close there too. Being open air was an advantage, but right now, I wouldn't sit in the same way, I would go to the park....” (PA)

“...When we talk to our friends at the hospital, if there is someone in the emergency cafeteria, I think it's risky, but I only ate from the cafeteria once, but I didn't eat it there either, but I think it can be improved and its spread is very suitable. The intern room was empty at first (laughs) but as the process progressed, we met more people there, but I slept there once. In other words, everyone sleeps in masks, there are people who drink water at the desk, but the others are always masked. The only thing is bad, it's pretty risky, I think it's full in the ED and it's reported, but we can't catch up when 112 patients are brought in despite that. At that time, attention decreases, and your own protection from trying to do business is put in the background. ...” (PB)

More than half of the participants had worked in the emergency department. Participants stated that they could easily access PPE, and the problems in this regard were easily resolved. They stated that they always use N95, box, gloves, disinfectant among these protective equipment, but they do not wear glasses, visors and bonnets, and some even think that if they also wear these equipment, the risk of contamination would be less. They all pay attention to hand hygiene, they use disinfectant after contact with each patient, but phone, card..etc. They said that they could not clean every surface they came into contact with, like they sometimes forgot about it, so no matter how protected they are, the risk always continues.

“...When I was in the field, I always wore a surgical mask over N95, I never took my mask off even to drink water. I always had those black boxes on me....” (PF)

They stated that many of the patients they examined in the emergency department were later positive and that these patients often did not pay enough attention to the mask precaution in the red area.

“... During my shift, the patient was covid positive and came without a mask, and we put the mask on the patient afterwards. That's why I think it's like they are trying to pay attention to something in the ED, but not too much...” (PG)

Theme-5: Social Life

In this process, there have been great changes in the social life of our participants both before the Covid-19 infection and during the disease process. Private vehicles, taxis or public transportation were preferred as a means of transportation in line with the possibilities of the participants, and our participants who were close to their homes preferred walking. Participants who had to use public transportation stated that infection precautions were not followed adequately during the trip, adequate protection would not be provided even if they were wearing two sheet masks, and being in the same closed environment for 40 minutes put them in a risky situation.

“... There are lots of people which can fill two buses and there are no rules such as no standing passengers and people take off their masks while talking, coughing and sneezing. No one obeys warning papers like stop here and there...” (PH)

Our participants, like everyone else, declared that their social life is not the same as before, and they have almost never been in social activities, especially since the beginning of the pandemic. However, they stated that after the hospital started, their social life consisted only of the hospital and their friends in the hospital, that they only met with other intern friends when they met, and that these meetings were held either in an open area such as a hospital park or in their own homes.

“... I used to hang out with big groups, then we started meeting on the shore in groups of two or three. I haven't met some of them since the pandemic. Because they don't meet to anyone.. I haven't seen too many people either. I was usually on the seaside trying to meet in the car...” (PA)

A few of the participants stated that they continue to meet in cafes. They stated that the covid measures were not followed in the cafes in general. They added that in general, seashores and open spaces are safer than cafes, but with the cooling of the weather recently, people do not prefer seashores either.

“.... There is disinfectant at every table, but there is no distance between the tables and people are sitting in crowds. The only difference is that the disinfectant and the employees are masked....” (PG)

Three of our participants stated that they have been using the gyms since the pandemic and only took a break during the period of Covid-19. They stated that they intend to continue after the illness period. Other participants, on the other hand, have never used a gym and said that this poses an unnecessary risk.

“.. The gym was the opposite of my logic. Masks are off, people can cough and sneeze, you use the same equipment. I never went..” (PA)

Only two of our participants stated that they went to TUS course physically, but the measures taken were insufficient and their departure actually poses a risk. Other participants stated that they continue their education online. Except for the gym and classrooms, none of our participants stated that they do not use any public areas.

“...Go to the classroom from time to time, but only for offline, I've never been to crowded classes. But I didn't find it right before, because I thought that going to the classroom was stuffy indoors and there were people who had a relationship with the hospital, and I was tense, but I couldn't study at home either, but now I'm relieved, I can go more comfortably. Yes, we gave up on sports, but maybe I'll start again. ...” (PH)

Theme-6: Education in Pandemic

Most of the participants stated that their clinical practice training was disrupted due to the pandemic and that they could not examine patients during their internships. They stated that although they are

aware that this attitude is aimed at protecting students, they are of the opinion that practical education should be increased by taking precautions. A few participants who had experience of working in the emergency department stated that they had the opportunity to practice clinically because of the need for patient density..

“.... I think education is zero since cases are increasing. we can't learn anything You know, it would be better if it was closed, I would probably be unhappy because I was extremely bored at home, but in terms of health, I can't help anyone. My function is zero. I can't do inspections in any department I'm in. ...” (PD)

“...Pediatrics and internal medicine emergency three major internships can be provided for everyone to see and benefit briefly as one month. Emergency seizures may be 8 hours instead of 12. With such measures, everyone can see the hospital and the time can be shortened. ...” (PG)

Discussion

In our qualitative study, we aimed to examine the experiences of intern physicians who were educated in a medical school on the Anatolian side of Istanbul and were infected with Covid-19 in this process.

Most of the participants stated that their symptoms were mild while they had Covid-19. In fact, it was seen that the reason for most participants to be tested was not their symptoms, but their possible contact situations. Zhao et al. stated that although the findings in Covid19 disease vary from person to person, fever, shortness of breath, headache, muscle pain and some gastrointestinal symptoms can be seen frequently (Zhao et al., 2020).

All the participants in our study had the Covid-19 infection in isolation at home . In addition, during this period, almost all participants experienced the fear of transmitting the disease to their families. The rapid transmission of Covid-19 infection through respiratory and contact routes justifies this concern of the students. (Samui, Mondal, & Khajanchi, 2020). Many of the participants stated that their psychology was negatively affected because they were isolated on their own during the quarantine process. In a study conducted in China to understand the psychological symptoms of college students during the quarantine period, negative psychological findings such as fear, anxiety, insensitivity, and rebelliousness were reported (Li, Qin, Shi, & Han, 2021). Since the quarantine process causes negative emotions even in healthy students, it is expected that the psychology of the students participating in our research will be negatively affected.

In our study, participants living with their families set themselves more strict and restrictive rules at home. They gave examples of wearing masks at home, separating the dishes, sitting in different parts of the house. Participants living alone or staying with other intern doctors stated that they were more comfortable in the home environment, they only cleaned the items and clothes they used when they came from outside, and this was sufficient. Living with family is likely to cause increased stress in students due to the risk of Covid-19 transmission. In the study of Islam et al., supporting our findings, it was reported that students living with their families during the quarantine period developed more anxiety and depressive symptoms than those living alone (Islam, Barna, Raihan, Khan, & Hossain, 2020). In this study, where we see that most of the interns' social lives consist of only their friends in the hospital after the hospital starts, online activities can be organized by following the distance rules in order to support them more psychologically and to ensure that they are not alone.

Hospitals are convenient places for the transmission of Covid-19 infection due to crowded and closed environments. The students defined that the areas such as the cafeteria, canteen, elevator, and emergency room in the hospital were crowded and therefore risky areas because social distance could not be maintained. For this reason, they stated that they were careful not to be in these places. In a report describing the characteristics of Covid-19 in China, among the factors associated with the transmission of healthcare workers, public environments, contamination from the environment and the absence of isolation rooms are listed (Wu & McGoogan, 2020).

Participants stated that they pay attention to PPE and hygiene in the hospital environment. They stated that they always use N95, box, gloves, disinfectant among the protective equipment, but they do not wear glasses, visors and bonnets, and some even think that if they wear these equipment, the risk of contamination would be less. The fact that one of the participants took off his mask at the break before the infection was one of the risky behaviors that could be a cause of transmission Chan et al also drew attention to the importance of the continuity of the KKE during the pandemic period (Chen & Huang, 2020).

The students who participated in the research stated that their social life has been reduced to a minimum since the beginning of the pandemic, and that they are only in public environments in the hospital during the education period in the hospital. Some participants stated that they were in public environments such as cafes, gyms and TUS classrooms. In addition, three students stated that they had to use public transportation to reach the hospital. In a study examining the social effects of the pandemic, it was determined that the behaviors of being in crowded environments and choosing public transportation decreased to a large extent during the pandemic period (KARATAŞ, 2020). Despite the risk of pandemic, the preference of public transportation may be due to individuals who have to work during the pandemic period.

According to the statements of students who prefer public transportation, the fact that the necessary care is not taken to Covid-19 infection measures in public transportation may have negatively affected the psychology of individuals and may have resulted in a serious psychosocial situation such as non-compliance with prohibitions (Taylor, 2019). Because of the similar problem, behaviors that increase the risk of infection can be seen in cafes.

Many of our participants did not use the gym, classrooms and various other public areas much after the pandemic started, that they pay attention to adequate precautions even if they do, and that the area where they feel the most risky is not these places, but the hospital.

The participants declared that the clinical practice training was also adversely affected by the pandemic. In a study investigating the effects of the pandemic on medical students, it was emphasized that in case of disruption in clinical practice training, students' self-confidence and their readiness for general practice would be negatively affected (Naser et al., 2021).

Conclusion

This research by identifying possible risky areas in the hospital, by examining the possible transmission routes, and possible contacts, carrier status of interns infected with Covid-19 in depth; will help to decrease in the number of new cases and disease contacts in the hospital and finally this may contribute to the improvement of the education of students on the path of medicine due to Covid-19. In addition, the risk of transmitting the virus to both patients and other healthcare workers will be reduced to a very low level. Measures to be taken as a result of the inferences will positively affect the long-term epidemic process.

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P-93 Empirical Antibiotic Treatment of Uncomplicated Urinary Tract Infections in a Family Medicine Outpatient Clinic

Alpaslan MERT

Abstract

This research article aims to determine the choice of inexpensive, readily available empirical antibiotics to be used for uncomplicated urinary tract infections (UTIs).

Keywords; Empirical antibiotic treatment, family medicine, urinary tract infections,

Introduction and Aim

Do expensive antibiotics really need to be started first in the treatment of uncomplicated urinary infections? Or is treatment with cheap, easily available antibiotics such as Ampicillin from semisynthetic penicillins, Gentamicin from aminoglycosides, Trimethoprim-Sulfamethoxazole (TMP-SMZ) from sulfonamides, and Nitrofurantoin from urinary antiseptics still the first choice today?

Considering that the pharmaceutical expenses for 2020 is 48,6 billion TL (5,8 billion dollars) in our country, it has been investigated whether cheap, easily available antibiotics can be the first choice in the treatment of urinary infections (1).

Method

All of our cases consisted of 100 (one hundred) patients collected from Obstetrics and Gynecology service and outpatient clinic, Pediatrics service, Internal Medicine and Urology polyclinic in Kartal Lütfi Kırdar Training and Research Hospital between January 2, 1991 and February 15, 1992.

40 pregnant women from the Obstetrics and Gynecology service, 15 children from the Pediatrics service, 25 patients from the Internal Medicine outpatient clinic, and 20 adult patients from the Urology outpatient clinic were included in the study.

Evaluation of the patients hospitalized in the service was made with the follow-up information in their files, diary records, laboratory and ultrasonography results. In outpatients, contact was made with the doctors in the relevant polyclinic. Afterwards, the current clinical findings were learned and evaluated together with the results obtained from the bacteriology laboratory. In all cases, the presence of 9-10 leukocytes in the urinalysis microscopy was taken as a criterion, and urine culture antibiogram was taken immediately afterwards. The results were divided into two categories as Resistant and Sensitive. Those in the less sensitive class and the cases that did not grow bacteria were excluded from the study. Oral or intravenous Ampicillin was started in all cases before culture antibiogram results were obtained based on urine microscopy findings. Appropriate changes were made when the culture result came in.

In adults; Ampicillin 1 gr. (oral or intravenous (Iv) every 6 hours), TM –SMZ 160 mg / 800 mg. (orally morning - evening 1 tablet), Gentamicin amp. 80mg. (morning - evening two times a day intramuscular(Im)/ IV), Nitrofurantoin tb. 50mg (orally one time every 6 hours) were given. In children; Ampicillin flk. (100 mg / kg/day IV every 6 hours), TMP - SMZ (based on TMP dose, 2 doses of 10 mg/kg/day orally), Gentamicin amp 40 mg. (5 mg/kg/day, IV every 8 hours), Nitrofurantoin susp. (5 - 7 mg/kg/day orally every 6 hours) were given.

Ciprofloxacin and Ceftriaxone sensitivity were investigated in cases insensitive to Ampicillin, TMP-SMZ, Gentamicin or Nitrofurantoin. Ceftriaxone was preferred instead of ciprofloxacin, since its use in children under the age of 14 and pregnant women is inconvenient.

Ciprofloxacin tb. 500 mg (morning and evening one tablet orally in adults) and Ceftriaxone flk. 1gr (Im/Iv once a day in adults, 50 mg/kg/day. Im/Iv. once a day in children) were given to convenient

cases. The duration of drug use was 10 days in all cases. In addition, the cases were evaluated in terms of age, gender, and existing diseases (Table-1).

We did not specifically use Gentamicin, TMP-SMZ and Nitrofurantoin in our study in pregnant women. Because TMP-SMZ and Nitrofurantoin could not be used safely in all trimesters of pregnancy. We did not prefer antibiotics such as Amikacin, Netilmicin, Tobramycin from the aminoglycoside group because they are more expensive than Gentamicin. Since Amikacin is the least side-effect drug of this group, we did not use Gentamicin, which has more side effects than Amikacin in pregnancy. We preferred ampicillin instead of these 3 antibiotics. We preferred the safer and more effective Ceftriaxone in insensitive cases to ampicillin.

Results

	Children	Adult
Age	Number	Number
0-14	15	-
18-70	-	45
Gender		
Female	10	30
Male	5	15
Diseases accompanying the infection		
Heart failure	1	
Gastroenteritis + Malnutrition	8	
Acute Rheumatic Fever + Hypospadias	1	
Iron deficiency anemia	1	
Acute Glomerulonephritis	2	
Benign Prostatic Hypertrophy		3
Renal stone		1
Diabetes Mellitus		3
Hypertensive Heart Failure		1

Table-1. Classification of children and adults according to age, gender and comorbidities.

E.coli was the most reproducing bacteria in children and adults (Table-2).

	Children	Adult	Total	Rate
Type of bacteria	N	N	N	

E.coli	10	27	37	61.6%
Staphylococcus	1	9	10	16.5
Pseudomonas aeroginosa	1	3	4	6.6%
Enterobacter	-	5	5	8.3%
Proteus	2	1	3	5.3%
Klepsiella pneumonia	1	-	1	1.6%
Total	15	45	60	

Table-2. Types of bacteria reproducing in children and adults.

The highest success rates (sensitivity) were TMP-SMZ (94.6%) for E.coli, Nitrofurantoin (80.0%) for Staphylococci, TMP-SMZ (100.0%) for Enterococci, TMP- SMZ (100.0%) for Proteus, TMP-SMZ (100.0%) for Klebsiella. None of the 4 antibiotics was susceptible to Pseudomonas. Of 60 cases, 56 (93,3%) could be treated with any of the four antibiotics (Table-3). It was unsuccessful in 4 cases (6,6%). These cases were susceptible to either ciprofloxacin or ceftriaxone. There was no resistance to both antibiotics at the same time.

		Ampicilin	Gentamisin	TMP - SMZ	Nitrofurantoin
		N	N	N	N
E.coli (37 cases)	Sensitive	17	31	35 (94.6%)	32
	Resistant	20	6	2	5
Staphylococcus(10 cases)	Sensitive	-	5	-	8 (80.0%)
	Resistant	10	5	10	2
Enterobacter(5 cases)	Sensitive	2	2	5 (100%)	3
	Resistant	3	3	-	2
Pseudomonas(4 cases)	Sensitive	-	-	-	-
	Resistant	4	4	4	4
Proteus(3 cases)	Sensitive	-	-	3 (100%)	-
	Resistant	3	3	-	3
Klebsiella(1 case)	Sensitive	-	-	1 (100%)	-
	Resistant	1	1	-	1
Total (60 cases)	Sensitive	19	38	44	45

	Resistant	41	22	16	15
Success rate		31.6%	63.3%	73.3%	75.0%

Table-3. Success rates if any of the above antibiotics are given alone before the antibiogram results are available.

When dual antibiotics were used, the highest success rate was in the combination of TMP-SMZ+ Nitrofurantoin (86.6%) (Table-4)

	Amp+ Genta	Amp+ TMP- SMZ	Amp+ Nitrofurantoin	Genta+ TMP-SMZ	Genta+ Nitrofurantoin	TMP-SMZ+ Nitrofurantoin
	N	N	N	N	N	N
Sensitive	38	44	44	49	44	52
Resistant	22	16	16	11	16	8
Success rate	63.3%	73.3%	73.3%	81.6%	73.3%	86.6%

Table-4. Success rates when dual antibiotics are used.

In the study conducted on 40 pregnant women, age, gestational age, diseases accompanying the infection and ultrasonography results are given below (Table-5).

Age	n	Rate
15-20	14	35.0%
21-25	16	40.0%
26-30	6	15.0%
31-35	2	5.0%
36-40	2	5.0%
Gestation period (in weeks)		
8-12	4	10.0%
13-24	25	62.5%
25-37	9	22.5%
38-40	2	5.0%
Diseases accompanying the infection		
Bartholin abscess	1	16.6%

Superimposed preeclampsia + Diabetes Mellitus	1	16.6%
Bladder atony (glob vesical)	1	16.6%
Trichomanos vaginalis. (In direct smear preparation)	1	16.6%
Preeclampsia	1	16.6%
In utero Mort Fetal.	1	16.6%
Ultrasonography results		
Renal stone	1	33.3%
Gallbladder stone	1	33.3%
Hepatomegaly + edematous kidney parenchyma	1	33.3%

Table-5. Classification of pregnant women according to age, duration of pregnancy, accompanying diseases and ultrasonography results.

As in children and adults, the most reproducing bacteria in pregnant women was E.coli (Table-6)

Type of bacteria	n	Rate
E.coli	38	95.0%
Proteus	2	5.0%
Ampicillin resistance		
E.coli	4	10.5%
Proteus	2	100%

Table-6. Bacteria reproduced in pregnant women and the cases showing ampicillin resistance.

Ampicillin 1 gram oral/IV was given every 6 hours to all pregnant women. When we gave Ampicillin directly to 40 pregnant women before the urine culture antibiogram results were obtained, no response was obtained in only 6 cases (15.0%). All of these 6 cases were sensitive to Ceftriaxone and Ciprofloxacin. However, we preferred Ceftriaxone since the use of Ciprofloxacin during pregnancy is inconvenient.

Another result we found was that the frequency of urinary infections was more common in small pregnancies. 29 of 40 cases were pregnancies between 8-24 weeks (72.5%).

Discussion

There have been no significant changes in the treatment of urinary infections today. However, the period of using newer and more expensive antibiotics has occurred.

Erek reported that a 7-10 day treatment with Ampicillin or Nitrofurantoin is sufficient in urinary infections(2). Johnson, on the other hand, recommends using any of Ampicillin, TMP SMZ, Cephalosporin or Sulfisaxazol for 7-10 days(3). We used antibiotics for 10 days in all

our cases. Kunin et al. and Mc Craeken et al. reported that a 7-day treatment with Ampicillin, Nitrofurantoin or Cephalosporin was 85.0% successful in the treatment of urinary infections in pregnant women(4,5). In our study, we achieved a success rate of 85.0% in pregnant women and 31.6% in children and adults with the use of Ampicillin. Ernest et al. reported that 10 days of Ampicillin, Sulfonamide or Nitrofurantoin treatment was 80.0% successful in adults. However, if pyelonephritis is suspected, they recommend dual antibiotics(6). Percentage of success in adults and children excluding pregnant women in our study; It was 31.6% in Ampicillin, 63.3% in Gentamicin, 73.3% in TMP – SMZ, and 75.0% in Nitrofurantoin. In a study conducted by Henry Nk et al. in women with uncomplicated urinary infections, TMP - SMZ (160 mg/800 mg) was used twice a day for 10 days and a success rate of 82.3% was achieved(7). The success rates in the use of dual antibiotics in our study were 63.3% in Ampicillin + Gentamicin, 73.3% in Ampicillin + TMP-SMZ, 73.3% in Ampicillin + Nitrofurantoin, 73.3% in Gentamicin + Nitrofurantoin, 81.6% in Gentamicin + TMP-SMZ, and 86.6% in TMP-SMZ +Nitrofurantoin.

Sagduyu et al. stated that combination therapy should be avoided if possible, and that antagonism and nephrotoxicity should be considered. They especially emphasized that the use of aminoglycoside + cephalosporin increases the possibility of nephrotoxicity(8). In our study, we preferred the use of a single drug to avoid antagonism. When the antibiogram results came, we made the necessary changes.

The most effective combination in our study was TMP-SMZ+Nitrofurantoin. TMP-SMZ is generally bacteriostatic and Nitrofurantoin is bactericidal. However, TMP-SMZ is bactericidal effective in the urinary tract. Therefore, there is no antagonism as this combination is bactericidal + bactericidal.

Robertson et al. and Hankins et al. reported that Ampicillin, Nitrofurantoin, Sulfanamide or Cephalosporins can be used for 10-14 days and are 65.0% successful, based on the fact that E.coli is the most common factor in pregnancy(9,10). In our study, the bacteria that reproduced most in pregnant women was E.coli (38 out of 40 cases). Response to Ampicillin was obtained in 34 of 40 pregnant women (85.0% success). The same working groups recommend intravenous administration of Ampicillin and Cephalosporins to hospitalized patients. We also preferred intravenous use in hospitalized patients. We gave oral preparations to the patients we followed from the outpatient clinic.

Conclusion

As a result, if only Ampicillin was given in adults and children, the success rate was 31.6%, while this rate increased to 85.0% in pregnant women. While E.coli reproduces at a rate of 95% in pregnant women in urine culture, this rate is 61.6% in children and adults.

If Ampicillin was given directly to pregnant women, children and adults without any discrimination, it was possible to get a response in 19 out of 60 cases and 34 out of 40 cases, a total of 53 (53.0%). The most effective drug in children and adults was TMP-SMZ (73.3%) and Nitrofurantoin (75.0%), while the most effective combination was TMP-SMZ + Nitrofurantoin (86.6%). Ampicillin resistance in pregnant women was 15.0%. 85.0% of cases were responsive to Ampicillin.

For all these reasons, we should avoid the use of expensive antibiotics in the treatment of urinary infections and should try cheap, easily available antibiotics. In case of no response, it is most appropriate to give medication according to the culture results.

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P-94 Predictive Value of Bacterial Vaginosis in Preterm Labor

Cemil KARAKUS

Abstract

Objective: Evaluation of the clinical importance of metronidazole treatment in pregnant women with bacterial vaginosis (BV) infection.

Material and Methods: This is a cross-sectional-descriptive study on patients who come to the perinatology outpatient clinic. The cases between 22-28 weeks of gestation who applied to the Perinatology Outpatient Clinic between 01.10.2002 and 28.07.2003 were included in the study. Sampling; Cervicovaginal swab samples were taken from the anterior and posterior fornixes, spread on the slide, and gram staining was applied to the preparations after fixation with alcohol, and they were investigated for bacterial vaginosis colonization by direct growth. The cases with severe colonization were divided into two groups and one group was treated. To check the success of the treatment, an appointment was made for a repeat examination at 32 weeks. An appointment was made for repeat examination at 32 weeks without treatment in the other group.

Result: The mean age of the pregnant women included in the study was 27.38 years. While the number of patients with Premature Birth (PMB) was 24 (9.40%), the number of patients who delivered at term was 231 (90.60%). In addition, 5 (83.33) of 6 twin pregnancies resulted in preterm birth. The number of patients with BV was 38 (14.9%) and 20 (52.63%) of them were given metronidazole 2x2 tablets for 2 days. In the repeated samples of 20 patients who received metronidazole treatment, the result was normal in 16 (80.00%) patients, while heavy colonization continued in 4 (20.00%) patients. 4 (80.00%) of 5 patients who were diagnosed with BV and developed PMB during follow-up did not receive treatment, and 14 (42.42%) of 33 patients who did not develop PMB did not receive treatment. Although the difference between them is not statistically significant in the analyzes made, it is seen that larger series are needed.

Discussion: Risk factors associated with premature birth can be revealed by evaluating the history of the pregnant woman during the follow-up period. In this study, in which we tried to measure the value of bacterial vaginosis, which we think may be one of these factors, in preterm labor, we determined that bacterial vaginosis infections may be important, although it is not statistically significant according to the findings. Pregnant women who are found to be at risk of infection in terms of preterm delivery should be followed up and cared for with a multidisciplinary approach, and treatment should be provided when deemed necessary. Pregnant women who are at risk of preterm delivery also carry risks related to exposure to various complications during labor and newborns afterwards. The management of these risky situations by planning treatments with proven accuracy and effectiveness is important both for the healthy delivery of the pregnant woman and for the health of the newborn.

Keywords: Bacterial vaginosis, Preterm birth, Gram stain

Introduction and aim

Bacterial vaginosis (BV) is characterized by infection of the vaginal flora in which protective Lactobacillus is transformed into a mixed anaerobic bacterial exchange, including other pathogenic agents (1,2). The complaint is associated with fishy odor and vaginal discharge, but >60% of women remain asymptomatic (3). BV diagnosis has traditionally been based on Amsel criteria (clinical setting) and Nugent score (laboratory setting/research) (1,4). Recently, microbiome studies have shown greater microbial diversity than previous breeding studies, and in the future BV may be subclassified based on this information (6,9,10). The greater the risk of a negative outcome. In addition, studies reporting on BV diagnosed at 20 weeks of gestation had relatively small sample sizes and the odds ratios in the meta-analysis had wide confidence limits. Recent randomized clinical trials for the treatment of BV and Trichomonas vaginalis provided the opportunity to examine whether BV had been previously diagnosed in a large population of women evaluated for BV at a wide range of

gestational ages according to a single common protocol. was associated with a higher risk of preterm birth than BV diagnosed later in pregnancy.

Material and Methods

The data for this study are from data recently completed at Akdeniz University Faculty of Medicine, where conditions were randomly assigned to metronidazole with or without treatment to prevent preterm labor. These trials required a large number of women to be screened for BV at 18 to 22 completed weeks of gestation. Normally, we did not determine the outcome of pregnancies of women who were screened but did not participate in clinical trials. However, as part of an adjunct protocol, we obtained pregnancy outcomes for women screened between 01.10.2002 and 28.07.2003; During this limited period, 255 women were screened and included in this protocol. Inclusion and exclusion criteria for screening have been described previously. Women were eligible for screening if they were between 18 and 22 weeks of gestation; did not report genital itching, burning, or foul odor; there were no contraindications for taking metronidazole; she has not experienced any significant medical or obstetric complications in her current pregnancy; had not taken antibiotics in the last 14 days and was not expected to take them before the intrapartum period; and can be tracked to delivery.

We defined BV as vaginal Gram stain with a vaginal pH of 4.4. This is the same definition used in the clinical trial and the Vaginal Infections and Prematurity Study. A Dacron swab sample from the junction of the posterior and anterior fornix was rolled on a glass slide and then touched to a ColorpHast pH bar (Curtin Matheson, Grand Prairie, Tex). Slides from women with a vaginal pH of 4.4 were sent to the lab of one of the authors (S.L.H.), where they were stained and interpreted by technicians masked to the clinical data. Therefore, according to the study protocol, women with a vaginal pH value of 4.4% were considered to have no BV even though they did not have a Gram stain read.

The women received routine prenatal care in their institutions. Study personnel extracted birth records to determine date, method and birthmark, and birth weight. In this analysis, we defined BV from the first screening regardless of Gram stains obtained later in pregnancy, as the latter were only available to women participating in the trials. Doctors of women participating in the clinical trial were required to follow a specific protocol, including sonography, to determine gestational age.⁹ However, for women who were screened but not registered, there was no protocol for determining the gestational age of pregnancies. Attempt; therefore, the gestational age used was the best obstetric estimate at birth. We considered all pregnancy losses and all preterm births (36 completed weeks of gestation) after screening tests as a result of interest. Secondary outcomes included deliveries classified as 23rd gestational week and inclusive 23rd to 36th gestational week. The first layer assesses the association between BV and miscarriage early in pregnancy where women are still being screened and will have a variable follow-up period depending on the pregnancy in which the screening occurs. Since all women were screened at 18 to 22 weeks of gestation, the latter definition removed the need to explain the fact that women who were screened earlier in pregnancy had more time to experience pregnancy loss than women who were screened later. We also examined spontaneous preterm labor, defined as spontaneous labor or preterm delivery after spontaneous rupture of membranes, regardless of the final delivery method.

Categorical variables were compared using the chi-square test. When categories were ordered (eg, no BV, Gram stain, Gram stain), significance was assessed for trend with the Cochran-Armitage test. We present the gestational age at screening at 2-week intervals starting from week 8 to 12 of diagnosed pregnancy up to week 21 to 22. For women screened in each gestational age window, we calculated the odds ratio for preterm birth among BV-positive compared to BV-negative women. If BV diagnosed earlier in pregnancy had a greater relative risk of preterm birth than BV diagnosed later, the odds ratio for BV would be earlier in pregnancy when women were screened. To test this hypothesis, we used a multiple logistic regression model that included the term BV (yes/no), gestational age at screening (in weeks as a continuous variable), and the interaction term between BV and gestational

age.

If BV diagnosed earlier in pregnancy had a greater relative risk of preterm birth than BV diagnosed later, the interaction term would be statistically significant and have a negative value. This assumes that the log odds ratio for preterm birth among BV-positive and BV-negative women decreases linearly with advancing pregnancy, which seems reasonable based on previous studies. Finally, the association between BV and pregnancy loss at 23 weeks of gestation was evaluated with a proportional hazards model. This allowed for gradual entry into the study (ie, women screened at different gestational ages); The model estimates a hazard ratio that is similar to a relative risk. Statistical analysis was performed with SAS statistics software (version 8.2; SAS Institute Inc, Cary, NC). In all analyses, 2-tailed probability values of ≤ 0.05 were considered statistically significant.

Results

There were 327 women screened for BV, 38 (14.9%) had BV. Of these women, 255 had pregnancy outcomes and 231 pregnancies (9.31%) lasted 37 weeks. Excluding 12 pregnancy losses at 23 weeks of gestation reduced the preterm birth fraction to 10.6%. Most women were screened at 20 weeks of pregnancy; 45% of women did not give birth. No other descriptive data were collected on women. In the entire population, delivery at 37 weeks of gestation was more common among 228 women with BV (18.1%) than among 327 women without BV (11.8%; $P = 0.001$). There was also a significant trend ($P = 0.001$) for a higher incidence of preterm labor in women with more abnormal Gram staining values; While 14.1% of 327 women with scores between 7 and 8 gave birth prematurely, 16.5% of 213 women with scores between 9 and 10 gave birth prematurely. Outcomes were similar for spontaneous preterm labor, total and spontaneous delivery between 23 and 36 weeks of gestation. The hazard ratio for pregnancy loss at 23 weeks of gestation was 3.2 (95% CI, 1.1-1.8), which is comparable to the odds ratio for delivery at 23 to 36 weeks (odds ratio, 1.05; 95% CI, 1.1-1.2).

BV was associated with an increased risk for both outcomes, but there was no evidence that the odds ratio associated with BV was higher when screening occurred earlier in pregnancy than when screening occurred later. Figure 2 shows the odds ratios for delivery at 23 weeks of gestation and at 23 to 36 weeks of gestation by screening time. Odds ratios for all preterm births among women with higher pH and Gram stain scores of 7 to 8 or 9 to 10 compared with women with normal pH or Gram stain scores 0 to 6 are presented for total preterm birth. Although higher Gram stain scores were associated with an increased risk of preterm birth in most pregnancies, the odds ratio for all preterm births among women with scores 9 to 10 was not higher when screening was performed earlier in gestation (probability value for the interaction of score 9). -10 with gestational age). The odds ratio for all preterm births among women scoring 7 to 8 actually increased with increasing gestational age ($P = .049$)

In no case was there a trend that the odds ratio for preterm birth was higher when screening for BV was performed and diagnosed earlier in pregnancy. Information on pregnancy outcome was lacking in 23 (18%) women screened, and women with BV were less likely (14%) to have incomplete pregnancy information than women without BV (20%; $P = 0.001$). This was purely due to participation in clinical research; Among trial participants, 1.9% of women with BV and 2.0% of women without BV lacked pregnancy outcome information ($P = .92$), compared to 22% of women with BV in women not in the clinical trial. and 21% of women without BV ($P = .17$). When women participating in the clinical trial were excluded from this analysis, the results did not change significantly.

Conclusion

This study, which included more women ($n = 327$) screened at 20 weeks of gestation, more than all previous studies combined, did not find that the likelihood of pregnancy loss or preterm delivery at 23 weeks was higher when BV was diagnosed earlier in pregnancy. birth than it was diagnosed later. This is in contrast to the results of a recent meta-analysis that reported an odds ratio of 7.45 for BV diagnosed at 16 weeks of gestation, 4.30 for BV diagnosed at 20 weeks of gestation, and 1.50 for BV diagnosed at 20 weeks of gestation. At 20 weeks pregnant.

The rate of preterm birth among BV-negative women in these studies ranged from 7% to 11.8%. Most studies have reported rates considerably lower than the 12.2% preterm birth rate among BV-negative women in our population. Of note, our estimate of odds ratio for preterm birth among BV-positive women was very similar to the odds ratio of 1.4 for preterm low birth weight reported in the Vaginal Infections and Prematurity Study screened at 23 to 23 for BV. It was performed at 26 weeks gestation and in a population similar to ours.

Most previous studies on women at 20 weeks of gestation were relatively small, leading to statistically imprecise estimates of the association between BV and preterm birth. Even when these studies were combined in a meta-analysis, the odds ratio for preterm birth when diagnosed with BV at 20 weeks of gestation was 2.11 to 8.39 with a 95% CI; The 95% CI for BV diagnosed at 16 weeks of gestation was 1.70 to 25.2.

There are possible reasons why our study did not find that BV diagnosed early in pregnancy carries a relatively large risk of preterm birth. We did not use a standard protocol for the assessment of gestational age among women ineligible for the clinical trial, and errors in the measurement of gestational age may have obscured our ability to observe an increased risk. However, we collected data on birth weight for these women, and when the analyzes were repeated for low birth weight (2500 g) and very low birth weight (1500g), the results were almost the same as for preterm birth, suggesting that there are differences. Gestational age measurement did not take into account our results.

We did not read the Gram stains of women with a vaginal pH value of 4.4%. Because the definition of BV for the clinical trial required both abnormal pH and abnormal Gram staining, screening for the experiment was more efficient. However, it limits our ability to study the joint effects of pH and flora. There were 136 women in this study who had normal pH values and therefore were not evaluated for Gram staining, so we estimate that we misclassified 126 women as normal who would have received Nugent scores if we had read the Gram stains. Our current definition identified 25 women with BV and 126 as normal, so we believe misclassification of 23 women is acceptable, if not optimal.

We did not collect comprehensive data on antibiotic use after screening among women not included in the clinical trial. BV treatment may have blunted the negative effect on preterm birth. However, women who had recently received antibiotics were ineligible for screening and we collected data on which of the women were ineligible for trial because they received antibiotics after screening but before being randomly assigned to treatment. We also collected extensive data on antibiotic use among women in the clinical trial. When we excluded women taking these clinically indicated antibiotics and women randomly assigned to receive metronidazole in the trial, our results did not change significantly. Therefore, we do not believe that informal use of antibiotics is responsible for the lack of increased risk of preterm birth among women with BV compared with women without BV when screened early in pregnancy.

Outcome data were not found for 18% of women screened. To determine the maximum effect that missing results could have on outcomes, all BV-positive women and none of the BV-negative women with missing results !37. We've made the extreme worst-case assumption that you're giving birth at 30 weeks of gestation. In this unlikely case, the odds ratio for preterm birth among BV-positive women screened at 13 weeks of gestation would be 3.7 (95% CI, 3.3 to 4.3). Although elevated, this is still considerably lower than the value of 7.55 noted by Leitich et al⁶ for women with BV at 16 weeks of gestation.

Perhaps more importantly, like almost all previous research on this topic, we know when BV is first diagnosed in pregnancy, but we don't know the actual time when women initially get BV. For most, if not most, of these women, it seems likely that BV preceded pregnancy. 20 Longitudinal data from non-pregnant women show that occasional BV-consistent genital flora days are common. Make sure it is defined. In addition, spontaneous resolution of BV may not result in a reduced risk of preterm birth, although this conclusion has been based on a small number of women. The chronic nature of BV and

the lack of benefit of resolution argue against the high risk of BV. when diagnosed early in pregnancy.

Women with lower genital tract symptoms were not eligible for screening and were not included in the study. However, only 5% of women were excluded from screening because of symptoms, not all of whom would have BV, which is not a likely explanation for our failure to find a greater relative risk for BV diagnosed early in pregnancy.

In conclusion, we evaluated whether earlier diagnosed BV in the 8 to 22 weeks gestational age range was associated with a greater increase in the risk of preterm birth than later diagnosed BV and found that gestational age at screening and diagnosis was BV-positive. women did not affect the relative risk of preterm birth.

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P-95 Intensive Care Restructuring in Covid-19 Pandemia

Sule OLGUN

Abstract

The World Health Organization accepted Covid-19 as an international public health problem and declared it as a pandemic on January 30, 2020. Intensive-care units are units where nursing services and treatments have a privileged importance. During this pandemic process we are in, the unit that needed infrastructure, material and personnel support in the hospital was, of course, intensive care. The important thing in this process is to make the necessary preparations for possible situations in intensive-care units. The working team must be prepared for the new waves and pandemics that may develop, and must constantly follow the agenda with new publications and keep their information up-to-date. In this article, which we prepared based on the literature, it is aimed to compile the knowledge of how intensive care planning should be during the Covid-19 pandemic process.

Keywords: Pandemic, Intensive Care, Restructuring.

Introduction

The new coronavirus, which emerged in Wuhan, China, in December 2019, was announced to the world on December 31, 2019, by the Wuhan Health Commission, the National Health Commission of the People's Republic of China and the Centers for Disease Control. For the first time, Zhu et al. Presented the genetic makeup of the virus as a summary report on January 24, 2020 (Zhu, Zhang, Wang, Li, Yang, Song et al., 2020; Li, Guan, Wu, Wang, Zhou, Tong et al., 2020. ; Parr, 2020). The World Health Organization accepted Covid-19 as an international public health problem and declared it as a pandemic on January 30, 2020 (TUBA, 2020).

Our country has always been ready for the increase of patients in intensive-care units during the Covid-19 pandemic process and still manages the process very well. Intensive-care units; these are the units where patients with critical problems endangering their lives are monitored continuously for 24 hours and where advanced technologies with complex structures are used. In these units, the hemodynamics of the patients who need intensive care is kept constant, vital signs such as blood pressure, pulse, respiratory rate, body temperature and oxygen saturation are continuously monitored on the monitor, and in case of any deviation in any of the vital signs, the mechanical ventilator is kept ready at the patient's bedside. The medicines, liquids and nutritional solutions he has taken are given to the patient. Intensive-care units are units where nursing services and treatments have a privileged importance (Auld, Caridi, Scheible, Blum, Robichaux et al., 2019; WHO, 2020).

General Information

Intensive-care nurses responsible for 24/7 care and treatment of their patients are healthcare professionals with evidence-based care and intensive care-based technology knowledge (Zhu et al. 2020; Ng, Poon, Puar, Quah, Loh, Wong et al., 2020 Vergano, Bertolini, Giannini, Gristina, Livigni, Mistraletti et al., 2020). In the pandemic process we are in, intensive care nurses work with a separate devotion. Certain decisions were taken by the Ministry of Health in the Covid-19 pandemic process in order to both alleviate the burden of intensive-care nurses and to reduce the cost. The physical capacity of intensive-care units should be determined throughout the hospital, and the physical capacity should be increased in case the

number of patients increases in the future. The equipment, equipment and workforce capacity to be used in the care and treatment of Covid-19 patients in intensive-care units should be determined in advance, and necessary planning should be done despite the possibility of an increase in the number of possible patients (CDC, 2020).

If the care and treatment of a Covid-19 positive individual is to be continued in intensive care, they should be taken to negative-pressure isolated single rooms. However, in the pandemic process, it may not be possible to provide these opportunities due to the density of patients. In this period, in order to transform different areas into intensive-care units, single rooms with closed doors and open windows to ensure air circulation can be used for intensive-care patients, if these rooms are also filled, different areas can be transformed into intensive-care units in order to increase the intensive-care capacity (ANZICS, 2020).

Which Units of Hospitals Can Be Converted to Intensive Care in Pandemic?

In case of insufficient number of intensive-care beds in the care and treatment of patients in need of intensive care during the Covid-19 pandemic process, the following units can be used as intensive care, provided that the necessary infrastructure is provided.

- Coronary care units
- Service beds in some places
- Perioperative monitoring/recovery areas
- Out of service critical care areas
- Unused intensive-care units

Desired to be specified by providing the necessary infrastructure:

The intensive care and treatment of the Covid-19 patient is the ability to provide the appropriate physical environment for monitoring, one air outlet, two oxygen outlets, two aspiration outlets and a 12-line electrical outlet, which are necessary for close monitoring (ANZICS, 2020).

What to Do When Intensive Care Workers Are Insufficient?

- During the Covid-19 pandemic process, there may be situations where intensive-care workers are insufficient. In order for the intensive-care process to continue without interruption at such times;
- Nurses who have received intensive care training or have experience in intensive care in their working life but are not working in intensive care at that time.
- Nurses with critical patient experience in different areas of the hospital
- To pediatric intensive-care nurses
- To coronary intensive-care nurses

Nurses who are familiar with the intensive-care environment and at the same time have few clinical applications can be assigned (ANZICS, 2020). During the pandemic process, an intubation team should be formed and this team should be comprised of anesthesia workers. Therefore, in the intubation team formed for emergency cases; there is an anesthesiologist, assistant, technician, technician and nurse. The intubation team can work in two areas;

- Leading rapid response teams
- To assist professionals working in newly established fields

In addition, more experienced intensive care workers can be assigned to lead a team that has recently moved to areas physically separated from intensive care and has no intensive care experience, and to manage intensive-care patients with this team (ANZICS, 2020).

In the planning of intensive-care workers during the pandemic process, the possibility that healthcare workers may also be infected should not be ignored and care should be taken in the

whole process in terms of the risk of infection of intensive-care personnel. Intensive-care visits should be restricted or even banned during the pandemic process. Video conferencing systems and telemedicine services can be used in council meetings such as exchanging information or presenting cases (CDC, 2020; Phua J, Weng L, Ling L, 2020). Covid-19 diagnosed patient care and follow-up such as "Covid-19 Diagnosed Patient Hospitalization Procedure, Covid-19 Diagnosed Patient Transport Procedure, Covid-19 Diagnosed Patient Medication Procedure, Covid-19 Diagnosed Patient Surgical Consent Form" procedures should be developed (ICN, 2020c; ICN, 2020d; THD, 2020; THD Istanbul Branch, 2020).

Intensive-care workers should use personal protective equipment and materials to ensure safety during patient care and treatment applications with a diagnosis of Covid-19. During the pandemic process, all these equipment and material needs should be determined and an algorithm should be created for high-risk or medium-risk groups (ICN, 2020c; THD, 2020). In addition, the stock amount of personal protective equipment and all other materials that will be used by intensive care workers in care and treatment, the supply chain and who will provide this supply, from which unit should be clearly stated and intensive care workers should be informed about this issue (ICN, 2020c; THD, 2020; THD. Istanbul Branch, 2020).

Monitoring and control of infection control measures applied by nurses and all other employees in hospitals should be made more strictly during the pandemic process, and supervisor nurses and infection control nurses should be supported more than ever (THD, 2020; THD Istanbul Branch, 2020). The team responsible for the care and treatment of patients diagnosed with Covid-19 must carefully plan the units where the care and treatment of the patients diagnosed will be carried out together with the hospital management (THD Istanbul Branch, 2020). In case of a possible diagnosis of Covid-19, it is necessary to plan nurses who will be able to work in place of nurses who can be quarantined, so that nurse workforce planning will be carried out (ICN, 2020c).

No records and information of the patient should be contacted, and a digital recording and information system should be used to prevent contact (Hoffmann, Battaglia, Perpetua, Wojtaszek, & Campbell, 2020; ICN, 2020c; THD Istanbul Branch, 2020). Employed nurses must also establish a communication network among themselves and answer the questions they ask each other with messages over this network (THD, 2020; THD Istanbul Branch, 2020; Wu, Zheng, Huang, Zheng, Xu & Zhom, 2020). Patient outcomes such as the recovery rate of inpatients with a diagnosis of Covid-19, the development of a pressure wound, if any, the condition of the wound, the condition of an additional infection should be recorded (THD, 2020). Despite the possibility of increasing the number of patients, the maximum possible bed capacity should be determined, and the preparation should be made for this (THD Istanbul Branch, 2020). For this, it is necessary to plan the negative pressure isolation rooms and other necessary physical arrangements, equipment and healthy personnel to work and a rotating work program in intensive care (THD Istanbul Branch, 2020).

During the Covid-19 pandemic process, in case of possible death of the patient in intensive care, the patient's relatives should be supported and the chaos environment should not be allowed to occur, for this, the appropriate procedures should be determined by joint decision and these procedure steps should be followed carefully, respectively (THD Istanbul Branch, 2020).

Another important point is to provide flour to the rapidly changing and updated pandemic rules for nurses, who have perhaps the most important role in coping with the pandemic process. There will be changes in the hospital operating procedure during the pandemic. Committees and teams should be formed in order to provide employee and patient training, to monitor infection control and follow-up procedures, patient admission and exit procedures,

pharmacy operating procedure, forms used, occupational health and safety studies, and committee decisions should be recorded and should be shared with the hospital management. The committee and committee that can be formed for this purpose should consist of committees such as Occupational Health and Safety Committee, Education Committee, Infection Control Committee (THD Istanbul Branch, 2020).

Finally, in the resource booklet (April, 2020) created by the Turkish Intensive Care Nurses Association for nurses who will work in the intensive-care unit specific to the Covid-19 pandemic, it was emphasized that the number of working nurses and patients should be adjusted to the number of patients who have Covid-19 diagnosis with mechanical ventilation. It has been stated that the ideal ratio is 1/1. It was stated that rotation between intensive-care nurses for difficult tasks, guide or mentor intensive care nurse should be matched with nurses who have no experience in the care and treatment of patients diagnosed with Covid-19, and this team should be ensured to work in the same shift permanently.

It was emphasized that the daily working time should be kept as short as possible in 4, 6 and 8 hour shifts, as well as the necessity of keeping the weekly working time as short as this. In order to ensure an accurate, regular and uninterrupted understanding of information between intensive-care nurses and other healthcare professionals, the necessary digital network should be provided, online team meetings should be held and all disciplines should address the problems together. (Turkish Intensive Care Nurses Association, 2020).

Conclusion and Recommendations

The life of human beings in the world and in our country is divided into two separate processes as before and after the Covid-19 pandemic. We seem to see this effect for a long time. During this pandemic process we are in, the unit that needed infrastructure, material and personnel support in the hospital was, of course, intensive care. The important thing in this process is to make the necessary preparations for possible situations in intensive-care units. The working team must be prepared for the new waves and pandemics that may develop, and constantly follow the agenda with new publications and keep their information up-to-date. In this pandemic process, besides patient safety, the safety of our healthcare professionals who provide care and treatment to patients should be kept at the highest level. For this, it is very pleasing that the vaccination process has started in the world and in our country and that healthcare workers are vaccinated first.

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P-96 The Importance of Biochemical Screening in the Diagnostics of Anomalies of Congenital Development

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Abstract

Currently, congenital developmental anomalies are one of the main problems of the health care system in most developed and developing countries of the world. As noted at the 63rd Assembly of the World Health Organization in 2010, "Congenital anomalies are a serious health problem worldwide", including causing moral and economic harm to their families.

Key words: congenital developmental anomalies, diagnosis of COVID-19 coronavirus, perinatal diseases and death, fetal, pregnant, hereditary diseases, embryogenesis, amniotic fluid, biochemical screening, AFP, XG, NT, PA-DBS and FB-DBS.

Relevance

Hereditary diseases can be detected in the early stages of embryogenesis and in the perinatal period. It can be seen that more than 2000 hereditary diseases are manifested in children from infancy. Chronic diseases, including in children and adults, occur due to 50% of genetic determination. The occurrence of congenital developmental anomalies (CMD) is multifactorial (1,2,3,4,5,8,9). In particular, at the moment there is no data on the teratogenic effect of the virus. To date, there is no data on the course of COVID-19 as an intrauterine infection. There is insufficient data on the occurrence of congenital malformations in the fetus (6,7,10,11). These problems are a priority area requiring in-depth study of general and clinical genetics, obstetrics, pediatrics, perinatology and other areas

Goals and Objectives of the Study

To study the importance of biochemical screening in the diagnosis of congenital malformations and in pregnant women with COVID-19 coronavirus infection.

Materials and Research Methods

Pregnant women with congenital malformations in 66 fetuses and pregnant women without congenital malformations in 30 fetuses, who applied to the Samarkand Regional Center for Screening of Mother and Child, were prospectively investigated. These 66 pregnant women were identified as the 1st main group (1-AG), and 30 pregnant women without congenital malformations were identified as the 2nd control group (2-NG). In total, $n = 96$ pregnant women.

Inspection Result

77% of the pregnant women in the study were rural and 23% urban. Their average age was 21.7 ± 2.3 years. 81% are housewives by profession, 19% are workers. Living conditions have grown satisfactory.

Screening tests were performed at 14-22 weeks of gestation. Interpretation of biochemical screening results in 66 pregnant women with TRA.

In 14 (21.2%) pregnant women with cardiovascular anomalies in 1-AG, the AFP level was 0.30-0.37 months in 10 (71.43%), and the XG level was 0.40-0.46 months in 4 (28, 6%). turned out to be less than usual. In contrast, 4 (28.6%) had AFP (0.5-2.5 mM) and 10 (71.43%) had XG. In other words, low AFP levels and normal HG levels were observed in 6 people (42.9%), AFP and XG levels were decreased in 4 people (28.6%), AFP and XG levels were normal in 4 people (28.6 %).

Thus, in cardiovascular diseases, a decrease in AFP was observed only in 6 (42.9%) and a decrease in both AFP and XG - in 4 (28.6%), and a decrease in total AFP was diagnosed in 10 (71.43 %) of pregnant women. There was a decrease in XG levels observed in 4 (28.6%) TRA statements. TRA was within the normal range of AFP and XG levels in 4 (28.6%) identified pregnant women. This means that 28.6% of AFP and XG levels are within the normal range and do not always confirm the presence of TRA.

The characteristics of amniotic fluid were studied in 14 pregnant women diagnosed with cardiovascular anomalies. In 4 of them (28.6%), high turbidity and turbidity were found, in 1 (7.14%), turbid water was abundant, but clean, and in 2 (14.3%), turbid water was turbid, despite the norm ... Against the background of cardiovascular anomalies, the lack of cochlear fluid was not revealed. This means that cardiovascular abnormalities are characterized by a large amount of water and cloudiness.

Biochemical screening of 6 (9.1%) pregnant women with cervical hygroma showed an increase in NT levels in the range of 5.13–5.22 months during 12 weeks of pregnancy in 4 (66.7%) pregnant women. Of these, 2 (33.3%) had PA-DBS-3.73 and FB-DBS-2.92 mM exceeding the norm. 2 (33.3%) had high levels of NT and PA-DBS and moderate levels of FB-DBS. Another 2 patients (33.3%) showed high levels of NT and FB-DBS and moderate levels of PA-DBS. In 16 (33.3%) pregnancies with a diagnosis of cervical hygroma at 16 weeks of gestation, AFP and XG levels were normal and had no diagnostic value. This is due to the fact that in 1 of these pregnancies (50%) the fetus did not develop at the 17th week of pregnancy.

Coagulation was normal in all pregnant women. Only 2 (33.3%) had turbidity.

Thus, the determination of the amount of NT during biochemical screening of the cervical hygroma showed the feasibility of confirming the diagnosis (66.7%). The diagnostic weight of PA-DBS and FB-DBS was lower (33.3%). Hygroma of the cervix of the fetus is characterized by clouding of amniotic fluid (33.3%).

TRAs of the urinary tract were found in 20 (30.3%) pregnant women. Their interpretation of the results of biochemical screening was as follows: the decrease in the amount of AFP occurred in the range of 0.29–0.44 mM. XG was in the range of 0.27-0.43 months. Of these, 6 had low AFP and XG (30%), 2 had low AFP and 2 had low HG, 10 had low AFP and 4 had low HG, and 8 had low AFG and XG. 40%).

Amniotic fluid characteristics: abundant and turbid in 6 people (30%), normal level in 6 people (30%), low humidity and turbidity in 4 people (20%), low content and complete absence of amniotic fluid found in 2 (10%).

Thus, on the part of the urinary system, it was revealed that TRA HG was below normal in 10 (50%) and AFP in 8 (40%). The urinary system was found to be directly proportional to the TRA due to its low water content and turbidity.

In 4 (6.1%) pregnant women, the fetus showed a decrease in the basal system, paralysis of the legs. According to the results of their study, the amount of AFP in general decreased from 0.33 to 0.43 mM. The amount of XG remains normal.

The amniotic fluid level was normal, and only 2 (50%) were turbid.

Thus, quantifying the AFP in the additional confirmation of the base system reduction proved to be effective. The amount of XG remained within the normal range. The turbidity of the amniotic fluid was directly correlated with a decrease in the baseline system.

At the time of detection, the encephalocele met AFP and XG standards. amniotic fluid is very turbid. Hydrothorax with AFP and XG decreased by 0.39 mM with normal and clear amniotic fluid

Thus, AFP and XG were the criteria in the definition of encephalocele. It was characterized by an abundance of amniotic fluid and their turbidity. When hydrothorax was detected, AFP and XG levels decreased by 0.39 mM, which was expressed in the normalcy and purity of amniotic fluid.

Fetal malformation was observed in 6 (9.1%). In 4 of them (66.7%) normal AFP with fetal immaturity decreased the amount of XG to 0.14-0.23 mM. In 2 (33.3%) both AFP and XG showed moderate results. amniotic fluid in all of them was moderate and characterized by turbidity. In 2 pregnancies (3.03%), the fetus had a spontaneous miscarriage in the first trimester of pregnancy. In 1 of them, the AFP level was 0.49 months, and the XG level was within the normal range. In the next 1, the amount of AFP and XG was normal. This means that when the fetus is not developing, the amount of XG decreases and the amniotic fluid becomes cloudy. AFP decreases with spontaneous abortion.

UTT screening results at 12 weeks gestation indicated that fetal umbilical hernia, cleft lip, and RARR are moderate. The cleft palate and rabbit lip TRA showed a decrease of only XG-0.40 MoM when detected at 18 weeks gestation. The number of AFPs came out in moderation. No pathology was found. In Dandy Walker syndromes, the decrease in NT and PA-DBS-norm and FB-DBS was 0.26 mM. The turbidity of the amniotic fluid has disappeared. Thus, it has been shown that RARR screening and prenatal UTT screening for additional confirmation of TRA at 12 weeks gestation are targeted and effective methods.

66 women in 1-AG 7 (10.6%) were diagnosed with the COVID-19 virus. Of the 30 women in the 2-NG group, 8 (26.7) were diagnosed and treated with the COVID-19 virus. The reason for the large number of patients with the SOVID-19 virus in the control group was that they came to the screening center to study the effect of the virus on the fetus. In them, the screening results were as follows. Ultrasound screening 1-AG showed that TRN, AFP-0.33 MoM, XG-0.33 MoM-coagulation was absent in pyelectasis of both fetal kidneys, AFP-0.33 MoM, XG-0.95 MoM-coagulation in the waters of both fetal legs are normal, cleft lip AFP-0.38 MoM, XG-0.47 MoM and hydronephrosis of the fetal kidney AFP-0.50 MoM, XG-0.39 MoM) AFP-0.53 MoM, XG-0.78 MoM no pathology of amniotic fluid coagulation was found, AFP-0.66 MoM in encephalocele, XG-0.55 Water for MoM coagulation was abundant and green, AFP-1.21 MoM for hydrothorax, XG-0.39 MoM, pathology no placenta was found.

Even in the absence of TRA in the 2nd NG, the AFP-0.22-0.42 MoM and XG-0.21-0.46 MoM results were below the norm (the norm of 0.52 MoM), and in the 1st XG-2 , 1 were above normal. In 2-NG, when 1 AFP-0.25 MoM and XG-0.34 MoM were present, the amniotic fluid was abundant and its color was green. In the other 1 AFP was 0.64 MoM and XG-1.74 MoM was normal, the water was normal but green. All 6 of them showed no pathology

Table 1.

Screening results in pregnant women diagnosed with COVID-19 virus

Screening results in 7 pregnant women with COVID-19 infection in 1-AG	Results of screening in 8 pregnant women with COVID-19 infection in 2-NG and no TRA in ultrasound screening

Ultrasound screening	Biochemical screening		Biochemical screening	
Detected TRA	AFP	CG	AFP	CG
Pyeloectasia of both kidneys of the fetus	0,33	0,33	0,22	0,46
Clubfoot of both legs	0,33	0,95	0,25	0,34
Cleft lip	0,38	0,47	0,42	0,21
Renal hydronephrosis of the fetus	0,50	0,39	0,42	1,19
Cystic adenomatous malformation of the lungs	0,53	0,78	0,53	0,67
Encephalocele	0,66	0,55	0,64	1,74
Hydrothorax	1,21	0,39	0,70	2,1
	-	-	0,94	1,62

Thus, the result of biochemical screening for 1-AG correctly correlated with the norm and the abundance of green amniotic fluid. This raises the suspicion of fetal neural tube defects, including abdominal wall defect, atresia of the red right and duodenum, urinary tract, and some kidney pathologies when AFP and XG levels are below normal in pregnant women diagnosed with COVID-19. It is advisable to carry out amniocentesis and other genetic, cytological studies to clarify the diagnosis. Abnormal AFP and XG levels cast doubt on Shereshevchi-Turner syndrome in chromosomal disorders, fetal growth retardation, and placental disease. Our results showed that mainly the placenta was affected and there were pathologies of the placenta. It is also well known that a decrease in AFP levels and an increase in XG levels occur in Down syndrome with chromosomal abnormalities. It should be noted that the reliability of the AFP test is 60% in Down's syndrome and 80-90% in neural tube abnormalities. In a biochemical test, the age, weight, presence or absence of diabetes in a pregnant woman, and the accuracy of the gestational age determine the accuracy of the result. SOVID-19 infection in pregnant women at risk identified by the TRA has been associated with gestational complications. Despite the fact that pregnant 2-NG were infected with SOVID-19, no pathology was revealed in the amniotic fluid.

Conclusion

The result of biochemical screening in 1-AG correlated with the norm and the abundance of green amniotic fluid.

Demonstrates the feasibility of amniocentesis and other genetic, cytological studies to clarify the diagnosis of TRA.

The results showed that the placenta was mostly affected and that there were abnormalities in the placenta. Developmental abnormalities in the fetus were not found.

COVID-19 infection in pregnant women at risk identified by the TRA has been associated with gestational complications. Despite the fact that pregnant women with 2-NG were infected with COVID-19, no pathology was revealed. This can be explained by the fact that healthy pregnant women in the control group have a mild course of the disease and a low incidence of complications.

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P-97 Fear of Covid-19, Resilience and Psychological Distress in White Collar Employees During the Covid-19 Pandemic

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Abstract

Aim: This study aims to evaluate the imposed mental health effect on individuals caused by the fear Covid-19 and its relationship with the level of resilience on the white-collar employees in the Turkish Republic of Northern Cyprus.

Methods: This cross-sectional study was carried out in March - May 2021 in 200 white-collared employees who are working at three different office in the Turkish Republic of Northern Cyprus. The sample was not selected in the study, it was aimed to reach the entire white collar workforce in three different Corporation and it was completed with 198 people. Research data was collected online via questionnaire and also three standard scales, which were the Short Psychological Resilience Scale, the Covid-19 Fear Scale and the Covid-19 Psychological Distress Scale. In the study, Pearson Chi-square, Mann Whitney U test and Kruskal Wallis analysis were used and $p < 0.05$ was considered statistically significant. Ethics approval was obtained.

Results: In the study, 56.6% of the participants were women and 20.7% of the participants reported that they had a chronic disease. It was found that 24.7% of the participants showed low resilience, 75.3% moderately-high resilience. Women exhibited a significantly higher level of fear of Covid-19 compared to men. In addition, the participants who received psychiatric support during the pandemic showed higher resilience compared with the participants who had not. A positive, strong and significant correlation was found between the Covid-19- Psychological Distress Scale and the Fear of Covid-19 Scale.

Conclusion: While the number of people affected by the Covid-19 pandemic continues to increase and the mental health consequences are still uncertain, the mental effects of the pandemic should not be overlooked in the process of investigating the effects of the pandemic in different areas. Understanding the underlying issues and identifying high-risk groups can greatly help prevent and treat consequences in the early stages.

Keywords: Brief resilience scale; Covid-19 related psychological distress scale; fear of Covid-19 scale

Introduction and Aim

Pandemic; it is the general name given to epidemic diseases that spread and affect a very wide area in more than one country or continent in the world. The current Covid-19 pandemic is associated with various stressors. Along with exposure to such a threat to health and life, quarantine, self-isolation, job loss or family conflicts are among the main stressors associated with the pandemic (Hyland et al., 2020). As the crisis continues, its impact on people's psychological well-being and mental health is likely to increase. Moreover, stress-related responses such as generalized fear and fear-induced hyperreactive behavior in the public may interfere with infection control (Dong & Bouey, 2020).

A study in Spain found that about 37% of people suffer from psychological distress (signs of traumatic stress) due to the Covid-19 outbreak, and the predicted impact is consistently higher for women and youth (Rodríguez-Rey, Garrido-Hernansaiz, & Collado, 2020). However, a few specific variables, such as having children, loss of income due to the outbreak, or having

a pre-existing health problem were associated with Covid-19-related psychological distress (Lotzin et al., 2020).

A study conducted in Ethiopia shows that levels of resilient coping are associated with lower psychological distress. In particular, those who scored moderate and high levels of resilient coping had a significant negative association with the probability of psychological distress (Necho, Tsehay, Birkie, Biset, & Tadesse, 2021).

Currently, there is no data on the Turkish Republic of Northern Cyprus that addresses and evaluates the fear, resilience and psychological distress caused by the epidemic.

This study aims to evaluate the imposed mental health effect on individuals caused by the fear Covid-19 and its relationship with the level of resilience on the white-collar employees in the Turkish Republic of Northern Cyprus.

Method

This cross-sectional study was carried out in March - May 2021 in 200 white-collared employees who are working at three different office in the Turkish Republic of Northern Cyprus. The sample was not selected in the study, it was aimed to reach the entire white collar workforce in three different corporation and it was completed with 198 people. In this study, it was aimed to evaluate the effect of the pandemic in terms of mental health, fear of Covid-19, resilience and Covid-19-related psychological distress in a sample including the Turkish Cypriot community. In terms of special purposes, it is aimed to compare according to variables such as gender, age, economic status, employment status, marital status, presence of chronic diseases, education level, and place of residence. In addition, it is aimed to determine the relationship between the fear of Covid-19 and the degree of resilience of the person through scales. Research data was collected online via questionnaire and also three standard scales, which were the Short Psychological Resilience Scale, the Covid-19 Fear Scale and the Covid-19 Psychological Distress Scale. In the study, Pearson Chi-square, Mann Whitney U test and Kruskal Wallis analysis were used and $p < 0.05$ was considered statistically significant. Ethics approval was obtained.

Results

In the study, 56.6% of the participants were women, 76.2% of the participants were lived in the province, 65.2% of the participants were were single, 61.1% of the participants had children and 20.7% of the participants reported that they had a chronic disease. The socio-demographic characteristics of the participants are shown in Table 1.

Table 1. Sociodemographic characteristics of the participants

		n	%
Gender	Female	112	56.6
	Male	86	43.4
Where You Live in	Province	151	76.2
	Non-province	47	23.8
Marital status	Single	129	65.2
	Married	69	34.8

Status of having children	Yes	121	61.1
	No	77	38.9
Presence of chronic disease	Yes	41	20.7
	No	157	79.3
Total		198	100.0

It was found that 24.7% of the participants showed low resilience, 75.3% moderately-high resilience. The participants with the highest rate of low resilience were found to be non-Turkish Republic of Northern Cyprus citizens, single people and those without dependent children. Those with a university or higher education level showed lower resilience than those with a high school or lower education level. The results of the participants with and without psychiatric disorders were found to be close to each other. In addition, the participants who received psychiatric support during the pandemic showed higher resilience compared with the participants who had not.

The mean score of all participants from the fear of Covid-19 scale was calculated as 17.6. The groups with the highest scores from this scale were found to be non-Turkish Republic of Northern Cyprus citizens and those with chronic diseases. Turkish citizens, participants living in villages and single participants were the groups with the lowest scores. Women exhibited a significantly higher level of fear of Covid-19 compared to men.

The group with the highest score from the Covid-19 related psychological distress scale was the group with 42 points, whose income was less than their expenses. Following this group, there were women and Turkish citizens with 41.5 points, those living in villages with 41 points, those with a university or higher education level and those with chronic illness. The lowest score was those who did not have children with 16 points. When the groups were compared within themselves, no statistically significant difference was detected.

A positive, strong and significant correlation was found between the Covid-19- Psychological Distress Scale and the Fear of Covid-19 Scale. There was no significant correlation between age and brief resilience scale or the fear of Covid-19 scale score ($p>0.05$). Also no significant correlation was found between the Brief Resilience Scale and the Covid-19 related psychological distress scale or the fear of Covid-19 scale ($p>0.05$).

Discussion

This study is the first study that aims to measure the resilience, fear and psychological distress levels of people due to the Covid-19 pandemic in the Turkish Republic of Northern Cyprus. The aim of the study is to find out the effects of the pandemic on the general society and to determine whether certain segments of the society are more affected.

In similar studies conducted in many countries such as Cuba, India, Pakistan, Vietnam, Russia, Belarus, Bangladesh, Greece and Israel, it has been determined that the female gender is an important indicator of the level of fear and Brazil was found to be the country with the highest level of fear of Covid-19 for women (Broche-Pérez, Fernández-Fleites, Jiménez-Puig, Fernández-Castillo, & Rodríguez-Martin, 2020). Similarly, in our study, women exhibited a higher level of fear than men. In the light of these data, we can say that the female gender experiences the effects of the pandemic more, whether there is a significant difference or not,

regardless of country structures. Learning that half of the society is affected so much will guide the stages of producing solutions.

In a similar study conducted in Brazil, the FCS-19S scale score average of the participants was found to be 19.8 points (Giordani, Zanoni da Silva, Muhl, & Giolo, 2020), and this value was found to be 17.4 and 16.6 points in Russia and Belarus, respectively (Reznik, Gritsenko, Konstantinov, Khamenka, & Isralowitz, 2020). In our study, since the FCS-19 score average was found to be 17.6 regardless of gender, it will be possible to say that the level of fear of people in the Turkish Cypriot community is lower. There could be many different reasons for this. For example, early closure practices during the pandemic process, strict quarantine rules for people coming from abroad, stable contact tracing can be considered as reducing the cases to zero levels. No new cases were detected in all tests carried out between April 17 and July 22, and the country went to normalization. People did not have to be isolated for long periods of time, and social activities continued, albeit intermittently. Such factors will keep morale and motivation high, increase coping skills and reduce fear.

In a similar study conducted in Pakistan, the fear level of young adults was found to be higher than that of adults and the elderly (Mahmood, Jafree, & Qureshi, 2020). In our study, on the other hand, no significant correlation was found between age and fear level.

According to the study of Sadati et al 2020, people's resilience levels decreased after the Covid-19 pandemic, and their vulnerability levels increased (Sadati, B Lankarani, & Bagheri Lankarani, 2020). Therefore, resilience plays an important role in assessing the effects of the Covid-19 pandemic. It has been shown that resilience and hopefulness protect against mental illness and are directly proportional to subjective happiness. Resilience interventions are a strategy that can be used to cope with stress. As a result, it is thought that resilience can also protect against mental disorders that may develop due to fear of Covid-19. It has also been revealed that fear of Covid-19 mediates the relationship between resilience and happiness. For this reason, resilience is important in terms of preventing the fear of Covid-19 and ensuring the continuity of the feeling of happiness (Steinhardt & Dolbier, 2008). According to the results of this marker, which we also attach importance to in our study, although most of the participants showed normal resilience, a considerable number of them showed low resilience. Although no significant difference was observed, we can see that women suffer from low stamina more than men. In addition, the participants with low resilience were found to be those who received psychiatric support during the pandemic and those who were not Turkish Republic of Northern Cyprus citizens.

In this study, higher the Covid-19 related psychological distress scale scores of women and individuals under the age of 45 were observed. In another study by Haktanır et al. in Turkey, no significant difference was found between other sociodemographic factors, including age groups, and the Covid-19 related psychological distress scale scores (Haktanir, Seki, & Dilmaç, 2020).

Feng et al's study revealed that the Covid-19 related psychological distress scale scores differ according to educational status, marital status, monthly income, and the presence of dependent children. In addition, although the gender difference was found to be similar, the Covid-19 related psychological distress scale scores of individuals over the age of 45 were found to be higher (Feng, Zhang, & Ho, 2021). In our study, however, no significant difference was observed between sociodemographic data and the Covid-19 related psychological distress scores. However, although the results were not significant, the groups with the highest scores were found to be those with less than their income, women, Turkish citizens, those with a university or higher education level, single individuals and those with chronic diseases. Our results are similar with the results of Haktanır et al. This can be

attributed to the cultural and social similarities between the Turkish and Turkish Cypriot community.

Economic income is also an important factor in dealing with the Covid-19 pandemic. Many people were unemployed during this period or the economic burden of many people increased. In our study, there were those who stated that the income of the group with the highest score on the psychological distress scale was less than their expenses. This finding is that the importance of economic income is undeniable. However, governments can identify these people, and by providing both financial and psychological support, they will play an important role in getting out of the pandemic process with the least possible damage.

Limitations

The study is in cross-sectional design format. Symptoms and stressors can change over time. Our research was carried out 1 year after the onset of the pandemic. The burden and effects of the pandemic may have changed in the beginning and in the ongoing process. Participants may have adapted more to the pandemic in a 1-year period, so their perception and stress levels may have changed according to the onset of the pandemic. Since the applied working population is white-collar workers, it will represent white-collar workers and it will be difficult to generalize to the whole society. Our research draws attention as it is the first study on this subject in Northern Cyprus. If this research is carried out with a larger sample group, more reliable results can be obtained that reflect the society about Covid-19 fear and resilience.

Conclusion

In our research, the participants with the highest rate of low resilience were found to be non-Turkish Republic of Northern Cyprus citizens, single people and those without dependent children. Those with a university or higher education level showed lower resilience than those with a high school or lower education level. The results of the participants with and without psychiatric disorders were found to be close to each other. In addition, the participants who received psychiatric support during the pandemic showed higher resilience compared with the participants who had not. Also, women exhibited a significantly higher level of fear of Covid-19 compared to men. The group with the highest score from the Covid-19 related psychological distress scale was, whose income was less than their expenses. Following this group, there were women and Turkish citizens, those living in villages, those with a university or higher education level and those with chronic illness. The lowest score was those who did not have children. While the number of people affected by the Covid-19 pandemic continues to increase and the mental health consequences are still uncertain, the mental effects of the pandemic should not be overlooked in the process of investigating the effects of the pandemic in different areas. Understanding the underlying issues and identifying high-risk groups can greatly help prevent and treat consequences in the early stages.

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P-98 Virtual Reality Applications in Spinal Injury

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Abstract

Aim: Spinal injuries are injuries that are caused by high-energy trauma such as falls from heights with high morbidity and cause labor loss. Although physiotherapy and surgical interventions are mostly conventional treatment methods that provide the reversal of dysfunctions due to spinal damage, there have been studies on the use of gaming and virtual reality in treatment in recent years. The review is aimed to investigate the studies including virtual reality in the treatment of spinal injury.

Method: The studies were searched including keywords “virtual reality” and “spinal injury” in Pubmed database from 2016 to 2021. The virtual reality applications that are used in treatment or rehabilitation of spinal injury were included. The augmented reality, or mixed reality applications; virtual reality that is used for treatment of other spinal diseases and non-fulltext papers are excluded.

Results: There were 88 studies including the keywords. There are 86 studies with full text included 9 systematic reviews and 2 meta-analysis in this theme. The use of virtual reality in the randomized controlled and clinical trials are commonly in psychological rehabilitations or psychological health of patients with spinal injury, neuropathic pain, gait training and embodiment. Mostly used biofeedbacks are mainly used in the simulations of reaching, walking.

Conclusions: The treatment of patients with spinal injuries is a long, and patient-dependent process. The longevity of treatments may be affected by interruptions such as pandemics. Virtual reality applications, which are one of the examples of personalized treatment and guide the patient with their biofeedback, can also provide treatment in the daily lives of patients.

Key words: Spinal Injury, Trauma, Virtual Reality

Introduction

Virtual reality (VR) is defined as the simulation of real scenarios through perceptions and is characterized by perception, visual, tactile and auditory perceptions, perceiving unreal scenarios as real and creating reactions accordingly(29). The first cinematic design was made by Morton Heiling in the 1950s, and the first virtual reality glasses compatible with virtual reality were discovered 10 years later by Sutherland and Sproul(29). The type of simulation used in aircraft simulations, automobile industry and military education is also used in the field of medicine, integrated with serious games, in the fields of education, navigation, and treatment. There are three types as non immersive, semi-immersive and full immersive(14). For full immersive VR, it is the type that makes the user feel like they are in a fully prepared virtual environment, such as an overhead screen, a biocular multi-directional monitor or a cave. Non-immersive VR is a type that is applied only with 2 or 3 dimensional images on the computer without using any complex equipment.

Spinal cord injuries were reported up to 100 patient per million and most of them involves cervical cord injuries(14). In addition to motor sensory losses caused by spinal injuries, psychosocial resuscitation is needed into practices. VR, which is applied in the fields of neurorehabilitation, especially in the fields of physiotherapy and psychotherapy, is trying to develop many virtual reality applications to support patients, patient relatives and healthcare professionals for physical and psychological rehabilitation in the management of the chronic

process caused by spinal injuries(1–3,5). Especially with VR applications, which gained popularity in the 2000s, studies in the last twenty years contribute to the literature with case and pilot studies.

We aimed to investigate (1)the use of fully immersive VR technologies in physiotherapy in spinal injury patients and (2)the comparison of VR and conventional usage in physiotherapy regarding complete and incomplete SCI patients and review the studies including virtual reality in the treatment and rehabilitation of spinal injury.

Methods

The studies were searched including keywords “virtual reality” and “spinal cord injury” (also with abbreviations as “VR” and “SCI”)in Pubmed database from 2016 to 2021. The included virtual reality applications were used in treatment or rehabilitation of spinal injury. The augmented reality, or mixed reality applications; virtual reality that is used for treatment of other spinal diseases and non-fulltext papers were excluded.

Results

There are 88 studies including the keywords. There are 87 studies with full text included 24 reviews in this theme. Twenty nine studies with 20 randomised controlled trials included in this review(Figure 1).

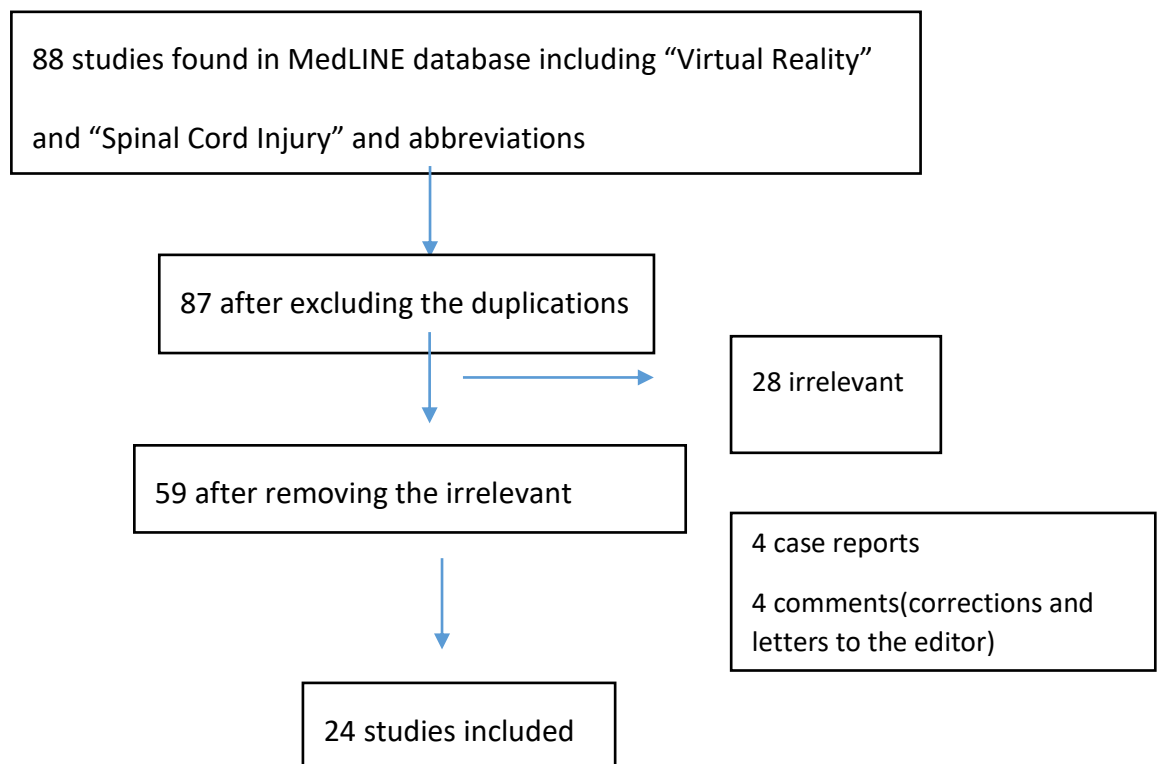


Figure1. Flow diagram of database search

The use of virtual reality in the randomized controlled and clinical trials are commonly in psychological rehabilitations or psychological health of patients with spinal injury, neuropathic pain, gait training and embodiment. Mostly used biofeedbacks are mainly used in the simulations of reaching, walking.

PMID	Year	First Author	Immersive	Biofeedback	Target part	Target function	N.Pain	Population	Incomplete SCI
26181226	2016	Dimbwadyo-Terrer I(7)	Yes	Yes	Upper limb	Reaching	No	9 sci	Both
27513629	2016	Donati AR(8)	Yes	Yes	Lower limb	Gait	No	8 paraplegia	Both
26544859	2016	Jordan M(10)	No	No	Lower limb	Gait	Yes	17 tetraplegik 18 paraplegik with neuropathic pain	Both
26890097	2016	Roosink M(21)	Yes	Yes	NA	Gait	No	9 sci	Both
27640345	2016	Shokur S(23)	Yes	Yes	Upper and Lower limb	Sensation	No	8 sci	Both
26885511	2016	Dimbwadyo-Terrer I(6)	Yes	No	Upper limb		No	31 patients with subacute complete cervical tetraplegia	Both
28986411	2017	Pozeg P(16)	Yes	Yes	NA	Ownership	Yes	20 paraplegia, 20 healthy	Both
29339902	2017	Khurana M(11)	No	No	Lower limb	Balance	No	30 paraplegia	No
29234302	2017	Villiger M(27)	Yes	Yes	Lower limb	Gait and Balance	Yes	12 chronic iSCI	Yes
28880130	2018	An CM(3)	Semi	No	Lower limb	Gait and Balance	Yes	10 SCI	Yes
30524356	2018	van Dijksseldonk RB(26)	Yes	No	NA	Gait and Balance	No	15i SCI	Yes
30213177	2018	Prasad S(17)	No	No	Upper limb	Hand functions	No	22 SCI	Both
31771600	2019	Duffell LD(9)	No	Yes	NA	Cycling	No	11 iSCI	Yes
30407030	2019	Richardson EJ(19)	Semi	Yes	Lower limb	Gait	Yes	59 patients with SCI and neuropathic pain	Both
30823854	2020	Tamplin J(24)	Yes	No	NA	Psychotherapy	No	12 iSCI	Yes
32502564	2020	Lakhani A(12)	Yes	No	NA	Psychotherapy	No	24 SCI	Both
32721988	2020	Lim DY(14)	Yes	No	Upper limb		No	10 SCI 10 control	Both
32198431	2020	Scandola M(22)	Yes	Yes	Lower limb		No	19 complete paraplegia, 23 incomplete paraplegia 28 control	Both
33300418	2020	Tosi AB(25)	No	No	Lower limb	Physiology	No	8 paraplegic	No
33371624	2020	Walia S(28)	No	Yes	NA	Balance	No	48 iSCI	Yes
31757776	2020	Robinson-Whelen S(20)	Yes	No	NA	Psychotherapy	No	10 women patients with sci	Both
33572242	2021	Lee MJ(13)	Yes	Yes	NA	Balance	No	20 healthy and patient	Both
33843410	2021	Manzanares A(15)	Semi	Yes	NA	Balance	No	11 patients with SCI medullary lesion lower than T1	Both
33077900	2021	Austin PD(4)	Yes	No	NA		Yes	16 SCI	Both

Table1. Studies included in the review regarding features of patients and virtual reality applications

Fifteen of the 24 studies used full immersive virtual reality applications and three used semi immersive VR. Twelve studies involved biofeedback as visual(n=7), audio(n=2) and tactile(n=6) feedbacks. Most of the patients were paraplegic and mostly targeted limb was lower limbs(n=8). The VR applications were mostly targeting on balance(n=8), gait(n=7), psychotherapy(n=4). There are 6 studies which investigated the participants suffering neuropathic pain. Twenty-five percent(25%) of the studies have included only incomplete SCI patients. The percent of both incomplete and complete SCI patients included were 66%. Quantitative scores were measured regarding VR applications compared to conventional methods in two studies.

Discussion

Virtual reality applications used in the rehabilitation and treatment of patients with spinal cord injury have gained momentum in the literature. There are applications in outcomes such as restoring motor and sensory function loss, gaining proprioception and cognitive spatial location skills, psychosocial rehabilitation, relieving neuropathic pain and increasing quality of life(1,2,9,18). Robotic limbs, brain-machine interfaces, tactile feedbacks take an important place in these studies (9,21).

Although mostly seen SCI was cervical injuries (14), virtual reality applications were targeted to lower limbs to maintain the functions of gait, walking and balance.

Besides found beneficial on walking and lower limb motor functions (19,27), VR also found better results than traditional therapies regarding independence (11). In before after studies semi immersive VR showed increasing scores on walking speed and limit of stability (3,26). Psychotherapy suggested as an option for SC patients especially with neuropathic pain (12,24). Improved scores as have been associated with incomplete SCI patients (9).

There are risk of bias especially in selection of the patients. Diagnostic suspicion bias is also a risk in patients who are familiar with the technology or estimates the superiority of the technology on conventional therapies. The patients also chosen from the hospitalised and known chronic patients which leads Berkson's bias and Volunteer Bias. The studies which does not have control groups at the same time of the study has non-comparability bias. Also the patients' level of diseases are not very stable that makes Neyman Bias. The studies are also have Lead and length time bias which patients have different level of achievement that cant be compared also in conventional therapies.

The treatment of patients with spinal injuries is a long, and patient-dependent process. The longevity of treatments may be affected by interruptions such as pandemics. Virtual reality applications, which are one of the examples of personalized treatment and guide the patient with their biofeedback, can also provide treatment in the daily lives of patients.

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P-99 Vitamins in Immunity and Covid-19: A Review

Irem DURCEK

Abstract

The New Coronavirus Disease (COVID-19) epidemic, which caused millions of cases and deaths, was caused by severe acute respiratory syndrome coronavirus 2. A strong immune system is very important in this epidemic. T cells are active in controlling and coordinating immune responses. These cells can be classified as antigen-recognizing and cytotoxic T cells. They show vitamins, antioxidants and immunomodulators. For a strong immune system, essential micronutrients such as vitamins A, D, E, C, B6, B12 must be taken into the body. Anti-inflammatory nutrition can prevent infections and support the immune system to fight infections. Thus, in the COVID-19 pandemic, it can regulate the severity of diseases.

Keywords: Covid-19; immunity; micronutrient; nutrition; vitamin.

Introduction and Aim

Viruses from the Coronaviridae family are zoonotic viruses that can be transmitted from animals to humans (Skalny et al., 2020) and have four subfamilies, the α , β , γ , and δ coronaviruses (Junaid et al., 2020). COVID-19 is caused by severe acute respiratory syndrome coronavirus (SARS-CoV) 2, a single-stranded RNA virus belonging to the beta-coronavirus genus. Severe acute respiratory syndrome coronavirus 2 shares a sequence identity of 79.5% with SARS-CoV and 50% with the Middle East respiratory syndrome coronavirus (MERS-CoV) (Keflie et al., 2021). The first binding site of SARS-CoV and SARS-CoV-2 becomes the angiotensin-converting enzyme 2 (ACE2) receptor in human nasal, oral, and conjunctival tissues (Stratton et al., 2021). SARS-CoV-2 binds to ACE2 receptors with 10 to 20 times higher affinity than SARS-CoV (Keflie et al., 2021). The highest level of ACE2 is in the small intestine, testis, kidneys, heart, thyroid and adipose tissue, and the medium level is in the lungs, colon, liver, bladder and adrenal gland (Fakhroo et al., 2021). While SARS-CoV-2 infects pulmonary macrophages and type 2 pneumocytes, it also infects tissues that express ACE2 receptors, such as the heart and kidneys (Stratton et al., 2021).

Acute respiratory distress syndrome, a secondary infection such as bacterial pneumonia, and the development of severe sepsis are the hallmarks in the course of more severe COVID-19 infection (Adams et al., 2020). Proinflammatory cytokines reaching high concentrations can cause a cytokine storm. These cytokine storms lead to lung injuries that result in life-threatening acute respiratory distress syndrome (ARDS) (Keflie et al., 2021). In conclusion, COVID-19 is a multifaceted, multisystem, multiorgan disease (Infusino et al., 2020).

The system most affected by COVID-19 is the respiratory system, and the second is the immune system (Infusino et al., 2020). Cell-mediated immune responses are essential to countering COVID-19. One of the critical aspects for the control of SARS-CoV-2 infections is the helper T cells (CD4) helper cell response with interferon (IFN) gamma in combination with specific neutralizing antibodies. One of the important factors for clearing RNA viruses without causing secondary damage to host tissues is cytotoxic (CD8) T cells. There is a significant decrease in the CD4 and CD8 T cell numbers of COVID-19 patients. Surviving T cells are also functionally depleted. This T-cell depletion is a condition seen in chronic viral infections. Thus, cytokines are thought to play a role in the reduction of T cells in COVID-19 (Stratton et al., 2021).

In the rapid progression phase of COVID-19, an increase in systemic interleukins, chemokines and tumor necrosis factor (TNF)- α is observed, and these changes correspond to features of a cytokine release syndrome in which interleukin (IL)-6 contributes to many of the key symptoms (Infusino et al., 2020). Sources of cytokines are T cells, macrophages and monocytes (Stratton et al., 2021). Typical features of severe cytokine release syndrome include activation of endothelial cells followed by vascular dysfunction. Nuclear factor κ B (NF- κ B) potentiates the inflammatory response, stimulates the production, mobilization and adhesion of inflammatory cells, affects the production of enzymes such as inducible nitric oxide synthase (iNOS), cyclooxygenase-2 (COX-2), phospholipase A2 (PLA2), and induces the production of many molecules that determine the production of free radicals that cause tissue damage (Infusino et al., 2020).

People have used plants from ancient times to the present day, and the area of use has not remained only as food. Although its mechanism of action has not been fully elucidated, it has also been used as a drug in viral infections with its secondary metabolites (Celik et al., 2021). Modulation of the immune system through the modification of dietary nutrients is immune nutrition (Jovic et al., 2020). Changes in immune responses mediated by T cells and antibodies and suppression of the immune system by dysregulation of the host immune system are conditions seen with micronutrient deficiencies (Junaid et al., 2020). Nutritional status is a crucial factor for an optimal prognosis in people infected with SARS-CoV-2, which can determine the clinical severity of COVID-19. Vitamins A, C, D, E, B6 and B12, which are micronutrients that contribute to immune function in various ways in both innate and adaptive immune responses, are important for the structural and functional integrity of physical inhibitors and for differentiation, proliferation, function and migration of innate immune cells (de Faria Coelho-Ravagnani et al., 2021). For example, vitamins A, C, D, and E also have anti-inflammatory or antioxidative effects, which can prevent virus-induced cytokine storm and also prevent tissue damage (Mayasari et al., 2020).

The purpose of this mini review is to summarize information on the novel coronavirus (SARS-CoV-2) and vitamins to supplement dietary counseling provided by dietitians.

Vitamin A

Vitamin A is a necessary vitamin for the protection of respiratory epithelial cells (Keflie et al., 2020) and mucosal integrity (Jayawardena et al., 2020). While vitamin A plays an important role in boosting immune function, it also acts as a regulator of cellular and humoral immune responses (Jayawardena et al., 2020; Gorji et al., 2021). Retinoic acid (vitamin A) contributes to the cytotoxic capacity of the immune system. It takes part in the control of antigen-presenting cells and in the balance of T-helper (Th) 1 lymphocytes and Th2 lymphocytes (Junaid et al., 2020). Retinoic acid-inducible gene I, which functions as a cytosolic pathogen recognition receptor, directs immune signaling after binding to pathogen-associated molecular pattern motifs in viral RNA that accumulates during acute infection of many RNA viruses (Keflie et al., 2020). It also supports the expansion of T cells in COVID-19 (Ebrahimi et al., 2020). Information about dietary intake and supplementation of vitamin A for the prevention of COVID-19 infection in adults is very small (Morais et al., 2021). It has been associated with poor outcome in MERS-CoV, SARS-CoV, and other respiratory viral infections and increased levels of IL-17 in serum and bronchoalveolar secretion (Gorji et al., 2021).

In these aspects, it is a vitamin that can help to prevent harmful situations that can be caused by the new coronavirus and to prevent lung damage (Junaid et al., 2020). It also reduces morbidity and mortality from some viral infections while inhibiting viral replication (Gorji et al., 2021).

Vitamin B complexes

Via the regulation of energy production in immune cells, vitamins B1, B2 and B5 control the host immune response. The repair of B cells is damaged by vitamin B1 deficiency. Vitamin B2 exerts a strong antiviral effect on a wide variety of viruses, such as MERS-CoV, alone or in combination with ultraviolet light. The differentiation of T cells is regulated by vitamin B3. Vitamin B3 also reduces the production of some proinflammatory cytokines and down-regulates transformative growth factor- β gene expression and NF- κ B activity (Gorji et al., 2021). Lymphocytes from individuals deficient in vitamin B6, which is necessary as a coenzyme in the metabolism of antibodies and cytokines, show decreased proliferation, decreased IL-2 production in response to mitogens, and decreased antibody production in response to immunization (Richardson et al., 2020).

When folate is deficient, which plays a crucial role in nucleotide synthesis and can therefore affect immune cell proliferation and response, both the proliferation of various cell types and the proportion of circulating T lymphocytes and their proliferation in response to mitogen activation are reduced (Richardson et al., 2020). There is a 3C-like protease (3CL) hydrolase enzyme that has an important role in the coronavirus life cycle and is also called the parent protease. Hydrogen bonds have been shown to form between this enzyme and folic acid molecules, and their activity is inhibited and the viral life cycle may be decayed. Folic acid, which acts as an inhibitor, can be used for the treatment of new coronavirus (Taheri et al., 2021). Vitamin B12 is a cofactor in folate metabolism. Thus, it contributes to antibody production and metabolism (Arruda de Souza Monnerat et al., 2021).

Vitamin C

Vitamin C is an essential antioxidant and enzymatic cofactor in many important physiological reactions in the body, including hormone production, collagen synthesis, and immune enhancement (Jayawardena et al., 2020). It plays a role in epithelial and endothelial barrier function, maintains vasodilation and reduces proinflammatory modulators (Infusino et al., 2020). Vitamin C reduces reactive oxidative types (ROS) and inflammation by reducing NF- κ B activation (Holford et al., 2020). In addition, it scavenges free oxygen radicals, reduces gene expression of proinflammatory cytokines, and increases microbial killing in certain cell types (Adams et al., 2020). Vitamin C in human arterial endothelial cells eliminates ACE2 upregulation induced by IL-7 (Holford et al., 2020). Vitamin C decreases pro-inflammatory cytokines such as TNF- α and increases anti-inflammatory cytokines such as IL-10 (Shakoor et al., 2021).

Vitamin C in leukocytes is quickly used up during infection. Vitamin C has been suggested as one of the elements that can be used against cytokine storm, a condition that can develop with COVID-19 infection (Shakoor et al., 2021). Vitamin C has many beneficial roles in potentially fighting against SARS-CoV-2 infection (Rossetti et al., 2021).

Vitamin D

Another vitamin that protects the physical integrity of cells and supports immune function is vitamin D. This vitamin increases the response of cells associated with innate and adaptive immunity (Quiles et al., 2020). Vitamin D exerts its effect on T cells, which down-regulates Th1-cell cytokines, particularly IFN- γ , and stimulates Th2-cell responses (Fiorino et al., 2020). Excess ROS production may increase NF- κ B expression in immune cells, leading to increased production of proinflammatory factors such as iNOS and COX-2. Vitamin D reduces the disproportionate release of ROS, increases intracellular glutathione concentrations, and may decrease the expression of NF- κ B and p38 MAP kinase, reducing the expression of proinflammatory genes in immune cells (Allegra et al., 2021). Deficiency plays a role in the onset and severity of viral respiratory infections and severe lung damage (Quiles et al., 2020).

It also changes the link integrity of viruses, increasing the likelihood of infection by viruses and other pathogens. In addition, it is associated with increased thrombotic complications commonly detected in SARS-CoV-2 infection. Through different mechanisms, the prognosis of patients with SARS-CoV-2 may worsen with vitamin D deficiency, while in elderly patients it may combine inflammation and cytokine storm (Allegra et al., 2021). The possible mechanism here is that calcitriol may increase the expression of the ACE2 receptor that mediates COVID-19 infection (Yang et al., 2020).

Vitamin E

Vitamin E protects cell membranes from lipid peroxidation, and immune cells are also included in these cells (Detopoulou et al., 2021). Vitamin E contributes to the immune response in many ways, including phagocytosis, antibody production and T-cell proliferation (Akhtar et al., 2021). Vitamin E increases cellular and humoral immune responses, lymphocyte proliferation, NK cell activity and IL-2 production (Fedeles et al., 2021). Vitamin E, which reduces and limits inflammation by targeting COX-2 and 5-lipoxygenase, also prevents the production of proinflammatory cytokines, including IL-1, IL-6, TNF and the chemokine IL-8, by monocytes and macrophages (Fiorino, 2020).

Vitamin E is a vitamin that acts on respiratory tract infections. Vitamin E may be a virulence factor for SARS-CoV-2 (Morais et al., 2021).

Conclusion

In infection with respiratory viruses, decreased immunity is an important risk factor (Im et al., 2020). People infected with COVID-19 may have either deficiencies in nutrients or an increased need for these elements (Rozga et al., 2021). A diet created with vegetables, fruits, nuts, legumes, whole grains and moderate levels of milk, fish and poultry is balanced. This diet should be supplemented with olive oil. The intake of sugar, refined carbohydrates, processed foods and red meat should also be restricted (Junaid et al., 2020). In addition, a diversified diet rather than a specific nutrient may prevent or reduce the vulnerability of those with acute and chronic illnesses in COVID-19 (Morais et al., 2021). It is essential that every patient diagnosed with COVID-19 be screened for malnutrition using a validated nutritional screening tool (Jayawardena et al., 2020). Diet, nutritional supplements, and similar interventions hold great promise for preventing and managing COVID-19. But strong clinical trial data are needed to support such claims (Infusino et al., 2020).

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P-100 Problems Faced by Nurse in the Covid-19 Pandemic

Büsrâ İNAC YILMAZ

Abstract

Introduction: Covid 19 has led to the pandemic, which can be transmitted through respiratory droplets, contact and aerosols, causing large-scale infections worldwide. Nurses, who are fighting against the epidemic at the forefront, experience great physical and psychological distress. This psychological distress may be predominantly sleep disturbance, anxiety and depression symptoms, post-traumatic stress, inability to make decisions, and even somatic symptoms. A strong relationship was found between healthcare workers and COVID-19 in terms of psychiatric repercussions.

Aim: In this study, the problems of nurses, who are among the health professionals most affected by the covid 19 pandemic, are mentioned.

Conclusion:It is known that healthcare professionals have a higher level of indirect traumatization, where the level of influence exceeds psychological and emotional tolerance and indirectly results in psychological abnormalities. In the face of long work shifts (reaching an average of 16 hours a day), the high risk of contracting a highly contagious disease, and the lack of adequate biological protection measures, mental distress has suddenly become apparent among healthcare workers. The pandemic brings with it ethical problems as well as psychological and spiritual problems. It has caused and continues to cause moral distress and unexpected challenges to the ethical values of nurses and health professionals, including human rights issues. The psychological status of nurses needs more attention during the COVID-19 pandemic.

Keywords: Covid 19; exposure; mental health; nurse; pandemics

Introduction

COVID-19 first appeared on December 31, 2019 in the city of Wuhan, Hubei Province, China. Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more serious diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARSCoV). COVID-19 has not been previously identified in humans (WHO, 2020; Üstün & Özçiftçi, 2020).

Compared to past outbreaks such as SARS and Ebola, COVID-19 is highly contagious during the incubation period and asymptomatic infection persists (Special Expert Group for Control of the Epidemic of Novel Coronavirus Pneumonia of the Chinese Preventive Medicine, 2020). It can be transmitted through respiratory droplets, contact and aerosols. As a result, COVID-19 has caused large-scale infections worldwide, leading to a pandemic. According to WHO reports, as of 26.08.2021, the number of covid positive cases was determined as 213 752 662 and the number of deaths as 4 459 381 (WHO, 2021). According to the data of the Ministry of Health, the total number of Covid cases in Turkey was determined as 6 039 857 and the total number of deaths as 52 860 (Ministry of Health of the Republic of Turkey, 2021).

Nurses, who are fighting against the epidemic at the forefront, experience great physical and psychological distress. This psychological distress may be predominantly sleep disturbance, symptoms of anxiety and depression, post-traumatic stress, inability to make decisions, and even somatic symptoms (Cañadas-De la Fuente et al, 2018; Sadati et al, 2016; Tehrani et al, 2013; Maharaj, Lees & Lal, 2018; Nie et al, 2020).

Medical personnel are always at the forefront of any epidemic and risk their lives to fulfill their duties. Because they are more likely to be in close contact with COVID-19 patients, they

are more prone to infection and spreading the virus among colleagues and family members (Gao et al, 2020). An analysis by Amnesty International in September 2020 found that at least 7,000 healthcare workers worldwide died from covid. The countries with the highest number of healthcare worker deaths in this report are Mexico (at least 1,320) and the United States (at least 1,077). Turkey was in the 16th place in this list with the deaths of 41 healthcare workers. According to the records of Turkish Medical Association on August 10, 2021, the number of doctors who died from covid was determined as 133 (TMA, 2021 data).

The Turkish Thoracic Society (TTS) conducted a survey investigating the rate of catching Covid-19. According to the survey conducted in the period of December 2020 and January 2021, the rate of health workers caught in Covid-19 is 57.4 %. This rate was found to be much higher in Turkey compared to other countries in the world. Unfortunately, 1 out of every 74 people who died in Turkey due to Covid-19 is a healthcare worker. According to the responses to the surveys, the rate of healthcare workers infected with Covid-19, which was 12.1 percent in the June – July 2020 period, increased significantly in the December 2020 - January 2021 period and became 57.4 % (TTS, 2021).

In another scientific study conducted on this subject, the highest rate of infection was found in the inpatient services of hospitals. This finding showed that healthcare workers in the service environment are more risky in terms of biosecurity measures compared to healthcare workers in units such as intensive care or emergency services (Nie et al, 2020).

Such a high number of infected medical personnel has not been seen in modern history. In addition to physical stress, medical personnel also face great mental loads. Previous research has found that SARS puts the greatest burden on nurses out of healthcare professionals. This is a requirement of being in close contact with infectious patients for a long time. In addition, many hospital workers resigned during the epidemic and nurses had to take over a large part of the work. Therefore, the emotional problems experienced by nurses during the COVID-19 epidemic should be given more importance (Chiu, 2003; Leung and Ooi, 2003; Maunder et al, 2003; Bai et al, 2004; Lin et al, 2007; Wong et al, 2015; Khalid et al, 2016).

Conclusion

The most visible and primary effects during the COVID-19 pandemic are physical problems (shortness of breath, impaired sense of taste and smell, cough, etc.). In addition, they were also affected psychologically, such as fear of death, anxiety of uncertainty, helplessness, hopelessness, depression, post-traumatic stress disorder, and irritability. In the process, not only the sick individuals/society, but also the healthcare professionals are physically and psychosocially affected by the process because they are both members of the society and work at the front line under serious risk (Huang et al, 2020; Santarone, McKenney & Elkbuli, 2020; Ehrlich, McKenney & Elkbuli, 2020).

Huang et al. (2020) compared the emotional reactions and coping strategies of nurses and nurse students. It was found that nurses exhibited more anxiety, fear, sadness and anger than nursing students. However, it was concluded that nursing students experience extreme psychological stress, excitement, doubt, helplessness and worry about their future careers when faced with an epidemic. The fact that they cannot be physically present with their families due to infection concerns further increases the distress of nurses.

In the longitudinal study of Cai et al. (2020) in Wuhan China, it was determined that nurses bear high risks of psychological problems under the COVID-19 outbreak. Healthcare workers, especially frontline nurses, have faced great challenges during the COVID-19 pandemic. More than a third of nurses experienced depression, anxiety and insomnia during the pandemic. During the epidemic, nurses showed significantly higher risks for symptoms of

depression, anxiety, and post-traumatic stress disorder (PTSD) than those in the stable period. More attention needs to be paid to the psychological state of nurses during the COVID-19 pandemic, especially for those fighting at the front during the peak of the epidemic.

In the cross-sectional study of Nie et al (2020), 66 (25.1%) of 263 nurses stated that they had psychological distress. It was determined that working in the emergency department, worry for the family, being treated differently, negative coping style, and stress symptom associated with COVID-19 were associated with psychological distress. More perceived social support and effective precautionary measures were negatively associated with psychological distress. COVID-19 has been shown to have a significant psychological impact on frontline nurses. Early detection of psychological distress and supportive intervention according to associated factors should be made to prevent more serious psychological effects on frontline nurses.

In the survey conducted by Jianbo et al (2020) with 493 doctors, 764 nurses, a total of 1257 participants, depression (634 [50.4%]), anxiety (560 [44.6%]), insomnia (427 [34.0%]) and stress (899 [71.5%]). Nurses, women, frontline workers, and those in Wuhan reported more severe symptoms of depression, anxiety, insomnia, and distress. Severe anxiety among men versus women, and severe insomnia among front-line workers versus second-line workers. Interventions to improve mental health in healthcare workers exposed to COVID-19 need to be implemented promptly, with special attention paid to women, nurses and frontline workers (Jianbo et al, 2020).

According to the meta-analysis and systematic review study of Luo et al (2020); The prevalence of anxiety and depression was highest among patients with pre-existing conditions and COVID-19 infection and was similar among healthcare workers. Studies from China, Italy, Turkey, Spain, and Iran reported higher prevalence among healthcare workers and the general population than those in the study. Common risk factors include being a woman, being a nurse, having a low socioeconomic status, a high risk of contracting COVID-19, and social isolation. Having adequate medical resources, up-to-date and accurate information, and taking precautions are protective factors. Consequently, there is an urgent need for psychological interventions targeting high-risk populations experiencing intense psychological distress.

Silva and Neto (2020) investigated the psychiatric symptoms associated with depression, anxiety, distress and insomnia in healthcare professionals working with patients with COVID-19 through meta-analysis and systematic review studies. They searched four databases from December 2019 to April 2020. Healthcare workers battling COVID-19 have concluded that they are more severely affected by psychiatric disorders associated with depression, anxiety, distress and insomnia, stress and indirect traumatization than other occupational groups. They found a strong relationship between healthcare workers and COVID-19 in terms of psychiatric repercussions. It has been shown that healthcare professionals have a higher level of indirect traumatization, where the level of damage exceeds psychological and emotional tolerance and indirectly results in psychological abnormalities. The incidence of obsessive-compulsive scars and somatizations was higher in situations involving frontline professionals. In the face of long work shifts (reaching an average of 16 hours a day), the high risk of contracting a highly contagious disease, and the lack of adequate biological protection measures, mental distress has suddenly become apparent among healthcare workers.

When the studies are examined, it is seen that the face of covid 19 reflected on the nurses is psychological problems such as depression, anxiety, insomnia, stress, anxiety, burnout and excitement. It is important to provide psychological support to nurses during periods of intense work such as pandemics.

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P-101 Views and Experiences of Psychotherapists on Online Therapies-A Qualitative Study

Ayse Gulsen TEKER

Abstract

Today, with the pandemic process we are in, interest in online psychotherapies has increased. This research aims to learn the views and experiences of psychotherapists about online psychotherapy practices, which are increasing day by day. In this qualitative study, in-depth interviews were conducted with ten psychotherapists, and information was collected about the participants' views and experiences with online therapies. After the interviews were completed, thematic analysis was made, and the themes and sub-themes were determined. Participants stated that online therapies provide advantages in accessibility, comfort, and privacy of patients, low cost, patients who cannot leave the house, and accessibility from home during the pandemic process. Inability to use body language, interruption of therapy, inability to create a professional therapy process, difficulty adapting children and the elderly, fake therapists, and ethical problems were the disadvantages mentioned. In conclusion, online psychological support has gained importance during the pandemic period. Online therapies, which are relatively new in our country, are open to development. In order to reduce the disadvantages and increase the effectiveness of these therapies, legal regulations should be established, the content of the therapy process should be regulated, and scientific standards should be determined.

Keywords: Mental health; online therapy; psychotherapy; Turkey

Introduction and Aim

Psychotherapy traditionally includes face-to-face meetings between the psychologist and the client. However, therapies using technology are also based on a long history. These therapies started in 1961 with video conferences (Bekes and Aafjes-van Doorn, 2020). This type of therapy, which has developed and expanded since then, has also been carried out through letters, e-mails, and telephones (Bozkurt, 2013). With the spread of the internet, it continues in the form of online therapies. Today, psychological support services provided using technology are grouped under the title of online therapy. These therapies are carried out by psychotherapists and clients using a tool supported by information or communication technology, such as computers, mobile phones, tablets, as a therapy environment (Oktay et al., 2021). Calls made using the internet can be made in 3 ways: chat, audio, and video calls via the internet (Bozkurt, 2013). Many studies examining the effectiveness of online therapies have shown that therapies made in this way are effective (Oktay et al., 2021; Tuzgol, 2020). The main advantages of online therapies are that they are more accessible and more affordable. However, disadvantages such as ethical concerns, lack of regulatory legal protocols, technological infrastructure problems, cultural problems, detection and rapid intervention of urgent mental problems, and not being as effective as face-to-face therapies have been stated for online psychotherapies (Bozkurt, 2013). Recently, curfews during the COVID-19 pandemic have further increased the interest in online therapies. This research aims to learn the views and experiences of psychotherapists about online psychotherapy practices, which are increasing day by day.

Method

In this qualitative study, the participants were reached by snowball sampling method. The research was conducted with ten psychotherapists providing online psychotherapy services. Psychotherapists are people who have a license in psychology or guidance and counseling and

have experience in both face-to-face and online psychotherapy. An invitation and information form was sent to psychotherapists via smartphones, and those who consent were included study. Data were collected through in-depth interviews one by one. In the study, a semi-structured question form was used, which was created as a result of a literature review and included open-ended questions questioning the views and experiences of psychotherapists about online therapies. The ethics committee approval was obtained from the Ethics Committee of Marmara University Faculty of Medicine (protocol no: 09.2021.629 date: 07.05.2021). Interviews were conducted online and via video chat. Each interview lasted an average of 30-40 minutes. Participants' names or personal information other than age and gender were not included in the research. The thematic analysis method was used in the research. First, the interviews were transcribed directly. Then each interview; were evaluated line by line, and frequently repeated statements in the interviews were coded. Then, the themes and sub-themes obtained from the codes were determined.

Results

For the research, ten psychotherapists were interviewed. Seven of the participants were female, and 3 were male. The ages of the participants varied between 25-40. All participants had both face-to-face and online psychotherapy experiences.

Themes and Sub-Themes Resulting from the Interviews

When asked about the advantages of online interviews, most participants primarily stated that online therapies provide an advantage in terms of 'accessibility'. This advantage is divided into sub-themes 'reaching the psychotherapist away from home', 'saving time', 'flexible appointments' and 'low cost'.

'I am giving an example. I live in Aydın. There are not many therapists working in Aydın. Let's say he is a child therapist and does not have a situation like going to Ankara. However, right now, I can easily reach a therapist in Ankara. Therefore, there are many online therapists you can choose in your city. This also provides an advantage.'

female, 34

'I can set the appointment times according to myself, and there are usually suitable times on the other side.'

female, 25

Another theme that the participants emphasized while talking about the advantages of online therapies was 'the comfort of the clients', 'no privacy concerns', 'no face-to-face meeting tension', 'mental diseases that prevent leaving the house' were determined as sub-themes of this theme.

'As I said, for the client, his accessibility is higher; he does not fall into situations such as whether someone sees it or if anyone knows without worrying about it. '

female, 40

'So he does not want to act. Therefore, online therapy becomes advantageous for these clients. In short, depressed clients do not want to leave the house. Or the same goes for people with an obsessive-compulsive disorder or people with social phobia. For example, they think that if I go out, I will get dirty and touch something. Our patients with social phobia prefer to be alone more. If he goes out under normal conditions until he comes to therapy, he will meet people outside; he will meet many people if he is going to use public transport.'

female, 30

The final theme regarding the advantages of online therapies was 'being in different environments' and thus 'no risk of COVID-19 transmission'.

'The client did not have to come to a certain place, it was good in that respect, or we did online therapy without any risk due to COVID.'

female, 35

When asked about the disadvantages of online therapies, one of the issues frequently emphasized by the participants and identified as a theme was 'remote access'. The sub-themes of this theme were determined as 'inability to use body language', 'inability to create a professional therapy process', 'not complying with appointments', and 'adjustment difficulties for young children and the elderly'.

'Communication is difficult; body language, especially the posture, sitting, and emotional intensity of the client, cannot be observed face-to-face. It is difficult for both the psychologist and the client. No tactility, I can't see your whole body.'

female, 34

'We take something seriously as people work hard. Because they are comfortable at home, they can also be uncomfortable with other people at home. That's why online therapy has a downside. If there is a family problem, he is trying to talk to you without ever leaving the house, or if there is someone in that house who has problems, as if he is in the other room, and I don't think that this is healthy either.'

female, 40

'Small children are hard to contain at the computer, they must have a parent with them. Because the child's attention is immediately distracted, I have difficulty keeping him in front of the computer for 45 minutes.'

female, 35

Another frequently highlighted theme when talking about the disadvantages of online therapies has been the 'interrupting therapy'. The sub-themes of this theme were 'disconnection from the internet' and 'noises from outside, someone entering the room where the client is, etc.'.

'The most important disadvantage is that the internet is cut off, gestures and facial expressions are limited. We cannot see the gestures and facial expressions of the client, but we see them in a limited way. Sometimes there are gestures and mimics that we miss, the sound goes away, the image freezes. Therefore, the interruption of the internet causes disadvantages.'

male, 25

'So the disadvantage is that since they are married, they can have children, have a spouse, and we share the protocols with the person, but here someone can enter the room, but the other person may not have such a command of the rules, or at that moment the door may be knocked. He might have another thing like the courier might come.'

female, 29

The last theme that emerged regarding the disadvantages of online therapies was 'abuse'. The sub-themes of this theme were 'giving therapies by unauthorized people' and 'ethical concerns, violation of privacy'.

'Psychotherapists do not have a professional code. Since we do not have a professional law, life coaches can be hired instead of us. There are more life coaches than psychologists.'

female, 25

When the participants were asked what they wanted to say finally, four of the participants stated that they would 'prefer face-to-face therapies', but that online therapies were beneficial in crises such as pandemics rather than no therapy at all.

'... it was a positive thing that we continued online during this process, we can reach the patient directly, but I still prefer face-to-face.'

female, 29

Discussion

In this study, the views and experiences of psychotherapists about online therapies were evaluated with a qualitative method. As a result, it has been revealed that online therapies have both positive and negative aspects.

In previous studies, online psychological support services are effective in treating panic disorder, social anxiety disorder, generalized anxiety disorder, post-traumatic stress disorder, depression, etc (Andersson and Hedman, 2013; Bouchard et al., 2000; Difede et al., 2007; Thase et al., 2018). In addition, most of the clients stated that they were satisfied with online therapies (Baumel, 2015; Andrews et al., 2018). However, online therapies have disadvantages as well as advantages. In this study, 'accessibility' was mentioned as the most significant advantage of online therapies. Apart from the comfort it brings in terms of time and space, online therapies provide convenience in reaching the therapist who is far away, in people with mental illnesses that make it difficult to go out, in the current pandemic conditions (Andersson and Titov, 2014; Bozkurt, 2013; Wind et al., 2020). Low cost has been highlighted as another advantage of online therapies. Online therapies are offered at more affordable prices than face-to-face therapies in our country, which makes it easier for people to access psychological support services (Bozkurt, 2013). Comfort and lack of privacy concerns are other prominent themes in this research. Joinson (2018) states that people feel more comfortable on the internet and share private information about themselves more comfortably. In addition, online therapies provide an important advantage in societies like our country, where there is an intense stigma on mental problems and people are afraid to say that they receive psychological support. The COVID-19 pandemic has led to the spread of mental services and remote health services in general. These services have been a savior during the curfew periods during the pandemic process (Capacı and Ozkaya, 2020; Humer et al., 2020; Wind 2020). Even those who said they would prefer face-to-face therapy among the people participating in this research emphasized that it is better to reach people with online therapies rather than no therapy.

In addition to these advantages, the participants also mentioned some disadvantages. Not being able to use body language is one of them. It was emphasized that the inability of both the psychotherapist and the client to fully use their gestures and facial expressions, to manage the therapy process with body language other than words, and not to provide an environment of trust between the therapist and the client are difficulties. In previous studies, clients, like therapists, emphasized the inability to use body language as a disadvantage of online therapies

(Baumel, 2015). Another issue frequently emphasized by the participants in this study is the difficulty in providing a professional therapy environment, the interruption of therapy, and non-compliance with appointments. Although online therapies have a long history, their widespread use in our country started with the pandemic. Therefore, it may take time for both clients and providers to learn about their position in therapy and to provide the necessary attention and care. Another issue is the difficulty in adapting children and the elderly. Researches have been done on the effectiveness of online therapies in adults, but few studies have been done in children and the elderly (Andersson and Titov, 2014). The main problem here is children's attention and adaptation problems, while the elderly cannot reach the necessary technology and cannot adapt to therapy. Therefore, the therapy content of these particular groups should also be specially arranged (Oktay and Ark., 2021; Stasiak et al., 2016). The elderly, on the other hand, is a group that needs to be considered separately and provided the necessary conditions in conditions where face-to-face therapy opportunities are reduced. Finally, abuse and ethical problems were mentioned. In order to overcome these problems, it is necessary to make professional law and legal regulations regarding online psychological support services. In addition, the scientific standards of these services should be determined, practice guides should be established, and the responsibilities of both the service provider and the client should be determined (Tuzgol 2020, Capacı and Ozkaya, 2020).

Conclusion

As a result, online psychological support services have become widespread with the effect of the pandemic process. Online therapies have both advantages and disadvantages. Online therapies are considered open to development. In order to reduce the disadvantages and increase the effectiveness of these therapies, legal regulations should be established, the content of the therapy process should be regulated, and scientific standards should be determined.

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**P-102 Evaluation of Cancer Screenings Performed in a Province in Central Anatolia
Between 2013-2020**

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Abstract

Cancer screening positively affects both survival and treatment costs. In Turkey programs are conducted at the national level for breast, cervical and colorectal cancer. The purpose of this research is to determine cancer screening coverage between 2013-2020 in a province in central Anatolia and to examine its change over the years. The data required for the research were obtained from Cancer Early Diagnosis, Screening and Training Centers (KETEMs). Coverage percentages of cancer screenings were calculated separately for each year and descriptive findings were presented with numbers and percentages. In this study, which examined cancer screenings during the nine-year period between 2013-2020, it was determined that the percentage of screening coverage increased during 2014-2015, but then decreased and decreased to the lowest level in 2020. The decline that started before the COVID-19 pandemic became much more severe after the pandemic. Evaluation, planning and interventions for all components of society, healthcare professionals, physical conditions and health management should be carried out rapidly.

Keywords: Breast cancer; cancer; cancer screening; colorectal cancer; cervix cancer; Turkey

Introduction and Aim

71% of deaths in the world are due to non-communicable diseases. The first of these non-communicable diseases are cardiovascular diseases, and the second is cancers (WHO, 2020). Cancer is the second most common cause of death in our country and the world. One of every six deaths in the world and one out of every five deaths in our country is due to cancer (WHO, 2021; TURKSTAT, 2019). While cancer-related deaths have decreased in high-income countries, this decline has not been achieved in low-middle-income countries (Wild, 2020). 70% of cancer-related deaths occur in low-middle-income countries (WHO, 2021). In addition, 29.8% of premature deaths in these countries are due to cancer (Wild, 2020). Between 30% and 50% of cancers can be prevented by avoiding risk factors. In addition, the burden of cancer can be reduced with early detection and appropriate treatment and care (WHO, 2021).

Early diagnosis and screening both increase survival and enable a simpler and cheaper treatment. However, early diagnosis is not possible in all types of cancer. The World Health Organization (WHO) states that early diagnosis and screening are appropriate for breast, colon, cervix, and oral cancers (WHO, 2017).

The population-based cancer screening program in Turkey started in 2006 within the scope of the National Cancer Screening Standards. As a result, cancer Early Diagnosis, Screening, and Education Centers (KETEMs) were established within the program's scope. 'National Standards for Breast Cancer Screening in Women' were published on 20 July 2004, 'National Cervical Cancer Screening Standards' on 29 May 2007, and 'National Colorectal Cancer Screening Standards' on 25 March 2009 were published and put into practice in 2012 (Koruk et al., 2015). It states that the purpose of the National Cancer Screening Standards of the Ministry of Health is to prevent possible complex and expensive treatments by reducing the frequency of invasive cancer, associated morbidity, and mortality. Accordingly, women aged 40-69 are screened every two years for breast cancer screening with mammography. For cervical cancer, women between 30 and 65 are tested every five years using Pap-Smear

/HPV-DNA tests. Women and men aged 50-70 are screened every two years for colorectal cancer screening via fecal occult blood test (FOBT) or a colonoscopy every ten years. The screening program is carried out by the Family Health Center (ASM), Community Health Center (TSM), and KETEMs units. Patients with abnormal results are referred to the necessary institutions for further examination (TR. Ministry of Health, 2021). Cancer screening programs are critical in reducing the burden of cancer. Showing how much of the target population these programs have reached and how this has changed over time will shed light on interventions to increase the effectiveness of screening programs.

This research aims to determine the cancer screening rates between 2013 and 2020 in a province in central Anatolia and to examine the change over the years.

Method

The data for this descriptive study were obtained from the KETEMs unit of the Provincial Health Directorate of a province in the Central Anatolian Region. HPV-DNA and/or Pap-Smear test, FOBT, and mammography numbers for screening purposes performed in primary health care institutions annually between 2013-2020 in the province and annual target population information of this province were obtained for screening.

The dependent variable of the study is the percentage of coverage. The following formula calculates the coverage (Tuncer et al., 2008).

$$\text{coverage} = (\text{number of people scanned/target population}) \times 100$$

Statistical Evaluation:

The data obtained from KETEMs were analyzed by transferring them to the Excel program (Microsoft Corporation, 2018. Microsoft Excel, Available at: <https://office.microsoft.com/excel>). Data for descriptive findings are presented in numbers and percentages. Necessary permissions and ethics committee approval were obtained for the research (Decision No: 2017-KAEK-189_2021.03.31_12).

Results

According to breast cancer screening data, the highest coverage percentage between 2013 and 2020 was reached in 2014 with 9.34%. The lowest is in 2020 with 1.62%. In the nine years, the coverage percentage could not exceed 10%. According to the mammography results, the number of patients referred for further examination varied over time; the highest was 108 in 2018, and the lowest was 18 in 2020. The percentage of coverage increased in 2014 and remained similar but decreased in 2019 and decreased significantly in 2020 (Table 1).

Table 1. Breast Cancer Screening by Years, 2013-2020

Years	target population (n)	number of mammograms (n)	number of referred patients (n)	coverage (%)
2013	35729	1199	-	3,40
2014	35053	3273	43	9,34
2015	35070	2554	23	7,28

2016	35070	3136	77	8,94
2017	35178	3054	86	8,68
2018	35178	3194	108	9,08
2019	36279	2361	56	6,51
2020	35886	580	18	1,62

When the cervical cancer screening data is examined, the highest coverage percentage was reached in 2015 at 67.32%. The lowest coverage percentage was 10.38 in 2020. The number of patients with a positive test result and referred for further investigation has varied over the years. In 2018, 105 patients had positive results and were referred for further investigation. In 2016, 6 patients received positive results, and seven patients were referred for further examination. The percentage of cervical cancer screening increased in the first nine years and then started to decrease. In 2020, it decreased six times compared to 2015 (Table 2).

Table 2. Cervical Cancer Screening by Years, 2013-2020

Years	target population (n)	number of Pap-Smear/HPV-DNA tests (n)	HPV-DNA (+) (n)	number of referred patients (n)	coverage (%)
2013	18669	2555	-	-	13,69
2014	18118	8020	-	8	44,27
2015	17976	12102	25	21	67,32
2016	17976	5732	6	7	31,89
2017	18000	6086	17	12	33,81
2018	18000	5505	105	105	30,58
2019	18455	5063	97	97	27,43
2020	18220	1892	25	25	10,38

When the colorectal cancer screening data are analyzed, the highest percentage of coverage was 58.5% in 2015. It decreased to 8.19% in 2020. Again, the highest number of people who tested positive was 557 in 2015. The lowest is that 28 patients tested positive in 2020. The referral patient information could not be reached. There is also no data for 2013. In a nine-year period, the percentage of coverage increased in 2014-2015 and then decreased, reaching the lowest value in 2020 (Table 3).

Table 3. Colorectal Cancer Screening by Years, 2013-2020

Years	target population (n)	FOBT (n)	FOBT (+) (n)	coverage (%)
2013	21611	-	-	-
2014	22376	7636	432	34,13
2015	22969	13437	557	58,50
2016	22969	6045	179	26,32
2017	23012	8604	233	37,39
2018	23012	8237	118	35,79
2019	23883	6690	52	28,01
2020	23928	1959	28	8,19

Discussion

In this study, which examined the cancer screenings conducted in the nine-year period between 2013 and 2020, it was determined that the screening coverage percentages increased in the period of 2014-2015 but then decreased to the lowest level in 2020.

In previous studies, the frequency of having mammography was between 25% and 45.6%; the frequency of Pap-Smear and/or HPV-DNA testing was between 33.3% and 46.5%; The frequency of having a FOBT varied between 4.5% and 17.0% (Ugur et al., 2019; Altun, 2020; Sacikara et al., 2021). In a study of healthcare professionals, those who had regular screening were 14.8% (Kaya et al., 2017). In another study, Pap-Smear and/or HPV-DNA tests percentage was 20.7%, and the percentage of those who had mammography was 45.4% (Seker et al., 2018). However, it should not be forgotten that these frequencies do not only cover the tests performed for screening, but also include the tests performed in secondary and tertiary healthcare institutions for diagnostic purposes.

We can examine the reasons for this low rate of cancer screening under the headings of society, health workers, physical conditions, and health management.

Society

Researches show that the first reason why people do not participate in cancer screenings is not hearing/not knowing. Previous studies have found that not hearing/known about screening programs is the most important reason for not having cancer screening (Ugur et al., 2019; Altun, 2020; Sacikara et al., 2021; Kucukeren et al., 2020; Emiral et al., 2018). Again, among other reasons, ignorance, finding it unnecessary, fear of cancer, embarrassment, fear of pain are reasons related to ignorance. Therefore, increasing public awareness should be one of the primary interventions in increasing the inclusiveness of screening programs.

Healthcare Workers

Studies have shown that the knowledge of health professionals about cancer screening is extremely limited. In a study, the rate of health workers who know all the national cancer screening standards was 6.3% (Koruk et al., 2015). In another study, 18.7% of the participants knew all the tests correctly (Kaya et al., 2017). In another study, it was found that 13.6% of the nurses did not hear the term cancer screening (Seker et al., 2018). Among the physicians

who know about cancer screening programs, the frequency of physicians recommending their patients to be tested was approximately 60% (Kaya et al., 2017). It is seen that health workers have both knowledge and motivation deficiencies related to the subject. Training should be organized to explain cancer screening programs and their importance to physicians in all health institutions. According to the information received from KETEMs personnel in our study, the most important reason for the increase in the years 2014-2015 was that a physician related to the subject worked at KETEMs at that time.

Physical Conditions

Cancer screening program continues in all provinces of our country, but the adequacy of personnel, space, and equipment should be evaluated, and the evaluations should be updated. There is only one mammography device at KETEMs in the province where this research was conducted. This may hinder reaching more women. In a study conducted in rural areas, it has been shown that the participation of those living in the village rather than the district center is less in screening programs (Emiral et al., 2018). Providing transport can increase participation in these areas.

Healthcare Management

In our country, the share of preventive health services in the budget allocated to health expenditures is decreasing (Karacan et al., 2016). More investment in preventive health services will improve both health and economic outcomes in the long term. It is essential to monitor, evaluate and improve preventive health interventions such as cancer screenings. The cancer screening program is provided in primary care, and health professionals are paid based on performance. However, cancer screening is not within the scope of performance criteria for family physicians. The subject can be rethought, and a different arrangement can be made.

Apart from all these, the ongoing COVID-19 pandemic, which started in 2020, has significantly affected non-emergency health services. In our study, it was observed that there was a significant decrease in 2020. In a study of 17 low-middle-income countries, it was found that cancer screening programs in all countries were adversely affected by the COVID-19 pandemic. Changes in health priorities, curfews, and a decrease in visits to health institutions have been effective in this. Apart from the recommendations discussed above, the COVID-19 pandemic requires faster and more accurate reassessment, planning, and coordination in health services. Online appointment booking, getting test results, and telemedicine can be effective during the COVID-19 pandemic (Illian, 2021). During the COVID-19 pandemic, KETEMs should continue to be functional, and primary health care services should not be pushed into the background.

Conclusion

As a result, this research has shown that the coverage of cancer screenings is not at the desired level in the nine-year period. The decline that started before the COVID-19 pandemic has become much more severe after the pandemic. Therefore, evaluation, planning, and interventions for all society, health workers, physical conditions, and health management need to be carried out quickly.

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P-103 An Investigation of the Perception of Covid-19 Pandemic on Society's Healthy Life Style Behaviors

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Abstract

The purpose of this study is to examine the impact of the Covid-19 pandemic on society's perception of healthy lifestyle behaviors. In this study, a survey form was used to obtain data. The survey form consists of two parts: the section with demographic information and the Healthy Lifestyle Behaviors II scale. The scale used in the survey is the Healthy Lifestyle Behaviors scale developed by Walker et al. (1987). The validity and reliability of the scale in Turkey were carried out by Esin (1999). The scale consists of 52 items and 6 factors. These factors are; spiritual development, interpersonal relationships, nutrition, physical activity, health responsibility, and stress. The population of the study consists of 62,148 people aged 18 and over, residing in Marmaris district of Muğla province. These individuals were selected using the random sampling method, one of the improbable sampling methods. The sample size was determined as 383 persons based on $\pm 5\%$ sampling error and $p = q = 0.5$. Data from the survey study was analyzed with SPSS 22.0. As a result of the study, there was no significant difference between the perceptions of individuals regarding healthy lifestyle behaviors according to their marital status, occupational group and whether they had Covid-19 infection. It has been determined that it is necessary to increase the protective and improving behaviors of health towards the globally changing health perception of individuals with the pandemic.

Keywords: Covid-19 pandemic; **Healthy life;** Healthy life style behaviors.

Introduction and Aim

The Covid-19 outbreak, which occurred in Wuhan, China, on December 1, 2019, has affected the entire world quickly. This epidemic is a condition that disrupts and even causes its destruction to all the mechanisms, both individual and social, contained in the existing systems of nation Giants and hyper-nation states (Kesgin, 2021). The covid-19 pandemic, which became a global problem with the epidemic and whose destruction could not be causalized at the first moment it was encountered, began to be resolved as the process progressed. This analysis has caused changeable effects on healthy lifestyle behavior, making it necessary to see health as the most fundamental part of the vital process rather than part of the essential process (Kesgin, 2021). Healthy lifestyle behavior basically refers to the whole behavior that a person has done to protect, improve their own health and maintain their current health status (Kaya et al., 2018). Protecting health is to identify the factors that may cause adverse effects on health and avoid these factors (Esin and Aktaş, 2012). Improving health addresses behaviors and attitudes that contribute to increasing the state of well-being of the individual. Here, a person must increase the pleasure they receive from vital values by using their energy correctly, producing developmental parameters related to their health, and evaluating them throughout their lives (Arnold, 1999; Tambağ, 2013). Healthy lifestyle; To be able to take responsibility for all the facts and events in healthy life behaviors, a balanced diet and making it permanent, determining the most appropriate exercise routine for your body, which will include positive gains in health as well as nutrition, to stay away from habits that may adversely affect health, such as smoking and alcohol, and be aware of individual health responsibility (Vural, 1998). Taking hygienic measures of the individual who adopts a healthy lifestyle protects the individual against bad scenarios that may adversely affect his health and may arise due to lack of hygiene. In addition to these, establishing positive interpersonal relationships and stress management are also essential components of a healthy

lifestyle (Zaybak and Fadiloğlu, 2004). By establishing positive interpersonal communication, the individual enriches his/her social aspect and provides positive gains to his/her mental health (Tambağ, 2013).

Health lifestyle, spiritual development, interpersonal relationships, nutrition, physical activity, health responsibility, and stress management are a phenomenon that is possible (Walker et al., 1996). Spiritual development is a creative tendency of human nature, the basis for developing and improving the body and mind (Nikadambaeva et al., 2021). Interpersonal relationships, in general terms, are all of the emotions, thoughts, and behaviors that individuals experience in their relationships with other people (Göçener, 2010). As social beings, human beings are satisfied with their physiological, psychological, and social needs by establishing healthy interpersonal relationships. Within the symbolic interaction theory framework, it seems that the communication factor underlies the excellent or lousy evolution of thoughts that create individual actions. (Baumeister and Leary, 1995; İmamoğlu, 2009). Nutrition is a permanent action that continues from the moment the individual is in the mother's womb until the end of his life. In order to maintain a healthy lifestyle, this action is expected to be in a correct and conscious continuity (Ermiş et al., 2014). Currently, individuals should demonstrate adequate levels of macro and micronutrient consumption following their physiological needs (Karpuz et al., 2015:1-4). Nutritional requirements vary according to the gender, age, physical and mental status of individuals. It is vital for individuals to acquire a correct and balanced diet due to their physical activities and needs, to protect and develop their health, as a self-responsibility (Ermiş et al., 2014; Özçelik, 2000; Onurlubaş et al., 2015; Tekgöz et al., 1995). Physical activity can be described as a bodily activity to spend energy after food intake. There is a significant relationship between physical activity and low disease risk (Rowland and Thomas, 1998). From another point of view, physical activity has the benefit of preventing or delaying chronic diseases. With this benefit, there is a decrease in the disease burden that may occur. While individuals can engage in physical activity with simple actions such as walking, sitting, and standing during their daily work, they can contribute to their physical movements with high heart rate and weight exercises that affect all muscle groups (Tambağ, 2013; Alpözgen and Özdiñler, 2016; Can et al., 2014; Başaslan et al., 2007; Arabacı and Çankaya, 2007). Health responsibility is the individual's maintaining their health status and fulfilling their responsibility while doing this (Levy, 2019; Avcı, 2016). Responsibilities that individuals can take for their health; Knowing himself physically, questioning whether he has physical abnormalities, benefiting from medical care when he needs it, not interrupting his medical checks, and avoiding harmful habits that may adversely affect his health (Tambağ, 2013). Stress is a factor that negatively affects the mental or physical well-being of psychosocial and environmental factors (Esch and Stefano, 2010). Stress management is an important phenomenon that can contribute to the development of health, positively affect the quality of life of individuals, reduce or prevent stress and the permanent or temporary morbidity that occurs with it (Sürme, 2019). Stress management is an effective intervention tool for improving health (Varvogli and Darviri, 2011).

The individual who adopts the healthy lifestyle behavior and can make it a part of his life will be able to use his skills more actively to cope with the harmful health conditions brought by the Covid-19 process compared to other people who are aware of this behavior. This study aims to examine the effect of the Covid-19 pandemic on society's perception of healthy lifestyle behaviors.

Method

The research population consists of 68,515 people aged 18 and over, residing in the Marmaris district of Muğla province. These individuals have selected by random sampling method from

non-probability sampling methods. Based on $\pm 5\%$ sampling error and $p=q=0.5$, the sample size has determined as 383 individuals.

Persons to be included in the research were selected from the central regions of Marmaris district of Muğla province with a random sampling method, one of the non-probability sampling Methods.

Health Promotion Lifestyle measurement Walker et al. (1987) based on Pender's health promotion model. The developed scale was revised and named the Healthy Lifestyle Behaviors Scale-II (Walker et al., 1996). The scale consists of 52 items and six factors. These; spiritual development, interpersonal relationships, nutrition, physical activity, health responsibility, and stress management. Esin (1999) used the healthy lifestyle Behavior Scale, which was a validity and reliability study. Ondokuz Mayıs University Social and Human Sciences Research ethics committee decision numbered 2021/563 was taken. The data have collected through the prepared questionnaire in May-June. Responses to statements contained in the scale have been arranged on the Likert scale of 4. Evaluations have been carried out with a score of 1 for never and 4 for regularly. The analyzed the data obtained from the survey study with SPSS 22.0. Performed a validity and reliability analysis of the scale. The Cronbach Alpha reliability coefficient of the Healthy Lifestyle Behaviors scale used in this study was found to be α : 0.86.

Results and Discussion

Below are the descriptive findings of the individuals participating in the study.

Table 1. Descriptive Findings

Variables	N	Percent(%)
Gender		
Women	241	56.6
Man	185	43.4
Total	426	100
Marital Status		
Married	189	44.4
Single	201	47.2
Divorced	36	8.5
Total	426	100
Age		
18-29	193	45.3
30-41	103	24.2
42-53	76	17.8
54 and Above	54	12.7
Total	426	100
Education Status		

Elementary and Under	48	11.3
High school	97	22.8
License and Higher	281	66.0
Total	426	100
Job		
Student	61	14.3
Officer	160	37.6
Worker	67	15.7
Freelancer	85	20.0
Not Working or Retired	53	12.4
Total	426	100
Social Security		
Social security agency	329	77.2
Private Insurance	37	8.7
Green Card or Not	60	14.1
Total	426	100
Perception of Income Level		
Sufficient	201	47.2
Insufficient	127	29.8
Doesn't want to specify	98	23.0
Total	426	100
Presence of Chronic Disease		
Yes	70	16.4
No	356	83.6
Total	426	100
Covid-19 Circumvention		
Yes	81	19.0
No	345	81.0
Total	426	100
Living in the Same House as an Individual in the Risk Group		
Yes	180	42.3
	246	57.7

No	426	100
Total		
General Health Perception		
Excellent	46	10.8
Very Good	98	23.0
Good	209	49.1
Not Good	73	17.1
Total	426	100

Of the individuals participating in the study, 56.6% were women, 47.2% were single, 45.3% were between the ages of 18-29, 66.0% had a bachelor's degree or higher, 37.6% civil servants, 77.2% have SSI social security, 47.2% have a perception of sufficient income, 83.6% do not have chronic diseases, 81.0% have not had the Covid-19 illness, 57.7% are in the same house with the individual in the risk group do not reside, 49.1% are those who evaluate the general health perception as good.

Table 2. Individuals' Perceptions of Healthy Lifestyle Behaviors by Gender

Dimensions	Groups	N	Mean	Standard Deviation	t **	p
Health Responsibility	Women	241	2.4518	.57561	2.263	.024*
	Man	185	2.3273	.54553		
Physical Activity	Women	241	2.3122	.70111	-.871	.384
	Man	185	2.3716	.69333		
Nutrition	Women	241	2.4177	.51230	.919	.359
	Man	185	2.3736	.46298		
Spiritual Development	Women	241	2.9059	.52721	.712	.477
	Man	185	2.8697	.51340		
Interpersonal Relations	Women	241	2.8834	.46566	2.808	.005
	Man	185	2.7514	.49997		
Stress Management	Women	241	2.5052	.53067	-.434	.665
	Man	185	2.5277	.53176		

* p<0.05; ** t Test

Found the only statistically significant difference between HLB perceptions by gender in the sub-dimension of health responsibility ($t=2.263$; $p<0.05$). In terms of this dimension, while women show more health responsibility than men, it has been determined that the scores of other sub-dimensions are similar between women and men. Similar to the results of our study, the survey conducted by Ünalın et al. (2007) on vocational high schools determined that the

average score of health responsibility of female students was higher than that of male students. Similarly, in the study conducted by Zaybak and Fadilogulu (2004) for university students, it was determined that there was a difference because the mean score of female students was higher in the health responsibility sub-dimension of the scale according to the gender of the students. Avcı and Erdoğan (2015), in their study on the workers working in the hazelnut factory, concluded that the scores of female workers in the scale of health responsibility, nutrition, stress management, and HLB were higher than male workers, and the difference was statistically significant. The study of Al-Kandari and Vidal (2007) found a statistically significant difference in the subscales of gender and an overall score, physical activity, interpersonal relations, and stress management.

Table 3. Individuals' Perceptions of Healthy Lifestyle Behaviors by Marital Status

Dimensions	Groups	N	Mean	Standard Deviation	F	P	Difference
Health Responsibility	Married	189	2.3998	.51376	.996	.370	No difference
	Single	201	2.3742	.59227			
	Divorced	36	2.5185	.66508			
	Total	426	2.3978	.56547			
Physical Activity	Married	189	2.2824	.65552	1.334	.265	No difference
	Single	201	2.3688	.72841			
	Divorced	36	2.4583	.72887			
	Total	426	2.3380	.69755			
Nutrition	Married	189	2.4262	.44132	2.027	.133	No difference
	Single	201	2.3532	.51120			
	Divorced	36	2.5062	.60419			
	Total	426	2.3985	.49142			
Spiritual Development	Married	189	2.9277	.51040	.931	.395	No difference
	Single	201	2.8557	.51112			
	Divorced	36	2.8858	.62374			
	Total	426	2.8902	.52096			
Interpersonal Relations	Married	189	2.8330	.46701	.624	.536	No difference
	Single	201	2.8060	.48990			
	Divorced	36	2.9012	.54935			
	Total	426	2.8260	.48473			
Stress	Married	189	2.5165	.52999	.994	.371	No

Management	Single	201	2.4932	.52294	difference
	Divorced	36	2.6285	.57592	
	Total	426	2.5150	.53064	

* $p < 0.05$; ** One-Way Analysis of Variance

Found no significant difference between the HLB perceptions of individuals according to marital status in all dimensions. In the study of Şimşekoğlu and Mayda (2016), only the difference between exercise and nutrition mean found scores significant in the statistical comparison made according to marital status.

Table4. Individuals' Perceptions of Healthy Lifestyle Behaviors by Age

Dimensions	Groups	N	Mean	Standard Deviation	F	P	Difference
Health Responsibility	18-29 years	193	2.3460	.57843	1.106	.346	No difference
	30-41 years	103	2.4639	.53614			
	42-53 years	76	2.4313	.58174			
	54 years and older	54	2.4095	.54767			
	Total	426	2.3978	.56547			
Physical Activity	18-29 years	193	2.3348	.73731	.740	.529	No difference
	30-41 years	103	2.3701	.68798			
	42-53 years	76	2.3882	.69719			
	54 years and older	54	2.2176	.55964			
	Total	426	2.3380	.69755			
Nutrition	18-29 years	193	2.3379	.48417	2.678	.047*	4>1 3>1
	30-41 years	103	2.3937	.50410			
	42-53 years	76	2.4737	.49537			
	54 years and older	54	2.5185	.46343			
	Total	426	2.3985	.49142			
Spiritual Development	18-29 years	193	2.8440	.51784	.938	.422	No difference
	30-41 years	103	2.9353	.55676			
	42-53 years	76	2.9196	.47196			
	54 years	54	2.9280	.52789			

	and older						
	Total	426	2.8902	.52096			
Interpersonal Relations	18-29 years	193	2.8175	.50565	.223	.880	No difference
	30-41 years	103	2.8080	.46028			
	42-53 years	76	2.8436	.49096			
	54 years and older	54	2.8663	.45398			
	Total	426	2.8260	.48473			
Stress Management	18-29 years	193	2.4806	.54451	.793	.499	No difference
	30-41 years	103	2.5243	.52073			
	42-53 years	76	2.5905	.56184			
	54 years and older	54	2.5139	.45015			
	Total	426	2.5150	.53064			

It is coded as 1=18-29 age, 2=30-41 age, 3=42-53 age, 4=54 age and above.

* $p < 0.05$; One-Way Analysis of Variance

The only statistically significant difference between the HLD perceptions of individuals according to their age was found in the nutrition sub-dimension ($F=2.678$; $p < 0.05$). In order to determine the source of the difference, according to the results of the LSD test, one of the Post Hoc tests, the nutritional perceptions of individuals aged 54 and over ($X=2.52$), Individuals in the 42-53 age group ($X=2.47$), It was determined that it was higher ($X=2.33$) than individuals in the 18-29 age group. Similar to the results of our study, Küçükberber et al. (2011) found that the 49-60 and 61-80 age groups had higher nutrition sub-dimension scores than those in the 20-48 age group. In Tambağ (2011) 's study on Hatay Health School Students, a statistically significant difference was found between the total and health responsibility subscale scores of HLBS according to the age of the students.

Table 5. Individuals' Perceptions of Healthy Lifestyle Behaviors by Education Level

Dimensions	Groups	N	Mean	Standard Deviation	F	P	Difference
Health Responsibility	Elementary and Below	48	2.4282	.64095	.257	.774	No difference
	High school	97	2.3643	.54733			
	Undergraduate and Above	281	2.4041	.55955			
	Total	426	2.3978	.56547			
Physical	Elementary	48	2.4401	.68270	2.288	.103	No

Activity	and Below						difference
	High school	97	2.2126	.67680			
	Undergraduate and Above	281	2.3639	.70382			
	Total	426	2.3380	.69755			
Nutrition	Elementary and Below	48	2.4977	.53015	1.446	.237	No difference
	High school	97	2.4215	.51916			
	Undergraduate and Above	281	2.3737	.47378			
	Total	426	2.3985	.49142			
Spiritual Development	Elementary and Below	48	2.8102	.52415	.790	.455	No difference
	High school	97	2.8751	.50109			
	Undergraduate and Above	281	2.9091	.52745			
	Total	426	2.8902	.52096			
Interpersonal Relations	Elementary and Below	48	2.6505	.54961	4.306	.014*	3>1
	High school	97	2.7984	.46876			
	Undergraduate and Above	281	2.8656	.47274			
	Total	426	2.8260	.48473			
Stress Management	Elementary and Below	48	2.5729	.60188	.378	.686	No difference
	High school	97	2.5232	.53593			
	Undergraduate and Above	281	2.5022	.51706			
	Total	426	2.5150	.53064			

It is coded as 1=Primary education and below, 2=High School, 3=Bachelor and above.

* p<0.05; One-Way Analysis of Variance

Found The only statistically significant difference between the HLB perceptions of individuals according to their educational status in the sub-dimension of interpersonal relations ($F=4.306$; $p<0.05$). Scheffe test, one of the Post Hoc tests, was used to determine the source of the difference. It has been determined that individuals with undergraduate and higher education levels have higher interpersonal relations perceptions ($X=2.86$) than individuals with primary education and below education level ($X=2.65$). The study conducted by Özkan and Yılmaz (2008) on nurses working in the hospital determined a statistically significant difference between the total mean score of interpersonal relations and the level of education and found the interpersonal relations scores of the nurses with undergraduate and higher education to be higher than the other groups.

Table 6. Individuals' Perceptions of Healthy Lifestyle Behaviors by Occupational Groups

Dimensions	Groups	N	Mean	Standard Deviation	F	P	Difference
Health Responsibility	Student	61	2.3752	.59079	.069	.991	No difference
	Officer	160	2.4104	.56381			
	Employee	67	2.4113	.59207			
	Freelancer	85	2.3830	.54339			
	Not Working or Retired	53	2.3920	.56134			
	Total	426	2.3978	.56547			
Physical Activity	Student	61	2.4078	.75101	.733	.570	No difference
	Officer	160	2.3031	.70384			
	Employee	67	2.3937	.67042			
	Freelancer	85	2.3765	.72156			
	Not Working or Retired	53	2.2311	.61011			
	Total	426	2.3380	.69755			
Nutrition	Student	61	2.3461	.50962	.974	.422	No difference
	Officer	160	2.3625	.46818			
	Employee	67	2.4809	.51334			
	Freelancer	85	2.4131	.47717			
	Not Working or Retired	53	2.4403	.53241			
	Total	426	2.3985	.49142			
Spiritual Development	Student	61	2.8597	.47700	.643	.632	No difference
	Officer	160	2.9049	.52173			

	Employee	67	2.9635	.50563			
	Freelancer	85	2.8641	.52799			
	Not Working or Retired	53	2.8302	.57883			
	Total	426	2.8902	.52096			
Interpersonal Relations	Student	61	2.8251	.46368	.804	.523	No difference
	Officer	160	2.8708	.46224			
	Employee	67	2.8126	.52410			
	Freelancer	85	2.8065	.50371			
	Not Working or Retired	53	2.7400	.49592			
	Total	426	2.8260	.48473			
Stress Management	Student	61	2.5287	.54170	.793	.530	No difference
	Officer	160	2.4875	.50122			
	Employee	67	2.6157	.61519			
	Freelancer	85	2.4985	.51557			
	Not Working or Retired	53	2.4811	.51736			
	Total	426	2.5150	.53064			

* $p < 0.05$; ** One-Way Analysis of Variance

Found no significant difference between the HLB perceptions of individuals according to their occupational groups in all dimensions. On the other hand, when reviewed the literature, Küçükberber et al. (2011) found that in their study on heart patients, heart patients working for working and non-working patients got higher scores on the HLB scale spiritual development physical activity sub-dimensions compared to non-working patients.

Table 7. Individuals' Perceptions of Healthy Lifestyle Behaviors According to Social Security

Dimensions	Groups	N	Mean	Standard Deviation	F	P	Difference
Health Responsibility	Social Security Agency	329	2.3951	.56340	2.100	.124	No difference
	Private Insurance	37	2.5556	.55246			
	Yesil card or no	60	2.3148	.57432			
	Total	426	2.3978	.56547			

Physical Activity	Social Security Agency	329	2.3127	.67556	1.896	.151	No difference
	Private Insurance	37	2.5473	.79514			
	Yesil card or no	60	2.3479	.74222			
	Total	426	2.3380	.69755			
Nutrition	Social Security Agency	329	2.3685	.46776	3.405	.034*	2>1
	Private Insurance	37	2.5736	.50952			
	Yesil card or no	60	2.4556	.58068			
	Total	426	2.3985	.49142			
Spiritual Development	Social Security Agency	329	2.8882	.52058	1.049	.351	No difference
	Private Insurance	37	2.9940	.44131			
	Yesil card or no	60	2.8370	.56562			
	Total	426	2.8902	.52096			
Interpersonal Relations	Social Security Agency	329	2.8183	.49250	1.097	.335	No difference
	Private Insurance	37	2.9369	.43076			
	Yesil card or no	60	2.8000	.47132			
	Total	426	2.8260	.48473			
Stress Management	Social Security Agency	329	2.4905	.53316	2.134	.120	No difference
	Özel Sigorta	37	2.6723	.46710			
	Yeşil kart veya yok	60	2.5521	.54281			
	Toplam	426	2.5150	.53064			

It is coded as 1=Social Security Agency, 2=Private Insurance, 3=Green card or none.

* $p<0.05$; One-Way Analysis of Variance

The only statistically significant difference between the HLB perceptions of individuals according to their social security was found in the nutrition sub-dimension ($F=3.405$; $p<0.05$). Tukey test, one of the Post Hoc tests, was used to determine the source of the difference. It has been determined that the nutritional perceptions of individuals with private insurance social security ($X=2.57$) are higher than those of individuals with SSI ($X=2.36$). The study of Koçoğlu and Akın (2009), determined that the HLB status of those without health insurance

and those with a green card (temporary health insurance) were similar and lower than those with other types of health insurance.

Table 8. Individuals' Perceptions of Healthy Lifestyle Behaviors According to Perceptions of Income Level

Dimensions	Groups	N	Mean	Standard Deviation	F	P	Difference
Health Responsibility	Sufficient	201	2.3936	.56064	.950	.388	No difference
	Insufficient	127	2.3561	.55544			
	Doesn't want to specify	98	2.4603	.58816			
	Total	426	2.3978	.56547			
Physical Activity	Sufficient	201	2.3818	.72621	1.791	.168	No difference
	Insufficient	127	2.2402	.64484			
	Doesn't want to specify	98	2.3750	.69747			
	Total	426	2.3380	.69755			
Nutrition	Sufficient	201	2.3709	.49759	1.615	.200	No difference
	Insufficient	127	2.3823	.48243			
	Doesn't want to specify	98	2.4762	.48707			
	Total	426	2.3985	.49142			
Spiritual Development	Sufficient	201	2.9502	.50011	4.691	.010*	1>2
	Insufficient	127	2.7743	.55731			
	Doesn't want to specify	98	2.9172	.49416			
	Total	426	2.8902	.52096			
Interpersonal Relations	Sufficient	201	2.8712	.50264	2.965	.053	No difference
	Insufficient	127	2.7402	.47311			
	Doesn't want to specify	98	2.8447	.45119			
	Total	426	2.8260	.48473			
Stress Management	Sufficient	201	2.5106	.52407	5.147	.006*	3>2
	Insufficient	127	2.4203	.51096			
	Doesn't want to						

specify	98	2.6467	.54679
Total	426	2.5150	.53064

It is coded as 1=Adequate, 2=Insufficient, 3=Does not want to specify

* $p < 0.05$; ** One-Way Analysis of Variance

Found statistically significant differences between individuals' perceptions of their income level in the sub-dimensions of spiritual development ($F=4.691$; $p < 0.05$) and stress management ($F=5.147$; $p < 0.05$). Tukey test, one of the Post Hoc tests, was used to determine the source of the difference. It has been determined that the spiritual development perceptions of individuals who perceive their income levels as adequate ($X=2.95$) are higher than those of individuals who perceive their income levels as inadequate ($X=2.77$). It has been determined that the stress management perceptions of individuals who do not want to specify their income level ($X=2.64$) are higher than those of individuals who perceive inadequate ($X=2.42$). In the study of Özyağcıoğlu et al. (2011) observed that the nutrition scores of students with low-income levels were also relatively low, and found the difference between them to be statistically significant.

Table 9. Individuals' Perceptions of Healthy Lifestyle Behaviors According to Whether They Have Chronic Disease or Not

Dimensions	Groups	N	Mean	Standard Deviation	t **	P
Health Responsibility	Yes	70	2.4048	.62340	.113	.910
	No	356	2.3964	.55431		
Physical Activity	Yes	70	2.1643	.67785	-2.291	.022*
	No	356	2.3722	.69720		
Nutrition	Yes	70	2.4444	.50618	.855	.393
	No	356	2.3895	.48868		
Spiritual Development	Yes	70	2.8984	.57959	.132	.895
	No	356	2.8886	.50952		
Interpersonal Relations	Yes	70	2.7968	.52389	-.551	.582
	No	356	2.8318	.47723		
Stress Management	Yes	70	2.4786	.51251	-.627	.531
	No	356	2.5221	.53454		

* $p < 0.05$; **t Test

The only statistically significant difference between individuals' perceptions of healthy lifestyle behaviors according to whether they have a chronic disease or not was found in the physical activity sub-dimension ($t=-2.291$; $p < 0.05$). In terms of physical activity sub-dimension, those without chronic disease showed higher HRBD than those with chronic

illness, while found the scores of other dimensions to be similar between those with and without chronic disease. In their study, Şimşekoğlu and Mayda (2016) found that nurses with chronic illness' mean stress management score was significantly lower in the statistical comparison made according to the regular disease status.

Table 10. Individuals' Perceptions of Healthy Lifestyle Behaviors by Whether or not they have Covid-19 Infection

Dimensions	Groups	N	Mean	Standard Deviation	t **	P
Health Responsibility	Yes	81	2.4966	.59189	1.752	.081
	No	345	2.3746	.55744		
Physical Activity	Yes	81	2.3117	.65940	-.377	.707
	No	345	2.3442	.70698		
Nutrition	Yes	81	2.3731	.48058	-.517	.605
	No	345	2.4045	.49442		
Spiritual Development	Yes	81	2.7997	.54132	-1.741	.082
	No	345	2.9114	.51457		
Interpersonal Relations	Yes	81	2.8189	.49236	-.146	.884
	No	345	2.8277	.48363		
Stress Management	Yes	81	2.4182	.51772	-1.829	.068
	No	345	2.5375	.53181		

* p<0,05; ** t Test

There was no significant difference between individuals' perceptions of healthy lifestyle behavior according to whether they had Covid-19 infection or not.

Tablo 11. Individuals' Perceptions of Healthy Lifestyle Behaviors According to Whether There Are Risky Individuals In The Area They Live In

Dimensions	Groups	N	Mean	Standard Deviation	t **	P
Health Responsibility	Evet	180	2.3981	.56116	0.12	.990
	Hayır	246	2.3975	.56975		
Physical Activity	Evet	180	2.2674	.71944	-1.793	.074
	Hayır	246	2.3897	.67789		
Nutrition	Evet	180	2.3543	.51057	-1.592	.112

	Hayır	246	2.4309	.47536		
Spiritual Development	Evet	180	2.7951	.52836	-3.260	.001*
	Hayır	246	2.9598	.50529		
Interpersonal Relations	Evet	180	2.7698	.45790	-2.058	.040*
	Hayır	246	2.8672	.50037		
Stress Management	Evet	180	2.4528	.49898	-2.077	.038*
	Hayır	246	2.5605	.54920		

* $p < 0,05$; **t Test

Spiritual development ($t = -3.260$; $p < 0.05$), interpersonal relationships ($t = -2.058$; $p < 0.05$), and stress management ($t = -2.077$), which are sub-dimensions of the HLB scale, depending on whether individuals are at risk in the area they live in. ; $p < 0.05$), found a significant difference between the sub-dimensions. In the spiritual development sub-dimension, those who are not risky individuals in the area where they live show more HLB than those who do, in the interpersonal relations sub-dimension, those who are not risky individuals in the area where they live show more HLB than those who do, In the stress management sub-dimension, it has been determined that those who are not risky individuals in the area they live in show more HLB than those who do not. It has been determined that the other dimension scores show similarities between those who are risky individuals and those who are not in the area where they live. On the other hand, polar and Kahraman (2013) did not find a significant difference between the average scores of people living together and healthy lifestyle behaviors scale subgroups in their study on elderly individuals.

Table 12. Perceptions of Health Perception and Healthy Lifestyle Behavior

Dimensions	Groups	N	Mean	Standard Deviation	F	P	Difference
Health Responsibility	Excellent	46	2,5870	,58779	2.273	.080	No difference
	Very good	98	2,4195	,55396			
	Good	209	2,3674	,55301			
	Not good	73	2,3364	,58706			
	Total	426	2,3978	,56547			
Physical Activity	Excellent	46	2,6902	,71139	10.885	.000*	1>3
	Very good	98	2,5281	,67459			1>4
	Good	209	2,2548	,66301			2>3
	Not good	73	2,0993	,68305			2>4
	Total	426	2,3380	,69755			
Nutrition	Excellent	46	2,5676	,39142	4.299	.005*	1>4
	Very good	98	2,4739	,50087			

	Good	209	2,3658	,48033			
	Not good	73	2,2846	,53190			
	Total	426	2,3985	,49142			
Spiritual Development	Excellent	46	3,0362	,54938	9.386	.000*	1>4
	Very good	98	3,0102	,46627			2>4
	Good	209	2,8915	,51097			3>4
	Not good	73	2,6332	,51576			
	Total	426	2,8902	,52096			
Interpersonal Relations	Excellent	46	2,9179	,47108	1.381	.248	No difference
	Very good	98	2,8560	,52848			
	Good	209	2,8203	,45989			
	Not good	73	2,7443	,49749			
	Total	426	2,8260	,48473			
Stress Management	Excellent	46	2,8152	,52357	8.612	.000*	1>3
	Very good	98	2,5842	,49702			1>4
	Good	209	2,4731	,50577			2>4
	Not good	73	2,3527	,56839			
	Total	426	2,5150	,53064			

It is coded as 1=Excellent, 2=Very good, 3=Good, 4=Not good.

* $p < 0,05$; One-Way Analysis of Variance

Statistically significant differences between HLB perceptions according to the general health perception of individuals, physical activity ($F=10.885$; $p < 0.05$), nutrition ($F=4.299$; $p < 0.05$), spiritual development ($F=9.386$; $p < 0.05$), stress management ($F=8.612$; $p < 0.05$) sub-dimensions. Scheffe test, one of the Post Hoc tests, was used to determine the source of the difference.

The physical activity perceptions of individuals who perceive their general health as excellent ($X=2.69$) are higher than those of individuals who perceive their general health as good ($X=2.25$) and those who perceive their general health as not good ($X=2.09$); It has been determined that the physical activity perceptions of individuals who perceive it very well ($X=2.52$) are higher than those of individuals who perceive it as good ($X=2.25$) and those who perceive it as not good ($X=2.09$).

It has been determined that the nutritional perceptions of individuals who perceive their general health as excellent ($X=2.56$) are higher than those of individuals who perceive their general health as not good ($X=2.28$).

It has been determined that individuals who perceive their general health as perfect have higher spiritual development perceptions ($X=3.03$) than those who perceive their general health as not good ($X=2.63$). It has been determined that the spiritual development perceptions of individuals who perceive their general health as very good ($X=3.01$) are higher

than those of individuals who perceive their general health as not good ($X=2.63$). It has been determined that the spiritual development perceptions of individuals who perceive their general health as good ($X=2.89$) are higher than those of individuals who perceive their general health as not good ($X=2.63$). Stress management perceptions of individuals who perceive their general health as excellent ($X=2.81$) were found to be higher than those of individuals who perceive their general health as good ($X=2.47$) and individuals who perceive their general health as not good ($X=2.35$). Stress management perceptions of individuals who perceive their general health as very good ($X=2.58$) were found to be higher than those of individuals who perceive their general health as not good ($X=2.35$). In the study of Kulakçı et al. (2012), it was determined that the perception of health affects the HLB, physical activity, spiritual development, and stress management in their study on the elderly living in nursing homes.

Conclusion

The study examined the perception of the society's healthy lifestyle behaviors of the Covid-19 pandemic in Marmaris District of Muğla Province. There was no significant difference between individuals' perceptions of healthy lifestyle behaviors according to their marital status, occupational groups, and whether they had Covid-19 infection or not. The study found that women showed more health responsibility than men. According to the nutritional perceptions of the individuals aged 54 and over to be higher than those aged 42-53 and 18-29 years. As the age of the individual increases, the perception of nutrition also increases. The main reason for this is thought to be the effort to improve the quality of life and the tendency to show more HLB. It has been found that individuals with undergraduate and higher education levels have higher interpersonal relations perceptions than individuals with primary education and below education levels. As the level of education increases, individuals' perceptions of interpersonal relationships increase. It is thought that individuals can act more selectively in their interpersonal relationships and build their relationships on more sensitive foundations. Found nutritional perceptions of individuals with private insurance social security higher than those of individuals with SGK. The spiritual development perceptions of individuals who perceive their income levels as adequate are higher than those of individuals who perceive insufficient; Stress management perceptions of individuals who do not want to indicate their income level were found to be higher than those of individuals who perceived inadequate. It has been found that individuals without chronic disease show more physical activity than those with chronic illness. High physical activity of individuals without chronic disease is seen as a measure against the possibility of developing a chronic disease, It is believed that people with chronic diseases have low physical activity due to their adverse conditions arising from their chronic illnesses. In the spiritual development sub-dimension, those who are not risky individuals in the area where they live show more HLB than those who do, in the interpersonal relations sub-dimension, those who are not risky individuals in the area they live show more HLB than those who do, In the stress management sub-dimension, it was found that those who are not risky individuals in the area they live in show more HLB than those who do. They were determined that the other dimension scores show similarities between risky individuals and those not in the area where they live. It has been determined that there is a linear relationship between the sub-dimensions of the HLB scale, physical activity, nutrition, spiritual development, stress management, and the general health perception of individuals. Accordingly, as the perception of general health increases, the perceptions of the said sub-dimensions also increase, and as the perception of general health decreases, the perception of these sub-headings also decreases.

It is thought that to get out of this global process, which affects all areas of our lives, especially health, with the minor damage, one should be individually aware of their

responsibilities and should be in the position of interrogator and analyzer, especially of health-related processes.

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P-104 Effects of Covid-19 Pandemic on Health Economies in Turkey, Usa and South Korea

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Abstract

Aim: In this study, studies were carried out to determine the economic dimension of the damage caused by the Covid-19 Pandemic to the health systems of our country and the sample countries implementing different health system models in the short and long term, and to determine the similarities and differences between the countries.

Methods: In the study prepared by systematic compilation method, the domestic and foreign scientific studies in the literature on the subject, the data shared by the World Health Organization and the Ministries of Health of the countries examined were examined in detail. Turkey, USA and South Korea health systems are the countries selected for our study. The data published in 2020 and 2021 were included in the study in accordance with the criteria for inclusion in the study and evaluated in terms of comparison, limitation and results.

Results: With the data examined, the extent of the damage is clearly visible. In Turkey alone, the burden of the pandemic on the health system is 3.7 billion Lira. It is anticipated that this amount will increase further due to the ongoing process. The United States, on the other hand, has a budget of more than \$100 billion devoted to the health care system and hospitals. Over time, it was seen that the amount allocated to the health system with additional packages increased by \$630 billion. In addition to the financial loss, the loss of health workers and changes in the workforce constituted another dimension of this economic loss.

Conclusions: As a result of the analysis, it was seen that the damages in the health economies of the countries examined differed depending on the measures taken and economic strength.

Keywords: Beykent; congress; economy; health; management.

Introduction

The economic dimension of health and health services has become increasingly important all over the world. Questions such as how to provide health care and the financing of these services are among the problems currently being tried to decipher in the World. The complex and irreplaceable structure of Health Services also leads to the correct planning of the health economy. Because countries have different population numbers and economies, the budgets that each country devotes to health care also differ. Another important factor is that countries have a sufficient number of medical personnel, medical institutions and place them fairly within the country. Here, health economics in general can be defined as the application of the theory, concept and methodology of economic science to all activities and institutions related to health care. So the health service in the area where the activity occurred related to the production of all kinds of distribution and management of resources, the organization of healthcare institutions, health care financing, health care in the field of legal regulations, the regulations of individual and community health concerns the economic consequences of health policies with the creation of the evaluation of the results it can be stated that the major interests of health economics (Caliskan, 2008). Especially with the Covid-19 pandemic, unprepared health systems have caused problems in many countries. Many people have died due to problems such as funding, medical staff and lack of intensive care beds. In this case, countries have tried to strengthen their existing health systems and regulate their health finances in such a way that they can fight the pandemic. In this study, how health financing in the United States, South Korea and Turkey is affected in the pandemic process and the

measures taken were explained. First, brief information about the health systems of countries was given and their impact on health economies was explained. Finally, a comparative assessment was made as a result.

Health Systems of the United States, Turkey and South Korea

Private insurance is the foundation of the U.S. health system, and everyone has the right to choose their doctor and patient. Payments are made either in the form of insurance or in the form of out-of-pocket payments. There is no unity in the country's health practices, and each state has different practices. Per capita health expenditures are one of the highest in the world and are certainly among the most technologically advanced countries. But despite this, health care seems to be poor quality and very costly.

Health services in Turkey are provided by public, semi-public, private and non-profit foundations. Financing for health care is made in the form of taxes, Social Security premiums (SSI), private insurance premiums and out-of-pocket payments. As of 2012, all citizens are covered by General Health Insurance.

Chart.1. Per Capita Health Spending (USD\$)

COUNTRY	2012	2019
USA	8745	11071,70
SOUTH KOREA	2291	3384,20
TURKEY	984	1337,20

The top health authority in the South Korean health system is the Ministry of Health and welfare. Since 1977, compulsory health insurance covering 96% of the population has started to be applied. The remaining 4% of the population receives health care due to poverty. In South Korea, where the health system is dominated by the private sector, 85% of the beds of hospitals in the city are owned by the private sector. National Health Insurance (NHIC) funding is funded from premium contributions and tax revenues paid by the consumer and employer.

Chart.2. The Place of Per Capita Health Spending in Gross Domestic Product (%)

COUNTRY	2012	2019
USA	16,9	17
SOUTH KOREA	7,6	8
TURKEY	5,4	4,4

The Effects of Covid-19 on The US Health Economy

On January 20, 2020, the first case of coronavirus was identified in the United States (USA), where the effects of covid-19 are heavily observed. As of August 4, 2021, the total number of cases was 36,176,471 and the number of people who died was 631,299. As can be seen from these rates, the United States ranked highest among the countries with the most cases in the Covid-19 pandemic. 570,000 health workers were infected and 3,700 health workers died in Covid-19 cases of health workers who were the most important force in the health system and who were fighting the epidemic at the forefront. America is among the countries that experience the most health worker losses in the world with these rates. There have also been disruptions in the provision of health care, with 570,000 health workers infected. In the face of this situation, the United States has implemented a four-stage package.

In the first package to be implemented, \$ 2.2 billion was prepared for medical institutions and \$ 3.4 billion for medical support. Announcing a second package immediately after the first package, the United States announced \$ 1.2 billion in testing support and \$ 170 billion in support for family and medical leave and paid sick leave. The third package would support \$ 127.2 billion for the public health and social services emergency fund and \$ 432.3 billion for other health services. Finally, in the fourth package, it was announced that \$ 100 million was allocated to health care. The U.S. also uses a \$ 1 billion budget for vaccine studies. As of August 4, 2021, 333 million 565 thousand doses of the vaccine were administered.

Chart.3. United States Support Packades (USD\$)

Stage	Support	Total
First Stage	Support For Health Agencies	2,2 B
	Medical Support	3,4 B
Second Stage	Testing Support	1,2 B
Third Stage	Public Health And Social Services Emergency fund	127,2 B
	Other Health Provisions for the Department of Health and Human Services	432,3 B
Fourth Stage	Health Services	100 M

The Effects of Covid-19 on the Health Economy of South Korea

The first positive case in South Korea was detected on January 20, 2020. From this date until August 4, 2021, the total number of tests 11,751,000, number of positive cases was 206,000 and the total number of deaths was 2,109. Among these data, 241 health workers were infected and 66 health workers died. South Korea has opened 600 test centers to ease the burden on health workers. Thus, the loss of health workers was prevented. South Korea has been very successful during the epidemic period, and the fight they gave to other countries in the epidemic has also been shown as an example. The reason they have very low coronavirus positive cases and death rates compared to their population is because they suffered a large loss in the MERS (Middle East respiratory syndrome) outbreak they experienced in 2015 and learned from this outbreak. South Korea has implemented four support packages to combat the epidemic, just like America. Only three of these packages provided health care. A total of \$71.7 million was provided to preventive and medical services in the first package. The second package was later announced due to changing conditions and \$8.9 million was allocated for preventive and medical services. In the latest package, \$ 83.3 million was given to preventive and medical services and \$ 625 million to health organizations. \$ 61 million is allocated for Vaccine Studies. South Korea administered a total of 20 million 328 thousand doses of the vaccine on August 4, 2021.

The Effects of Covid-19 on Turkey Health Economy

The first positive case in Turkey was observed on 11 March 2020. As of this date, the total number of tests was 68 million, the total number of positive cases was 5.82 million, and the total number of deaths was 51,767 (August 4, 2021). More than 140 thousand health workers became ill. A total of 314 health workers, 132 of whom were doctors and 282 of whom were other medical personnel, died. Between March 2020 and March 2021, the cost of treating inpatients and outpatients due to Covid-19 in Turkey was approximately TL 8.7 billion, which was 2% in state health expenditures and 3.8% in health expenditures of SSI (Social Security Institution). Turkey is among the countries that have decoupled the least cash support in the fight against Covid-19. 7.6% of gross domestic product is allocated to fight the pandemic. Covid-19 has brought an additional burden of October 3.7 billion TL to the Turkish health economy in 1 year (Turan, 2020). 13 hospitals were opened in Covid-19 in Turkey. A total of 74 million 329 thousand doses of the vaccine were administered in Turkey (August 4, 2021). The budget allocated for Vaccine Studies is 1.1 million TL.

Conclusion

In this study, we explained how the planning of the health economy, which is even more important with the epidemic, was carried out from the beginning of the pandemic in the USA, South Korea and Turkey, as well as the financial and moral losses of the countries. With the emergence of the first case of covid-19, America has become one of the countries that spend the most on health and spending all over the world. Of course, among the reasons for this is the strong economy and high population decency of the country. But there is still a lot of debate about the quality of health economy planning and health services is not very sufficient. However, South Korea has also shown an exemplary success in fighting the pandemic. It controlled the epidemic without allocating too much budget compared to other countries and prevented more casualties. The biggest factor here was the losses in the MERS outbreak in 2015 and the lesson learned from it. South Korea has thus shown that it will succeed by correctly planning its health economy without allocating very high budgets. Although Turkey is among the countries of the world that allocates the lowest budget for the epidemic, it has succeeded in fighting the epidemic due to the fact that both the number of health workers and the total number of beds in hospitals are sufficient according to the number of patients. It has also been cited as one of the successful countries by who (World Health Organization). As can be seen in this study, we see how important it is to plan the health economy correctly, even if they have different health systems to combat the epidemic and thus prevent further loss in the long term.

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P-105 Emotional Intelligence of Health Institutions Employees

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Abstract

Aim: This research; the nurses serving health institutions in order to determine their level of emotional intelligence is scheduled.

Method: The sample of the survey; Bursa Province depending on the unity of public hospitals serving employees constitute the nurses. Participation on a voluntary basis to investigate the universe, formed of research showing 574 nurse. The nurses to determine the socio-demographic characteristics 9-question descriptors information form has been prepared. Participants to determine their level of emotional intelligence Hall created by the "Emotional Intelligence Assessment Scale" were used..

Results: As a result of the investigation, the nurses ' emotional intelligence assessment of the scale of their score 124.66 ± 33.79 . The maximum score that can be quite is 180. Receiving from the nurses scale score revealed low levels of emotional intelligence. Emotional intelligence, according to the points obtained from the lower rating scale factors, the order of nurses to be aware of their emotions, empathy with self-motivation, social skills, and emotions were high levels of checking.

Conclusions: We can express nurses with high emotional intelligence as happy and healthy individuals who are aware of the emotions they experience within themselves, as well as the feelings of the individuals and colleagues around them, and can make healthier and stronger moves thanks to this difference. While nurses provide care to the patient, a sense of empathy must be developed in order to better understand the patient and the disease, to understand and manage the patient's emotions more closely. Employees are required to work in harmony with service recipients or colleagues. Team concept is a mandatory event in order to provide health services in healthcare institutions. If the team is not compatible within itself, it may cause service disruption. Nurses with high emotional intelligence are individuals who care about these concepts in the position they work.

Keywords: Emotion, Intelligence, Emotional Intelligence, Nurse.

Introduction

The aim of this research is to reveal how important emotional intelligence is for nurses and to develop solutions to increase the emotional intelligence levels of nurses.

It is a concept whose value is understood when health generally deteriorates. The concept of illness, which occurs when the health status of the individual deteriorates, can make the individual's emotional changes quite variable. Nursing is a profession that mostly consists of people who provide help services for the elimination of this disorder when the mental and physical health conditions of the individual deteriorate. Persons serving in this profession are expected to be aware of positive or negative emotions, to be able to control their own emotions, to have high empathy skills, to be self-motivated and to have social skill levels. These concepts reveal the importance of emotional intelligence.

Emotional intelligence; It refers to the ability of a person to know himself, to postpone his demands, to control instantaneous changes in the emotional sense, to struggle against obstacles and problems, to approach other people with understanding, to sense the most special feelings of the other people, to establish and maintain an effective and productive relationship.

Scientists have stated that emotional intelligence is not destiny like IQ, it can be developed at any age. This brings the importance of emotional intelligence to a different point (Acar, 2002). Emotional intelligence; It is seen as a combination of social skills and abilities, which are related to the individual's ability to realize and understand his own emotions, to control them, to realize his inner motivation in order to realize his goals, and to establish better relations by understanding the feelings of the person in front of him (Erkuş & Günlü, 2008). Studies on emotional intelligence can be divided into two groups. In the first group, the skills of emotional intelligence, measuring emotional intelligence, and research on the place and importance of emotional intelligence in business life. In the studies conducted in the second group, emotional intelligence was examined together with a different organizational variable (problem solving, loyalty, job satisfaction, conflict management, work performance, team, leadership, communication, etc.) (Gürbüz & Yüksel, 2008).

Emotional intelligence includes emotional abilities such as accurately describing emotions, identifying emotions, and placing emotions appropriately in cognitive stages. Individuals with high emotional intelligence, who learn to use their emotional competencies as required, make their professional and private lives easier for them. Because by being aware of the feelings of himself and those around him, he increases his potential to solve the problems in daily life more easily (Akbolat & Işık, 2012).

The main elements that make up emotional intelligence are based on four principles (Goldsworthy, 2000).

1. Emotional intelligence is not static. People gain new social habits, good or bad, in their daily lives. It takes a long time to destroy a socially inappropriate movement.

2. Emotion and consciousness are closely linked. In Damasion's research titled "Descartes' Error" in 1994, it is seen that there are intertwined regions of feelings. This statement reveals the importance of arguments that affect our learning and that socio-emotional gains are a necessary element in an effective learning environment. Agreement-based learning and other learning strategies do not make this completely effective either, because they require a group of brainpower to collect on a problem (Goldsworthy, 2000).

3. The six elements that make up emotional intelligence are given below.

a) Spontaneous existence, revival of the emotion includes the identification of the psychological traces of an emotional return.

b) The ability to mobilize the senses in order to be motivated to some near and far ends,

c) Ability to use emotions appropriately,

d) Competitive individuals in social relationships should be alert to the emotional turmoil of the rest.

e) Individuals should be able to recognize the verbal or nonverbal signs of others. The basis of this ability to empathize is the ability to emotionally manage relationships with other people.

f) With the spontaneous existence of emotion, individuals need to learn the part of social skills that people have specifically targeted in order to be more competitive between the options of recognizing the verbal or non-verbal symptoms of others. These needs are abilities such as making eye contact with people, being relaxed, and being able to enter a social environment. These abilities support the emotional intelligence framework much later.

4. The development and progress of emotional intelligence is completely dependent on interaction. The six choices mentioned above correspond to different levels of confusion in one's life. In Senge's work on organized behavior, emotional intelligence is linked to both

vices and virtue. For example, if an individual loses his/her job, he/she may lose his/her self-respect, for example, he/she may turn to the problem of alcohol use, this makes the individual lose his/her self-confidence even more, or he/she may try to find a new and different job (Goleman, 2002).

Emotional intelligence has 5 different sub-dimensions. These are awareness of emotions, control, empathy, self-motivation and social skills (Bozoğlu & Çankaya, 2012; Akkoç, 2007; Öztekin, 2006).

Method

Aim of The Study

The aim of the study is to investigate the emotional intelligence levels of nurses in Bursa.

Population and Sample of the Research

The population of the research consisted of 746 nurses working in State Hospitals affiliated to the General Secretariat of Bursa Public Hospitals Union. The sample of the study consisted of 574 nurses who volunteered to serve in these hospitals between 2014 and 2015.

Hypotheses of the Research

H1: There is a significant relationship between nurses' demographic characteristics and emotional intelligence.

H2: There is a significant relationship between the professional characteristics of nurses and emotional intelligence.

Data Analysis

The data obtained from the participants were made with the help of the SPSS package program. Before starting the descriptive and difference analyzes, Cronbach Alpha analysis was performed for the reliability of the data. After the data were found to be reliable, frequency analyzes, independent sample t-test and One-Way ANOVA analyzes were performed. Since these data show normal distribution, parametric tests were applied. All analyzes were performed at 95% confidence intervals.

Data Collection Tools

In this study, data were obtained by face-to-face survey method. The questionnaire form used in the research consists of three parts. The information form created by the researcher consists of two parts in itself. 1-7. While questions between 7 and 9 are about determining the demographic characteristics of the participants, questions between 7 and 9 are about determining the professional characteristics.

In the last part of the questionnaire, there is the Emotional Intelligence Rating Scale (EIRS), which was developed by Hall (1999) to measure emotional intelligence. The scale was brought to the Turkish literature by Ergin in 2000 (Ergin, 2000). In Ergin's study, the Cronbach Alpha coefficient of the scale was found to be 0.87. In our study, the Cronbach alpha coefficient of the emotional intelligence assessment scale was found to be 0.94.

The emotional intelligence assessment scale consists of a total of five sub-factors. These factors are awareness of emotions, Emotion control, self motivation, empathy and social skills. All of these factors consist of six items. It consists of 6 items in Likert format. Scoring on this scale is 6- Totally Agree, 5-Partially Agree, 4-Somewhat Agree, 3-Somewhat Disagree, 2-Partly Disagree, 1-Totally Disagree.

The logic in calculating the sub-factors is the answers given to the 6 items that make up each factor are summed up by scoring. The answers given to the 30 items in total give the total score of the emotional intelligence scale. Emotional intelligence total score or high sub-factor scores determine the level of emotional intelligence (Ergin, 2000). Table 1 shows the scoring of the emotional intelligence rating scale.

Table 1. Scoring of the Emotional Intelligence Rating Scale

Scale Sub-Dimensions	Low	Normal	High
Awareness of Emotions	25 and below	26-30	31 and above
Emotion Control	26 and below	27-31	32 and above
Self Motivation	26 and below	27-30	31 and above
Empathy	25 and below	26-30	31 and above
Social Skills	24 and below	25-29	30 and above
Total Points	129 and below	130-154	155 and above

Findings

Table 2 shows the data on the socio-demographic characteristics of the participants. Nurses participating in the research; 83 % of them are women, 44.8 % of them are between the ages of 26-33, 59 % are bachelor's degree graduates, 60.3 % are married, 50.7 % have no children, 47 % of the 283 married nurses participating in the research have 1 child. When the characteristics of the participants in the profession are examined, it is seen that 50.3 % of them have a total working year between 1-5 years. While 29.1 % of the nurses work in internal units, 88.2 % of the nurses participating in the research work as service nurses.

Table 2. Socio-Demographical and Professional Characteristics of Nurses (n=584)

Variables		n	%
Gender	Woman	477	83.1
	Man	97	16.9
Age	18-25	162	28.2
	26-33	257	44.8
	34-41	128	22.3
	42 and above	27	4.7
Education	High School	74	12.9
	Associate Degree	124	21.6
	Bachelor's degree	339	59.1

	Postgraduate	37	6.4
Marital Status	Married	346	60.3
	Single	228	39.7
Having Children	Have	283	49.3
	Not Have	291	50.7
Number of children (n=283)	1	134	47.3
	2	121	42.8
	3	21	7.4
	4	7	2.5
Total Working Years	1-5	289	50.3
	6-10	140	24.4
	11-15	56	9.8
	16-20	54	9.4
	21 and above	35	6.1
Worked Unit	Internal units	167	29.1
	surgical units	140	24.4
	Intensive care	131	22.8
	Other units	136	23.7
Working Positions	Service Nurse	506	88.2
	Responsible Nurse	56	9.8
	Intensive Care Nurse	12	2.1

Table 3 shows the highest scores that can be obtained from the scale and the scores of the emotional intelligence assessment scale and its sub-factors.

Table 3. Mean Scores from the Emotional Intelligence Rating Scale

Scale Sub-Dimensions	The lowest and highest scores that can be obtained from the scale	Mean Scores Received from the Scale $\bar{X} \pm SS$

Awareness of Emotions	6-36	25.30±7.93
Emotion Control	6-36	23.79±6.95
Self Motivation	6-36	25.28±7.75
Empathy	6-36	25.97±7.61
Social Skills	6-36	24.30±7.05
Total Points	30-180	124.66±33.79

When Table 3 is examined, the order of the scores obtained from the nurses' emotional intelligence assessment scale sub-factors is as follows; empathy 25.97±7.61; Awareness of Emotions 25.30±7.93; Self Motivation 25.28±7.75; Social Skills 24.30±7.05 and Emotion Control 23.79±6.95. However, the total score of the scale was determined as 124.66±33.79. Since the maximum score that can be obtained from the scale is 180, the score obtained from our study shows that nurses have low levels of emotional intelligence.

Table 4 shows the results of the analysis regarding the comparison of the socio-demographic characteristics of the nurses with the EIRS score averages.

Table 4. Comparison of Nurses' Socio-demographic Characteristics with EIRS Mean Scores

Variables	Sub-Dimensions ($\bar{X} \pm SS$)					Total Points ($\bar{X} \pm SS$)
	Awareness of Emotions	Emotion Control	Self Motivation	Empathy	Social Skills	
Gender						
Woman	25.68±7.79	23.85±6.76	25.57±7.55	26.28±7.39	24.40±6.82	125.81±32.71
Man	23.40±8.39	23.47±7.85	23.85±8.60	24.42±8.48	23.81±8.08	118.96±38.34
P Value	p<0.05	p>0.05	p<0.05	p<0.05	p>0.05	p>0.05
Education						
High School	24.74±8.52	23.27±7.60	24.74±8.63	25.81±8.92	24.02±7.57	122.59±37.76
Associate	24.19±8.7	23.58±7.2	24.83±8.3	24.56±8.6	23.58±7.6	120.75±37.1

Degree	5	6	0	0	9	5
Bachelor's degree	25.43±7.60	23.70±6.73	25.21±7.52	26.17±7.05	24.19±6.72	124.73±32.08
Postgraduate	28.89±5.68	26.37±6.33	28.48±5.22	29.18±4.81	28.29±5.45	141.24±23.59
P Value	p<0.05	p>0.05	p>0.05	p<0.05	p<0.05	p<0.05

Working Positions

Service Nurse	25.09±7.93	23.52±6.87	25.03±7.69	25.79±7.57	24.10±7.03	123.54±33.45
Responsible Nurse	26.41±8.25	25.10±7.38	26.66±8.17	27.03±7.97	25.42±7.09	130.64±36.12
Intensive Care Nurse	28.83±5.62	29.16±5.95	29.50±7.25	28.66±7.06	27.66±6.55	143.83±30.64
P Value	p>0.05	p<0.05	p>0.05	p>0.05	p>0.05	p<0.05

The relationship between nurses' demographic characteristics, emotional intelligence assessment scale sub-factor and total scores is given in table 4 above. In the study, no relationship was found between the gender variable and the emotional intelligence rating scale. A significant relationship was found between the scores awareness of emotions, self motivation and empathy scores, which are sub-factors of emotional intelligence assessment, and gender ($p<0.05$). It was observed that the mean score of the female gender, which is one of the subgroups of the gender variable, was higher than that of the males. This situation reveals that the emotional intelligence levels of the female nurses in the study are higher than the males. In the study, it was seen that female nurses' emotional intelligence assessment scale sub-factor score averages were also higher than male nurses.

It was observed that there was a significant relationship between the education variable and the total score of the emotional intelligence assessment scale ($p<0.05$). In the study, it was observed that there was a significant relationship between the sub-factors of the scale, awareness of emotions, empathy and social skills, and the education variable ($p<0.05$). It was determined that the emotional intelligence levels of nurses with postgraduate education were higher than those of nurses with other education levels. In all sub-factors of the emotional intelligence assessment scale, the mean score of nurses with postgraduate education is higher than the others.

It was determined that there was a significant relationship between the position in which the nurses included in the study worked and the total score of the emotional intelligence assessment scale ($p<0.05$). It was also observed that there was a statistically significant relationship with emotion control, one of the sub-factors of the emotional intelligence rating scale ($p<0.05$). It was determined that there was no significant relationship between the position employed and the sub-factors awareness of emotions, self motivation, empathy and social skills ($p>0.05$). In the study, it was determined that the total mean score of the nurses serving in the polyclinic units (143.83±30.64) was higher than the others. It was determined that the sub-factor mean scores of the polyclinic nurses were higher than the others.

Contrary to the above, there was no significant relationship between the nurses' age variable, marital status, having a child, total years of work and the units they served, and the emotional intelligence assessment scale and sub-factor ($p>0.05$).

Discussion and Conclusion

The level of emotional intelligence should be high in order for nurses to enjoy their private or working life, to adapt easily to the hospital environment, and to be a mentally healthy person while giving service. Since nurses serve mostly individuals with impaired health, sensitive behaviors that can meet both physiological and emotional needs of patients are only possible with the development of emotional intelligence.

In the study, the emotional intelligence levels of the nurses were found to be 124.66 ± 33.79 . Since the maximum score that can be obtained from the scale is 180, it is seen that the emotional intelligence levels of the nurses are low.

Difference analyzes were performed to determine the difference between emotional intelligence and demographic characteristics. While there was a significant difference between the socio-demographic characteristics of education and working position and the emotional intelligence rating scale total score ($p<0.05$), no difference was found between other variables ($p>0.05$). In the study, it was determined that the mean of the polyclinic nurses (143.83 ± 30.64) was higher than the nurses working in the service and responsible positions.

In the study, it was observed that the emotional intelligence levels of women (125.81 ± 32.71) were higher than men (118.96 ± 38.34). In the age variable, it was determined that the highest level of emotional intelligence (126.59 ± 42.72) was at the age of 42 and above. When the emotional intelligence scores of the nurses were analyzed according to their education levels, it was seen that the emotional intelligence scores of the nurses who received postgraduate education were higher (141.24 ± 23.59).

We can describe nurses with high emotional intelligence as happy and healthy individuals who are aware of the emotions they experience within themselves, as well as the emotions of the individuals and colleagues around them, and can make healthier and stronger moves thanks to this difference. Considering that nurses work under intense pressure and stress, their emotional intelligence also increases their ability to cope with this pressure and stressful work environment efficiently. Nurses should have a developed sense of empathy in order to better understand and manage the patient and the disease while giving care to the patient. Nurses are required to direct their own feelings and thoughts in a positive way while fulfilling these situations due to their profession. It is seen that the nurse's ability to provide and maintain this balance has a very close relationship with the level of education.

The characteristics expected of nurses in the position they work in are concepts related to emotional intelligence. These concepts are harmony, motivation, empathy, self-confidence, respect and optimism. Employees must work in harmony with service recipients or colleagues. The concept of team is a necessary condition for the provision of health services in health care institutions. The incompatibility of the team within itself may cause disruption of services. Nurses with high emotional intelligence are individuals who pay attention to these concepts in their positions.

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P-106 The Effects of Performance Evaluations on Employees in Health Institutions

Iclal YAVUZ

Abstract

Aim: This research; to determine the effects of performance evaluations on employees in health institutions.

Method: This research was conducted by applying a questionnaire to the staff at BHT CLINIC Istanbul Tema Hospital. The questionnaire was applied between 21.05.2021-04.06.2021. There are 450 personnel in the universe of the research. Since the personnel work in shifts and considering the working conditions, the questionnaire was applied to 127 personnel. Since the shift system was arranged weekly, the reliability of the study wasn't affected. According to the staff distribution of the employees, %51,2 of the respondents are administrative staff and %48,8 are medical staff. While selecting the sample set, both staff groups were selected by proportioning the total number of employees.

Results: It was observed that the performance perception levels of the employees participating in the research were high. "Performance evaluation improves employee performance." item has the highest perception, "Performance evaluation reduces the stress of employees." item has the lowest perception.

Conclusions: It is the basic level of service in hospital and service in service. In hospitals, cute and lovable quality. Success is what the human factor means. It is the greatest resource for one's health. One of the responsibilities of health management is customer requests and details about evaluation. Performance appraisal allows to identify disciplinary problems and promotion possibilities in advance, and most importantly, it creates a high motivation environment for both subordinates, superiors and the organization/institution.

Keywords: Evaluation, Motivation, Performance, Staff

Introduction

Organizations; They are technical, social and economic structures established for a specific purpose and functioning according to an order. They try to achieve their goals by coordinating the productive efforts of human resources. The change in the content of organizations gained momentum towards the end of the twentieth century. When the performance is examined in terms of organizational behavior, it is the product that the employee obtains as a result of the actions he performs in order to achieve the organizational goals and reach the determined goal. This product can be a good, service or idea. In order to determine and evaluate the performance, an idea should be obtained by looking at the result of the activity performed (Appelbaum vd., 2009:13).

Organizational efficiency and effectiveness are related to employee performance in the planning of services in health institutions and reaching the desired levels. Performance is a concept of foreign origin. Mean in Turkish; are used as the concepts of performance and achievement. The word performance is used more widely in the field of human resources management, as it is in daily speech and written language (Dilek, 2009). Performance is defined as the whole of concepts that have gained value quantitatively or qualitatively in line with the objectives and plans determined by the enterprise. It can also be expressed as the demonstration of appropriate behaviors by the employee in line with the determined standards and the degree of approaching the determined goal (Tunçer, 2013, p. 89). When considered in terms of human resources, performance; where we are, how good we are, and where we should be. (Kılıç, 2007, p. 309). At the same time, performance is related to the results

obtained by an employee as a result of the task assigned to him in a certain time (Tunçer, 2013, p. 89). Performance evaluation practices are important for institutions to measure this relationship.

Managers should plan the processes of determining wages, promotion and firing of employees. They should make good observations and follow performance appraisal processes in order to identify their strengths and weaknesses for employees. With the information obtained at the end of this process, the evaluation results help in making administrative decisions such as wage regulation, promotion or dismissal (Pehlivan, 2008, p. 173).

Method

Aim of The Study

The research is an applied research in terms of basic philosophy. It is an explanatory, quantitative and cross-sectional research about its purpose.

Population and Sample of the Research

This research was conducted by applying a questionnaire to the staff at BHT CLINIC Istanbul Tema Hospital. The questionnaire was applied between 21.05.2021-04.06.2021. There are 450 personnel in the universe of the research.

Data Collection Tools

The site in general consists of two people. The first part consists of demographic inquiry and the second part consists of scaling the management system. The questions of the second part are taken from İbrahim Mert's (2011:99) article titled "Perception of the Outputs and Barriers of the Performance Evaluation System of the Employees". İbrahim Sani Mert, on the other hand, consists of the article titled "Effectiveness of Performance Evaluation" published by İshaq, İqbal and Zaheed in 2009 (Mert, 2011: 99).

The first part consists of six demographic questions in total. With these questions, information was obtained about the training of the personnel, their educational status, service information within the institution, and information.

It consists of four questions on the second part. It asks personal questions about these questions with the performance evaluation system.

A five-pointer (strongly disagree-disagree-sometimes-possessiveness-together) was used in the questionnaire.

Findings

Table 1. Demographic characteristics of the people participating in the research (part 1)

Gender	Number	Percent(%)
Women	81	63,8
Man	46	36,2
Total	127	100,00
Age	Number	Percent(%)
18-29	94	74

29-39	22	17,3
40-49	10	7,9
50+	1	0,8
Total	127	100,00

Marital Status	Number	Percent(%)
Single	95	74,8
Married	24	18,9
Divorced	2	6,3
Total	127	100,00

When the characteristics of the people working at Istanbul Tema Hospital participating in the research are examined, 63.8% of the participants are female, 36.2% are male, 74% are between the ages of 18-29, 17.3% are between the ages of 29-39, 7.9% are between 40-49 years old, 0.8% are 50 years old and over. The people within the scope of the research stated their marital status as 74.8% single, 18.9% as married and 6.3% as divorced.

Table 2. Demographic characteristics of the people participating in the research (part 2)

Education	Number	Percent(%)
Literate	3	2,4
Primary	7	5,5
High school	23	18,1
Associate degree	48	37,8
Licence	38	29,9
Degree	8	6,3
Total	127	100,00

Stadd	Number	Percent(%)
Medical staff	62	48,8
Administrative staff	65	51,2
Total	127	100,00

Operation time	Number	Percent(%)
0-3 year	102	80,3
3-7 year	13	10,2
7-15 year	6	4,7
15-25 year	5	3,9
25+ year	1	0,8
Total	127	100,00

2.4% of the participants are literate, 5.5% primary school, 18.1% high school, 37.8% associate degree, 29.9% undergraduate, 6.3% higher while they reported that they had undergraduate education, 48.8% reported that they were working in medical staff and 51.2% were working in administrative staff. 80.3% of the participants 0-3 years, 10.2% 3-7 years, 4.7% 7-15 years, 3.9% 15-25 years, 0.8% i He has been serving in the institution for 25 years or more.

Table 3. The Average and Standard Deviation Values of the Opinions of the Persons within the Scope of the Research on the Performance Evaluation System Scale

Clause		Strongly Disagree	Don' t agree	Sometimes	Agree	Absolutely agree	X	s.s
Performance evaluation enables employees to learn what managers expect from them.	f	4	11	34	57	21	3,62	0,966
	%	3,1	8,7	26,8	44,9	16,5		
Performance appraisal contributes to the progress of the organization	f	3	10	23	53	38	3,88	1,001
	%	2,4	7,9	18,1	41,7	29,9		
Performance evaluation provides the development of strategies for education.	f	7	4	26	58	32	3,81	1,026
	%	5,5	3,1	20,5	45,7	25,2		
Performance appraisal allows employees to learn something about themselves.	f	3	10	26	54	34	3,83	0,991
	%	2,4	7,9	20,5	42,5	26,8		
Performance evaluation enables the development of future plans	f	8	8	22	57	32	3,76	1,094
	%	6,3	6,3	17,3	44,9	25,2		
Performance appraisal creates a relationship between performance and reward.	f	6	13	32	47	29	3,62	1,089
	%	4,7	10,2	25,2	37	22,8		

Performance appraisal combines employee performance and goals.	f	2	13	31	59	22	3,67	0,933
	%	1,6	10,2	24,4	46,5	17,3		
Performance appraisal increases the performance of employees.	f	5	15	34	40	30	4,45	6,266
	%	3,9	11,8	26,8	31,5	23,6		
It transforms performance evaluation evaluation results into performance enhancing feedback.	f	8	4	32	51	32	3,74	1,068
	%	6,3	3,1	25,2	40,2	25,2		
Performance appraisal gives employees information on how they are working	f	3	8	23	64	29	3,85	0,926
	%	2,4	6,3	18,1	50,4	22,8		
Performance evaluation increases motivation.	f	8	9	43	41	26	3,53	1,295
	%	6,3	7,1	33,9	32,3	20,5		
Performance appraisal creates a sense of equality among employees.	f	20	12	29	45	21	3,27	1,295
	%	15,7	9,4	22,8	35,4	16,5		
Performance appraisal extends the period of stay (working in the institution) of employees.	f	11	19	39	41	17	3,26	1,137
	%	8,7	15	30,7	32,3	13,4		
Performance appraisal reduces employee stress.	f	13	28	39	28	19	3,09	1,204
	%	10,2	22	30,7	22	15		

Average = 3,67

It is understood that the level of perception of "Performance Evaluation" is high (General Average=3.67). When the sub-items of the performance evaluation are examined, the item "Performance evaluation increases the performance of the employee" (x=4.45) has the highest perception, while the item "Performance evaluation contributes to the progress of the institution" (x=3.88) has the second highest perception, "Performance evaluation gives the employees the highest perception". gives information about how they work."(x=3.85) is the third highest perception. When the lowest item averages are examined, "Performance evaluation reduces the stress of employees." The item (x=3.09) is the lowest, "Performance evaluation prolongs the period of stay (working in the institution) of the employees." (x=3.26) the second lowest item is "Performance evaluation creates a sense of equality among employees." The item (x=3.27) is the third lowest item.

Discussion and Conclusion

It is the basic level of service in hospital and service in service. In hospitals, cute and lovable quality. Success is what the human factor means. It is the greatest resource for one's health. One of the responsibilities of health management management is to adapt to customer demands and perceptions (Alcan, 1997, 133). Attention should be paid from the employee

until he is trained. Performance evaluations are important for businesses. The education that will evaluate will teach and will be beneficial to the school.

There should be a review about it. Performance management that can work, determining the knowledge, skills and characteristics necessary for the employee to perform their functions in the best way. Choosing the performance, designing the best planning to realize the choices of preference. Performance evaluation for managers, you can plan your training and training plans for the system to reach your goals.

It was observed that the performance perception levels of the employees participating in the research were high. "Performance evaluation improves employee performance." The item has the highest perception, "Performance evaluation reduces the stress of employees." The item has the lowest perception.

For researchers to obtain more comprehensive results in similar studies to be conducted on the subject, comparison with the samples to be selected not only from the private sector but also from the public sector will give a wider result.

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P-107 Local Government Health Practices in the World and Turkey in the Pandemic Process

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Abstract

While covid 19, which we live as the most current of the epidemics throughout history, has created radical transformations in many areas from global policies to individual practices, it has also imposed certain requirements in the conduct of public services. The study focuses on demonstrating the concrete transformation experienced in local government service policies in Turkey and in the world during the Covid 19 pandemic process, with general examples. With this perspective, a survey and a list of original application models were created for all world examples. Although the process included the presentation of social support programs of local governments in parallel with health programs, only the applications in the field of direct health care were discussed in the study.

Keywords: Municipality, health, social service, management, covid 19

Introduction and Aim

Cities are the natural environment of modern human life. It is of great importance that this environment offers the opportunity of a quality life in health and well-being. The concept of a healthy city defines a very wide area that expresses the construction in accordance with the principles of urbanism, science and health rules (Tunçer, 2006). Epidemics create situations where this feature is completely lost in many respects.

During the pandemic period, which is one of the most important health problems faced by the world, all the practices of local governments have gained great importance and the vital role of local health policies has become visible.

It is clear that the lessons learned from this period are of great importance in preparation for epidemics that are expected to continue and diversify in the future due to global climate change and many similar factors.

For this reason, the study presents a selection of examples from the world and Turkey and is based on the prediction that the duties of local governments regarding health functions will become more diversified and intensified in the future.

Outbreaks Throughout History

When we look at the epidemic record of the world, we encounter earthquakes and invasion movements in the east of Hellen in the 6th century, as well as plague epidemics, the first of which was in 541, one after the other (Rich, 1999: 33). Epidemics gain continuity with phenomena such as climate deterioration, famines, and the eating of sick animals. The larger plague epidemic begins in China in 1331 and spreads by 1350, reaching Central Asia, Crimea, Constantinople, Sicily, Egypt, France, England and Russia through trade (Pointing, 2015: 419-420).

It highlights health conditions, especially in local services, after epidemics in which millions of people died. 6,000 deaths in the cholera epidemic that broke out in London as late as 1866; The fact that 240 deaths out of every 1000 babies born alive in New York City in 1870 (Foster, 2008: 91) also forced the improvement of water and sewer services all over the World.

Recurrent cases of cholera and plague of the 19th century; 20th Century Russian, Spanish, Asian influenza and Aids; In the 21st century, Sars, Mers, bird and swine flu cases continue with covid 19.

Today, movements for the privatization of water services, especially in Africa and South America, and the processes of reducing the use of expensive water or completely deprivation of it continue to harbor a similar epidemic threat.

Although all these processes that resulted in the death of millions of people have brought both physical and intellectual transformations after the epidemics, they continue to be lived like a human destiny. The new conditions that cause us to commemorate the lockdowns experienced due to wars are factors that question our understanding of life and can lead to a change in relationships over time (Morin, 2020).

Local Services in the Epidemic

One of the most important debates about the epidemic is the fact that metropolitan cities are more heavily affected by the process. While New York maintains its exemplary status as one of the most damaged cities; Istanbul and Izmir data in Turkey also confirm this determination. Considering that the mayor of New York attributed the growth of the epidemic to the population density of the city; It is seen that medium-sized cities are in an advantageous position.

However, the better performance of the picture in Hong Kong, another densely populated city, shows that other factors are also important (Holland, 2020). As a result, the claim that metropolitan cities have come to an end after Covid is not considered possible when we look at past experiences (Economist, 2020).

The first consequence for the largest urban public spaces has been their rapid depopulation and emptying. The prominence of these services for human life has served to criticize the real functions of the largest spatial arrangements that can even be defended as “prestige projects” and to demonstrate the relative importance of mega projects such as flight-guaranteed airports and crossing-guaranteed bridges. It has been discovered that many jobs that require empty shopping malls, skyscrapers hosting business centers, huge open offices, hundreds of flights a day and road vehicle traffic can be done digitally.

The secondary result for city administrations is that while all service sectors can stop or slow down, urban services gain more urgency and sensitivity than ever before. which can be counted among the "preventive health services" of local governments.

- in addition to basic service areas such as cleaning, water, wastewater,
- Increasing parks and green areas in the city, improving existing areas and making them accessible,
- The need to increase and diversify the capacity of many service areas, such as the provision of opportunities to do sports, has become more evident during the last pandemic the world has been through.

Looking at the world examples, it is observed that more successful results are obtained in controlling the epidemic in cases where local governments play an active role in the effective fight against the epidemic.

Informing the Local People

All municipalities have informed the public and made the necessary warnings by using all available transmission channels. All the instructions, circulars, campaigns, warning films of the Ministries of Health and related institutions were also announced to the local people.

Canada Quebec region local government service and application principles were detailed on the website as a whole in order to answer all questions that may arise in the minds of citizens (Oubec.ca, 2021).

According to the Mediterranean Integration Center (CMI) data, the most prominent concept in Palestinian municipalities was solidarity; A holistic discourse of struggle was established with the government, security, non-governmental and support organizations (CMI, 2020).

Bursa Karacabey municipality set out with the formula "Healthy city with 3T" for the struggle. Citizens were called to comply with the 3T formula, which was determined as cleanliness, no contact and trust (Karacabey.bel, 2020).

Technological innovations were also used in informing and controlling the public. Such imperatives have also given rise to democratic debates because epidemics create an environment of repression politics that can also be open to abuse. As Foucault (2002: 48) points out, "epidemic medicine can only be possible through law enforcement". When the examples in history are examined, many practices such as keeping cemeteries and sewage areas under control, initiating the cremation of corpses rather than being buried, controlling the meat, wine and bread trade, and ordering the slaughterhouses have also produced the reason for "creating a health inspector unit". Today, this audit is carried out with much more technological applications.

Controls were provided with unmanned aerial vehicles. In Italy, the video of the Mayor of Messina chasing the young people who violated the curfew with a drone broke records (Euronews, 2020a; Youtube, 2020).

Aydın, Mamak, Uşak, Bağcılar Municipalities started a thermal camera measure against the corona virus. Health teams measured the body temperatures of citizens at the entrance of the municipal main service building, which is visited by thousands of citizens every day.

A call to "stay at home" was made, such as signaling systems and marking pedestrian crossings. Sakarya Metropolitan Municipality continued its call to 'Stay at Home', which it started in traffic lights and audible warning systems, with articles on pedestrian crossings (Sakarya.bel, 2020). In Bolu İnegöl, the "stay at home" message within the scope of corona virus measures was given from the sky. The pilot, who flew with a paramotor in the municipality organization, carried the "Stay at Home" warning to the sky after the earth (İnegölonline, 2020).

Hygiene Practices

Inspection/improvement of waste systems in municipalities around the world became a priority issue; It was observed that especially the Mediterranean Region Municipalities gave priority to the studies on this subject.

Ultraviolet rays were used to provide hygiene, drinking water was disinfected with ultraviolet rays. A UV disinfection system was commissioned by Sakarya Metropolitan Municipality Water and Sewerage Administration (SASKİ) to completely destroy microorganisms that may occur in water and prevent their reproduction (SASKİ, 2020).

Robots that disinfect with ultraviolet rays have been placed in metro stations. In New York, a lamp system that kills the Covid 19 virus with ultraviolet rays has been piloted on subway trains and buses (CNN, 2020).

In Turkey, the aforementioned UV-rayed robots were produced both in the private sector and in Vocational and Technical Anatolian High Schools (Sözcü, 2020). The country's Vocational and Technical Anatolian High Schools were among the units that actively participated in the struggle during this process. Balıkesir Metropolitan Municipality carried out 900 tons of

disinfection application in an area of 1 million 500 thousand m² with the disinfection raw material supplied from Recep Gencer Vocational and Technical Anatolian High School, and subsequently this figure increased to 3 thousand 500 tons of surface disinfectant and 10 thousand liters of hand disinfectant (Balıkesir.bel, 2020a, Balıkesir.bel, 2020b).

Disinfection and disinfection works in the cities continued uninterruptedly by the municipality teams. Especially crowded public spaces were disinfected at regular intervals. Public institutions, schools, mosques, streets, buses, metro stations, public transportation vehicles, taxis were sprayed.

200 thousand garbage containers were sprayed in Osmangazi (Osmangazi.bel, 2020). Some municipalities (Balıkesir Gonen, Balıkesir 6 Eylül, Ayvalık etc.) used their own disinfectant. In the Sındırgı district of Balıkesir, which is famous for its geothermal waters and has become a center of attraction in its thermal area, geothermal water was used in disinfection works against the corona virus. The water, which is 98 degrees at its source and rich in minerals, created a great advantage for hygiene (Sondakika.com, 2020). Istanbul Ümraniye Municipality has activated the locally produced micronsis tool, which makes an important contribution to the disinfection process (Umraniye.bel, 2020a).

Disinfection studies were carried out with drones. Drones were also used for disinfection in Ankara Yenimahalle and İzmir Çiğli Municipality (Yenimahalle.bel, 2020; egetelgraf, 2020). One of the new developments has been the practice of global cargo companies delivering prescription drugs with drones in a region called The Villages in the state of Florida in the United States, where people over 55 live (Arı kovanı, 2020).

Masks and other materials took an important place in the distribution of hygiene materials. Municipalities used many different methods in this distribution, from their own resources to philanthropic support, from realizing their own production to supporting manufacturers. They almost competed in the number of production and distribution.

In the Iraqi Baghdad municipality, 500-1000 masks were produced per day by female volunteers with the organization of the Municipal Women's Commission (CMI, 2020). Italy Tuscany Region President Enrico Rossi stated that in addition to the 20 million euro support, 8.5 million masks were distributed to everyone for 30 masks per month (PES Group, 2020).

Balıkesir Dursunbey Municipality distributed 4000 Bor hand disinfectant produced from Bor mine (Dursunbey.bel, 2020). Bilecik Osmaneli Municipality, on the other hand, did not neglect to obtain a "ce mark" certificate of conformity for mask production (Osmaneli.bel, 2020). While Van Municipality used 5 thousand 400 liters of disinfectant in its disinfection works, 2 thousand 400 liters of disinfectant and 145 thousand masks were distributed free of charge to the citizens as part of the fight against the epidemic. 38 vehicles, 20 mistblowers, 18 PLV-ULV devices, 90 back atomizers were used in the studies conducted throughout the province (Van.bel, 2020).

Hygiene inspections were carried out, illegally produced hygiene items were confiscated. Disinfection cabins and materials and medical waste bins were placed at the points where the human density was high.

Ayvalık Municipality produced its own mask, disinfectant medicine and disinfection cabinet (Ayvalık.bel, 2020). By Bandırma Municipality, Mobile Disinfectant Cabinets produced by the Municipality teams were installed at the entrance of the Closed Market Place (Bandırma.bel, 2020). Health kit support was given to taxi drivers (İzmit Municipality). (İzmit.bel, 2020).

Hygienic marriage ceremonies were held. Istanbul Beşiktaş Municipality received the marriage applications of couples who want to get married online through its website. This application, which both accelerates and facilitates the transactions and is secure against the epidemic, was welcomed (Beşiktaş.bel, 2020). Ümraniye Municipality has also launched an online marriage application for newly married couples. In the practice of this municipality, only the couples and their witnesses were married, while the relatives of the couples who could not attend the wedding ceremony were able to watch the wedding images published on the internet live (Ümraniye.bel, 2020b).

Spatial Arrangements

Distance arrangements were made in public areas. The pandemic has questioned not only the existence of open green spaces, but also whether they meet the criteria of ease of access. The need for green spaces with short access came to the fore when vehicle access was prohibited or permission to go outdoors in limited time intervals was issued. Distance adjustments were also made in these areas. The benches collected from all the parks within the borders of Tekirdağ Süleymanpaşa were transformed to leave a distance of approximately one meter between the residents (Süleymanpaşa.bel, 2020a).

Social distance circles were drawn in parks and gardens. It was aimed to protect the social distance rules during the normalization period, when the coronavirus measures were reduced, with the circles drawn with a diameter of 3 meters at 3 meters intervals.

Another pioneering public space project was the opening of restaurants with flexiglas units in Amsterdam (Rapatly, 2020), Czech Republic, Milan (Holland, 2020).

Transportation services were organized multi-dimensionally. The sudden decrease in the use of public transport during the pandemic process has caused very serious public losses. Undoubtedly, it was not possible to give up public transportation completely, and serious supports were announced all over the world in order to maintain these services, which are very expensive investments.

In America, Sound Transit was supported with a fund of 166 million dollars (Groover, 2020). While the capacities of transportation vehicles were reduced in Turkey, regulations were made by increasing the use of technology. In Kocaeli Metropolitan Municipality, TransportationPark instantly checked each vehicle one by one with the employees of the control center, and provided additional expeditions with the possible intensity seen in the vehicles (Kocaeli.bel, 2020). Bursa Metropolitan Municipality Sea Buses Administration (BUDO) reduced the number of weekly flights from 28 to 8 due to the lack of passenger demand due to the corona virus epidemic (Dünya, 2020)

Distance applications in public transportation vehicles, pedestrian crossings and models of manually managing buttons at elevator entrances were investigated. Municipalities have taken additional measures in metro and bus stations. As part of the coronavirus measures, thermal cameras were installed in metro stations in Istanbul. Passengers with high fever were directed to the nearest health institution (IBB, 2020). Continuing disinfection processes in buses and terminals, Metropolitan Municipality teams measured the body temperatures of citizens with heat meters at the terminal entrances and carried out the necessary actions in abnormal situations.

The principle of small-scale, close-range access became important. The closure of borders not only between countries but also between cities and curfews revealed the need for downsizing in all transactions. Obligations to avoid public transportation and to be able to use nearby shopping places only for basic necessities; Priorities such as ease of access in emergency

cases emphasized that the concept of "accessibility" in urban designs should be considered directly with "proximity".

Emphasizing both the body-strengthening and distance-providing functions of walking or cycling, and indirectly the "neighbourhood" and "neighbourhood" phenomena; brought regulations aimed at re-functioning and revitalizing these centers. The most important slogan of these efforts was "15 Minute City". The spread of shopping and socializing spaces at neighborhood/neighbourhood scale instead of large shopping mall models for cities; Within the 15-minute urban model, practices such as the "walking to school" model were suggested in primary education. This application, led by Paris, was detailed with walking and cycling models.

It is recommended to increase shared routes. In the brochure on street regulations against the pandemic prepared by the National Association of Transportation Offices, formed by 84 North American cities and transportation companies, standards were studied in many subjects such as walking, cycling, shopping areas, shared streets, open playgrounds (NACTO, 2020). In addition to the reduced traffic speed on shared roads by vehicles and pedestrians, increasing the speed barriers on other roads, widening pavements, increasing dedicated roads for public transport, narrowing the parking areas in some areas and increasing the table and session distances of on-site service services such as restaurants were discussed.

Urban agriculture, green building, horizontal city models were put on the agenda. In addition, bicycle lanes were increased and bicycle incentives were given (Holland, 2020; Independent, 2019).

Conclusion

As a result, the epidemic conditions will bring both physical, emotional and intellectual transformations, with their structures causing the death of millions of people. Urban planners are expected to bring radical applications for post-pandemic cities. Therefore, with the foresight that the importance of spatial arrangement projects will not decrease; It is thought that rational scale and cost issues should come to the fore.

In order to leave a correct local government understanding for the future, it is necessary to abandon the use of the city as a rent-only area, by realizing that it is the most important unit in increasing the quality of life of today's society. The public interest and the most rational use of public resources should be emphasized; the popular discourse that leads to the service being perceived as just a "big project" through the development of local democracy should be abandoned.

It is possible and necessary for local governments to discover/establish a very rich portfolio of original projects that they can produce if they focus on local needs.

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