



UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA



İSTANBUL KENT  
UNIVERSITY

**3<sup>RD</sup> INTERNATIONAL  
CLINICAL NURSING RESEARCH  
CONGRESS**

**PROCEEDING BOOK**

**8-11 DECEMBER 2020**

[www.icnrc2020.com](http://www.icnrc2020.com)

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## INVITATION

Dear Colleagues,

On behalf of the Organizing Committee, We would like to invite you to “The Third International Clinical Nursing Research Congress” which is organized online in collaboration with Istanbul Kent University of Health Sciences Department of Nursing, Turkey and University of Wollongong Faculty of Science, Medicine and Health School of Nursing, Australia on the 08th-11th December 2020.

The knowledge and experience you bring to this congress will help improve nursing care. The Organising Committee looks forward to welcoming you to this Research Congress in December.

### **Honorary Presidents of the Congress**

Prof. M.D. Necmettin ATŞÜ (President of Istanbul Kent University)  
Prof. Patricia DAVIDSON (Dean of Johns Hopkins School of Nursing)

### **The Congress Secretary**

Asst. Prof. Cennet ÇİRİŞ YILDIZ  
Res. Asst. Güzin ÜNLÜ  
Ms Heidi LORD

### **Chairs of the Congress**

Prof.Dr.Zuhal BAHAR  
Prof.Dr.Ritin FERNANDEZ

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Istanbul Kent University, Faculty of Health Science, Nursing Department

#### **Lecturer Meryem ERCEYLAN**

Istanbul Kent University, Faculty of Health Science, Nursing Department

#### **Lecturer Gökçe ÇİÇEK**

Istanbul Kent University, Faculty of Health Science, Nursing Department

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Istanbul Kent University, Faculty of Health Science, Nursing Department

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**Hakan ORER**, Koç University, Turkey

**Selda SEÇGİNLİ**, Istanbul University-Cerrahpaşa, Turkey

**Patricia M. VANHOOK**, East Tennessee State University, USA

# CONGRESS SCIENTIFIC PROGRAM

## 8TH DECEMBER 2020, TUESDAY

8 DECEMBER 2020, Tuesday

8 DECEMBER 2020, Tuesday							
ORAL PRESENTATION	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Gizem AÇIKGÖZ, Gökçe ÇİÇEK
	00:30 02:00	05:30 07:00	06:30 08:00	08:30 10:00	13:30 15:00	16:30 18:00	ORAL PRESENTATION
ORAL PRESENTATION	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Ayfer AYDIN, Ritin FERNANDEZ
	02:00 05:00	07:00 10:00	08:00 11:00	10:00 13:00	15:00 18:00	18:00 21:00	ORAL PRESENTATION
	5:00 5:10	10:00 10:10	11:00 11:10	13:00 13:10	18:00 18:10	21:00 21:10	break
POSTER DISCUSSION	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Selda SEÇGİNLİ, Nihal GÖRDES AYDOĞDU
	05:10 06:10	10:10 11:10	11:10 12:10	13:10 14:10	18:10 19:10	21:10 22:10	POSTER DISCUSSION
	06:10 06:20	11:10 11:20	12:10 12:20	14:10 14:20	19:10 19:20	22:10 22:20	break
OPENING	New York	London	Milano	Istanbul	Singapore	Sydney	SPEAKERS
	06:20 07:05	11:20 12:05	12:20 13:05	14:20 15:05	19:20 20:05	22:20 23:05	Opening Speeches  <b>Zuhal BAHAR</b> <i>Istanbul Kent University, Turkey</i> <b>Ritin FERNANDEZ</b> <i>University of Wollongong, Australia</i> <b>Patricia DAVIDSON</b> <i>Dean of Johns Hopkins University, School of Nursing, USA</i> <b>Necmettin ATSÜ</b> <i>President of Istanbul Kent University, Turkey</i>
OPENING CEREMONY	New York	London	Milano	Istanbul	Singapore	Sydney	OPENING CEREMONY
	07:10 08:10	12:10 13:10	13:10 14:10	15:10 16:10	20:10 21:10	23:10 00:10	Traditional Dance Show "Pozitif Kumpanya Gölgerinin Dansı"
ORAL PRESENTATION	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Gizem AÇIKGÖZ, Gökçe ÇİÇEK
	08:20 11:10	13:20 16:10	14:20 17:10	16:20 19:10	21:20 00:10	00:20 03:10	ORAL PRESENTATION

# 9TH DECEMBER 2020, WEDNESDAY

## 9 DECEMBER 2020, Wednesday

ORAL PRESENTATION	New York 00:00 03:00	London 05:00 08:00	Milano 06:00 09:00	Istanbul 08:00 11:00	Singapore 13:00 16:00	Sydney 16:00 19:00	CHAIRS: Ahmet İlkay CEYHAN, Gül AKDOĞAN GÜNER ORAL PRESENTATION	
	03:00 03:10	08:00 08:10	09:00 09:10	11:00 11:10	16:00 16:10	19:00 19:10	break	
POSTER DISCUSSION	New York 03:10 04:10	London 08:10 09:10	Milano 09:10 10:10	Istanbul 11:10 12:10	Singapore 16:10 17:10	Sydney 19:10 20:10	CHAIRS: Selda SEÇGİNLI, Fatma ERSİN POSTER DISCUSSION	SPEAKER
	04:10 04:20	09:10 09:20	10:10 10:20	12:10 12:20	17:10 17:20	20:10 20:20	break	
KEYNOTE LECTURE	New York 04:20 05:05	London 09:20 10:05	Milano 10:20 11:05	Istanbul 12:20 13:05	Singapore 17:20 18:05	Sydney 20:20 21:05	CHAIRS: Heidi LORD, Zuhul BAHAR Advances in Systematic Review	SPEAKER Ritın FERNANDEZ University of Wollongong, Australia
	05:05 05:15	10:05 10:15	11:05 11:15	13:05 13:15	18:05 18:15	21:05 21:15	break	
LECTURE	New York 05:15 06:00	London 10:15 11:00	Milano 11:15 12:00	Istanbul 13:15 14:00	Singapore 18:15 19:00	Sydney 21:15 22:00	CHAIRS: Ritın Fernandez, Nursen NAHCIVAN Primary Health Nursing on Covid	SPEAKER Sharon James University of Wollongong, Australia
	06:00 06:10	11:00 11:10	12:00 12:10	14:00 14:10	19:00 19:10	22:00 22:10	break	
LECTURE	New York 06:10 06:55	London 11:10 11:55	Milano 12:10 12:55	Istanbul 14:10 14:55	Singapore 19:10 19:55	Sydney 22:10 22:55	CHAIRS: Ritın FERNANDEZ, Nursen NAHCIVAN Nursing Research Strategy	SPEAKER Zuhul BAHAR Istanbul Kent University, Turkey
	06:55 07:05	11:55 12:05	12:55 13:05	14:55 15:05	19:55 20:05	22:55 23:05	break	
LECTURE	New York 07:05 07:50	London 12:05 12:50	Milano 13:05 13:50	Istanbul 15:05 15:50	Singapore 20:05 20:50	Sydney 23:05 23:50	CHAIRS: Mahmut BAYIK, Gül AKDOĞAN GÜNER Nursing Curriculum Desing for Evidence: Over coming the barriers to implementation	SPEAKER Patricia M. VANHOOK East Tennessee State University, USA
	07:50 08:00	12:50 13:00	13:50 14:00	15:50 16:00	20:50 21:00	23:50 00:00	break	
LECTURE	New York 08:00 08:45	London 13:00 13:45	Milano 14:00 14:45	Istanbul 16:00 16:45	Singapore 21:00 21:45	Sydney 00:00 00:45	CHAIRS: Patricia M. VANHOOK, Zuhul BAHAR What Nursing Research Changed Through The World	KEYNOTE SPEAKER Patricia DAVIDSON Dean of Johns Hopkins University, School of Nursing, USA
ORAL DISCUSSION	New York 08:55 11:00	London 13:55 16:00	Milano 14:55 17:00	Istanbul 16:55 19:00	Singapore 21:55 00:00	Sydney 00:55 03:00	CHAIRS: Meryem ERCEYLAN, Merve GEYLANI ORAL PRESENTATION	

# 10TH DECEMBER 2020, THURSDAY

10 DECEMBER 2020, Thursday

10 DECEMBER 2020, Thursday										
LECTURE	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Gül AKDOĞAN GÜNER, Cennet CİRİŞ YILDIZ	SPEAKER		
	01:00 01:45	06:00 06:45	07:00 07:45	09:00 09:45	14:00 14:45	17:00 17:45	Future of The Doctorate	Robert HARRIS	<i>Academic Vice President of Doctoral Education - Karolinska Institutet, Aula Media, Sweden</i>	
	01:45 01:55	06:45 06:55	07:45 07:55	09:45 09:55	14:45 14:55	17:45 17:55	break			
LECTURE	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Liz HALCOMB, Ayla BAYIK	SPEAKER		
	01:55 02:40	06:55 07:40	07:55 08:40	09:55 10:40	14:55 15:40	17:55 18:40	ORPHEUS recommendations for doctoral training – a Turkish perspective	Michael MULVANY	<i>Aarhus University, Denmark</i>	
	02:40 02:50	07:40 07:50	08:40 08:50	10:40 10:50	15:40 15:50	18:40 18:50	break			
LECTURE	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Ritin FERNANDEZ, Ayfer AYDIN	SPEAKER		
	02:50 03:35	07:50 08:35	08:50 09:35	10:50 11:35	15:50 16:35	18:50 19:35	Supervision in Doctoral Education	Gül AKDOĞAN GÜNER	<i>Izmir University of Economics, Turkey</i>	
	03:35 03:45	08:35 08:45	09:35 09:45	11:35 11:45	16:35 16:45	19:35 19:45	break			
LECTURE	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Michael MULVANY, Sebahat GÖZÜM	SPEAKER		
	03:45 04:30	08:45 09:30	09:45 10:30	11:45 12:30	16:45 17:30	19:45 20:30	Ethics Education in Research	Hakan ÖRER	<i>Koç University, Turkey</i>	
	04:30 04:40	09:30 09:40	10:30 10:40	12:30 12:40	17:30 17:40	20:30 20:40	break			
ORAL PRESENTATION	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Ayfer Aydın, Bülent DEMİR	SPEAKER		
	04:40 05:25	09:40 10:25	10:40 11:25	12:40 13:25	17:40 18:25	20:40 21:25	Mixed Methods Research	Liz HALCOMB	<i>University of Wollongong, Australia</i>	
	05:25 05:35	10:25 10:35	11:25 11:35	13:25 13:35	18:25 18:35	21:25 21:35	break			
ORAL PRESENTATION	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Selda SEÇGİNLİ, Güzin ÜNLÜ	SPEAKER		
	05:35 08:35	10:35 13:35	11:35 14:35	13:35 16:35	18:35 21:35	21:35 00:35	ORAL PRESENTATION			
	08:35 08:45	13:35 13:45	14:35 14:45	16:35 16:45	21:35 21:45	00:35 00:45	break			
POSTER DISCUSSION	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Ayla BAYIK, Cantürk ÇAPIK	SPEAKER		
	08:45 09:45	13:45 14:45	14:45 15:45	16:45 17:45	21:45 22:45	00:45 01:45	POSTER DISCUSSION			

# 11TH DECEMBER 2020, FRIDAY

11 DECEMBER 2020, Friday

11 DECEMBER 2020, Friday									
LECTURE	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Mahmut BAYIK, Seçil AKSAYAN		SPEAKER
	01:00 01:45	06:00 06:45	07:00 07:45	09:00 09:45	14:00 14:45	17:00 17:45	Why Sould I Write Study Protocol		Sebahat GÖZÜM <i>Akdeniz University, Turkey</i>
	01:45 01:55	06:45 06:55	07:45 07:55	09:45 09:55	14:45 14:55	17:45 17:55	break		
LECTURE	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Zuhal BAHAR		SPEAKER
	01:55 02:55	06:55 07:55	07:55 08:55	09:55 10:55	14:55 15:55	17:55 18:55	Beauty		Adnan MENDERES
	02:55 03:05	07:55 08:05	08:55 09:05	10:55 11:05	15:55 16:05	18:55 19:05	break		
LECTURE	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Cennet ÇIRIŞ YILDIZ, Selda SEÇGİNLI		SPEAKER
	03:05 03:50	08:05 08:50	09:05 09:50	11:05 11:50	16:05 16:50	19:05 19:50	Methodologies For Research Practice at The Nursing Research Practice On-line		Carol COSTLEY <i>Middlesex University London, UK</i>
	03:50 03:55	08:50 08:55	09:50 09:55	11:50 11:55	16:50 16:55	19:50 19:55	break		
ABSTRACTS SESSION	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Selda SEÇGİNLI, Güzin ÜNLÜ		
	03:55 04:50	08:55 09:50	09:55 10:50	11:55 12:50	16:55 17:50	19:55 20:50	ABSTRACTS PRESENTATION		
	04:50 04:55	09:50 09:55	10:50 10:55	12:50 12:55	17:50 17:55	20:50 20:55	break		
LECTURE	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIRS: Michael MULVANY, Ayşe BEŞER		SPEAKER
	04:55 05:40	09:55 10:40	10:55 11:40	12:55 13:40	17:55 18:40	20:55 21:40	Trends and Priorities in Research Education in Nursing		Selda SEÇGİNLI <i>Istanbul University-Cerrahpaşa, Turkey</i>
	05:40 05:50	10:40 10:50	11:40 11:50	13:40 13:50	18:40 18:50	21:40 21:50	break		
Cultural Session	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIR: Dilek TUNALI		
	05:50 07:50	10:50 12:50	11:50 13:50	13:50 15:50	18:50 20:50	21:50 23:50	"İftarlık Gazoz" Scenarist: Yüksel Aksu		
Cultural Session	New York	London	Milano	Istanbul	Singapore	Sydney	CHAIR: Dilek TUNALI		SPEAKER
	07:50 08:35	12:50 13:35	13:50 14:35	15:50 16:35	20:50 21:35	23:50 00:35	Film Criticism		Yüksel AKSU
Closing & Award Ceremony	New York	London	Milano	Istanbul	Singapore	Sydney			SPEAKER
	08:35 09:20	13:35 14:20	14:35 15:20	16:35 17:20	21:35 22:20	00:35 01:10	Award Ceremony & Closing Speeches & Step by Step Istanbul		Necmettin ATSÜ <i>President of Istanbul Kent University, Turkey</i> Zuhal BAHAR <i>Istanbul Kent University, Turkey</i> Ritini FERNANDEZ <i>University of Wollongong, Australia</i> Patricia DAVIDSON <i>Dean of Johns Hopkins University, School of Nursing, USA</i>



## **SUMMARY SPEECHES**

### **THE FUTURE OF THE DOCTORATE**

**Robert A. HARRIS**

Karolinska Institutet/ORPHEUS. Sweden

The Doctoral degree is over 200 years old. Since its initiation by Humboldt in Germany, doctoral training has spread all over the World. During the last 20 years sequential technical revolutions in research science have provided early stage researchers with unprecedented potential to explore the wonders of biomedicine and to expand the boundaries of scientific knowledge. However, the increasing demands for scientific innovation, publication excellence and global competition, together with the increasing cases of scientific fraud and worsening economic prospects for safe career development, provide institutions with several new challenges. Global mobility facilitates international recruitment of doctoral students, but inherently necessitates knowledge of cultural traditions in order to ensure efficient integration into working environments. The importance of supervisor training and having an efficient means of monitoring the progression of doctoral students are fundamental quality assurance processes typical of modern universities. A modern principal investigator and doctoral student supervisor is expected not only to be an excellent researcher, to be updated in the most recent science technologies, but also to have knowledge of economic issues, politics, institutional policies and personal well-being, putting increasing pressure on time available. A multitude of new issues, such as the current focus on sustainable development goals, requires their constant professional development.

Historical, current and future perspectives and challenges of Doctoral training will be reflected on, including the importance of both institutional and individual professional responsibility, as well as exploring the potential for collaboration between international universities. Recommendations of how institutions can keep the Doctoral degree relevant in an ever-changing scientific and social landscape will be presented.

## **STRATEGY DEVELOPMENT FOR NURSING RESEARCH**

**Prof. Zuhar Bahar**

Istanbul Kent University, Faculty of Health Sciences, Nursing Department

Research is the most fundamental tool of scientific development. Research in the nursing profession increases theoretical knowledge and creates a strong scientific base for nursing practice.

Development of nursing research in Europe can be considered in four stages; 1. Pioneering alone, 2. Colective Period: In this context, the European Nurse Researchers Working Group (WENR) was established) 3. Advances in Education and Publication of Research (A PhD Program in Swedan in 1970, MA programs in Finland in 1979, Increased number of articles, books and journals), 4. Strategy development (Proposal made by Council of the European Union at the meeting). The aim of council is to support Improve nursing research in Europe, Increase practice based nursing research and nursing research. Also, The vision “to create a change” was adopted and emphasis was placed on the necessity to develop down-to-earth strategies. The strategy model proposed to improve nursing research is as follows (Council of Europe 1996);

- Improvement of organization and structure,
- Integration of research and practice,
- Provision of educational opportunities,
- Increasing resources and budget,
- Cooperation between the countries.

Using the Delphi method, nurses in Germany, Spain and Ireland determined their priorities in nursing research. In Spain, Fondo de Investigacion Sanitaria (FIS), afiliating with Carlos III Health Institute, supports nursing research and at the salamanca meeting (1999) discussion of to what extent proposals made in 1996 are taken into consideration in various countries and in what countries these proposals spread. And also Finland, Denmark, England and Spain are the countries which have developed most rapidly and local, regional and national organizations have been made.

To develop national strategies:

1. Training activities organized (30 meetings on qualitative and quantitative research methods)
2. Researchers were consulted (by universities)
3. Research projects supported (FIS funded 602 research between 1989 and 2000)
4. National nursing conferences are held annually to disseminate research findings.
5. International events held (meeting in Salamanca in 1999, participation of 14 European countries).

At the same time conceptual models have been used, cost-benefit research has started and problems with resources, funds and language have been detected.

In England, evidence based protocols have started. The only focus of attention is to develop evidence based practices and to spread them. Training of clinical nurses on practice-oriented research was carried out in 1990. In 1991, the National Research Strategy and National

Health Service were established (NHS). Health Department in 1993 has published “Strategy for Research in Nursing, Midwifery and Health Visiting”. Some concepts have also started to appear in national documents. In 1996, the concept of "National Research Strategy" was used in the report of the Expert Committee, the term evidence-based medicine in the British Journal of Midwifery, and in 1998 the concept of evidence-based nursing was used.

The amount of support devoted to research in the development of nursing research should also be avoided, and research funding has also increased in Europe (Portugal from € 50 to € 963, Scotland from € 1.8 to € 100, Holland from € 0.5 to € 17, Germany from € 0.5 to € 32, Ireland from € 1,4 to € 101)

The European Nursing Research Foundation (ENRF) was created in 2016 within the European Federation of Nursing Associations (EFN), as an extension of its activity for the promotion of nursing research. The mission of the ENRF is a) To promote and encourage nursing research as a factor for professional excellence to benefit citizens' health in the EU and in Europe; b) To use nursing research to influence EU policies; and c) To promote evidence-based decisionmaking.

The ENRF's strategic goals are:

- a) Promoting the quality of nursing research.
- b) Promoting education and training programmes that can be developed in the member states as a result of research projects.
- c) Obtaining funds and financial aid for research projects, human resources, and infrastructures.
- d) Establishing partnerships with Universities, institutions, and public or private organisations.
- e) Disseminating science, transferring the results of research projects to society.
- f) Collaborating with national and international research centres providing training opportunities.
- g) Guaranteeing the principle of lawfulness, as well as the principles of an ethical, professional conduct in research and knowledge management.

The current health research priorities in the European Union, four areas of scientific interest are defined:

*a) Positive environments for professional nursing practice:* In order to contribute to positive practice environments for nursing professionals in Europe, the ENRF will, as a priority, support and seek funding to develop and implement projects through the following actions:

- Establishing the relationship between nursing staffing and healthcare quality and efficiency levels;
- Developing innovative and sustainable nursing strategies to promote nurses' safety in the workplace and biosafety;

Implementing and assessing the impact of advanced and new nursing roles on the European social and healthcare environment.

*b) Self-care: improvement of healthcare outcomes in chronic processes:* In order to contribute to the challenge of chronic diseases in Europe, the ENRF will, as a priority, support and seek funding to develop and implement projects in the following areas:

- Preventing and monitoring disease symptoms in various populations and environments, on a lifelong basis;
- Developing, implementing, and assessing innovative interventions (including technologies and devices) to contribute to the understanding, monitoring, health promotion, and self-care of people with long term conditions and their families;
- Examining the effects of nursing-led interventions to promote health and wellbeing;
- Supporting nursing care coordination to improve care
- Designing strategies to optimise and improve the transition of people with long term conditions to integrated care, coordinated between care levels.

*c) Education and training of nurses in Europe:* The ENRF seeks to improve educational and research capabilities through the following actions:

- Identifying and learning about the various experiences with credit systems for professional nursing practice;
- Learning about the regulations and various nursing categories across EU countries;
- Learning about the PhD programmes in Nursing Sciences implemented across EU countries.

*d) Innovation to improve nursing clinical practice;* The ENRF will prioritise the following research actions:

- Designing and assessing technological nursing interventions in collaboration with other professionals (such as engineers and designers) to promote the health and wellbeing of the European population
- Identifying the key factors in innovative interventions for clinical nursing decision-making

In the America, The National Center for Nursing Research (NCNR) was established in 1985. The American Association of Nurses (ANA) achieved great success with the establishment of this center. The National Center for Nursing Research was established within the "National Institute of Health" and provided visibility for nursing research at the national level. The National Center for Nursing Research has adopted 4 strategies for the nursing research program. These are; Integration of biology and behavioral sciences, regulations and use of new technologies, development of new tools and methods, education of new nurse scientists.

At The Council for the Advancement of Nursing Science (CANS) Annual Scientific Conference in October 2016 (Round III), the Science Committee met and through an iterative voting process, narrowed a list of 18 topics to four thematic areas:

1. Precision science (includes omics, physiological, psychological, and environmental factors and also phenotypes, chronic disease, symptoms, self management, and palliative care).
2. Big data and data analytics (includes informatics, technology, and topics such as data elements, data security, and bioethics).
3. Health determinants (includes health disparities, chronicity, workplace violence, military health, veterans, health promotion, and cognition).
4. Global health (includes nursing care in underresourced countries, emerging infectious diseases, and the threat of epidemics).

In Canada, the responsibilities of governments in research are determined by the Canada Nurses Association as development of technologies, professional development of health staff (pay rise, planning, education, employment, funding nursing research / increasing funds for nursing research) and elimination of inequalities. Canadian Association of Schools of Nursing is the national voice for nursing education, research, and scholarship and represents baccalaureate and graduate nursing programs in Canada. The CASN mission is to lead nursing education and scholarship in the interest of healthier Canadians. This mission, and CASN's goal to advance nursing knowledge, provided the impetus for this initiative. The delineation of research priorities for nursing aligns with CASN's strategic priority to "foster the development of research and scholarship in nursing education to support disciplinary knowledge, nursing's contribution to interprofessional knowledge, and innovative, quality health care. The seven research priorities fall into the three domains: Nursing Practice, Nursing and the Health Care System, and Nursing Education. The priorities include the following: 1. Indigenous and other vulnerable and/or equity seeking communities 2. Chronic disease management and care delivery across space and time 3. Home care and primary health care nursing 4. Care of older adults across diverse care contexts 5. Roles, scopes of practice, and value of RNs and/or NPs to health care 6. Nursing care, quality improvement, and patient safety 7. Nursing education outcomes.

In Australia, Australian Nursing Federation Policies are the practice is evidence-based, ensuring that all nurses have access to research, complying with ethical principles, and focusing research on developing nursing knowledge and practices. To promote nursing researches, the Australian Nursing Federation developed the following strategies:

Strategy 1: To improve available workforce (To describe available workforce, to attend to available workforce and to conduct adaptation programs to support nurses at all levels)

Strategy 2: To increase nursing researches (To educate young nurse researchers and to spread the use of research findings)

Strategy 3: High quality education (education of assistant nurses and nurses working in clinics, unstrict education programs-life-long education, national education standards)

Sydney Local Health District Nursing & Midwifery Service strategic priorities (2017–2020) areas are:

- Clinical Practice (Delivering the highest quality care in partnership with our patients and their families)
- Workforce (A Well, Resilient, Capable & Sustainable Workforce)
- Information & Communication Technology (Health Information Technology that Supports and Informs Extraordinary Care)
- Research (Research that informs patient care and contributes to new knowledge)

In Turkey, by HEMAR-G Nursing Research Symposium held in 2004. Research strategies in nursing were discussed for the first time in the symposium, and it was proposed to establish a National "Nursing Research Unit" within the Ministry of Health. The establishment of this unit in Turkey, determining nursing research priorities, organization and development of the structure, research and application integration, given the educational opportunities, resources, and increasing the budget, it is important to ensure the development of cooperation between countries. However, the unit could not be established.

As a result, non-governmental organizations should advise governments in the development of nursing research, pressure groups should be formed, the knowledge and experience of other countries should be used, and government policies should be established.

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## **ORPHEUS RECOMMENDATIONS FOR DOCTORAL EDUCATION – A TURKISH PERSPECTIVE**

**Michael MULVANY**

Aarhus University, Department of Biomedicine, Denmark

The modern PhD has its origins in the reforms that William van Humboldt, Director of Education in Prussia, introduced at the University of Berlin some 200 years ago. He recognized that doing research was a professional task requiring professional training. Thus he instituted a doctoral degree at the Faculty of Philosophy, *dr. phil.*, to be given to “*younger candidates who had completed a prescribed course of graduate study under supervision and successfully defended a thesis/dissertation containing original research*”. This remains the basis for the model used throughout the World today. However, there are a number of crucial differences. In the US, entrance to doctoral education requires a bachelor degree but then has a two-year period of advanced learning leading up to a qualifying exam. In contrast, in Europe – in accordance with the Bologna concept – entrance is based on a master’s degree, and the PhD is almost exclusively concerned with a research project. The Turkish PhD programme combines these two approaches in that it requires a master’s degree for entry to PhD, but also includes a two-year period of advanced learning leading to a qualifying exam. The result is that the time from entry to bachelor to completion of PhD is longer in Turkey than in either the US or Europe, but there is less time for research. A number of Turkish institutions have therefore sought to make changes and have been working with ORPHEUS (Organisation for PhD Education in Biomedicine and Health Sciences in the European System) to find ways in which their PhD programmes could be more closely aligned with the Bologna concept and the ORPHEUS recommendations for doctoral education. Changes that have been made include increasing the amount of time available for the research project, increasing the number of paper equivalents to be included in the thesis, increasing the independence of the thesis assessment committee, and introduction of courses in supervision. To facilitate this process, the ORPHEUS labelling procedure has been used. This procedure provides a procedure for involving the relevant stakeholders in discussion of the practical alterations that can be made. At present three Turkish institutions (the health sciences institutes at Dokuz Eylül University, Hacettepe University and Kocaeli University) have received an ORPHEUS label, and several other institutions are in various stages of making an application.

## TRENDS AND PRIORITIES IN RESEARCH EDUCATION IN NURSING

**Assoc. Proff. Selda SEÇGİNLI**

Istanbul University- Cerrahpasa, Florence Nightingale Nursing Faculty, Public Health  
Nursing Department

Nurses are the key to change health outcomes for the community and nursing research is key to increase nursing visibility. Clinical decisions should base on scientific decisions and nursing research provides the evidence for clinical decisions. Nurses make up the single largest segment of the health care work force. In Turkey, nursing is the largest of the healthcare professions, with nearly 200.000 nurses, the majority of whom are practicing in hospital settings. Nurses are clinical researchers/scientists who lead interdisciplinary research teams in generating new knowledge and evidence to guide best clinical practices. Some of the challenges are management of chronic conditions, primary care, prevention and wellness, and the prevention of adverse events, mental health services, school health services, long-term care, and palliative care. Thus, the community and the health system need well-prepared nurses able to meet current and future health care demands. The patient centered care, teamwork and collaboration, quality, evidence-based practice and informatics are competencies for health care professionals according to the Institute of Medicine- IOM.

Nursing education has undergone major reforms and changes over recent decades in Turkey. Several trends such as nursing informatics, simulations in nursing education, advanced educational technology, evidence based practice and educational quality assurance, distance education in nursing effect the nursing education in Turkey and worldwide. So, it is important to promote research culture in academic setting at Institutional, faculty or department/ school and academic/ individual level. For enhancing the science of the discipline and facilitate nursing research (American Association of Colleges of Nursing-AACN) several factors need to be understood separately and in interaction. The AACN defined the goal of research training in nursing at all levels as ‘to strengthen the profession’s contribution to enhancing the health and healthcare of individuals and populations.’ The AACN determined the expectations and competencies of graduates regarding research in baccalaureate, master, practice-focused doctoral, research-focused doctoral and postdoctoral programs.

The National Institute of Nursing Research Strategic Plan (2016-2020) identified four foci as Symptom Science, Wellness, Self-management and end-of-Life and Palliative Care. Two other areas linked to advancing nursing science are promoting innovation and 21<sup>st</sup> Century Nurse Scientists. Thus, nurses must commit to changing the view of nursing's vital role in healthcare. One way is through global nursing research.

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## ORAL PRESENTATION

Publication No : S-001

### RELATIONSHIP BETWEEN OBESITY AND FREQUENCY OF JUNK FOOD CONSUMPTION IN 7-8 AGED CHILDREN IN A PROVINCE

Yasemin GÜVEN<sup>1</sup>, Emine ÖNCÜ<sup>1</sup>  
<sup>1</sup>Mersin University, Faculty of Nursing

#### **Goal:**

Children's junk food consumption which has high energy and low nutritional value is a common problem. This study was aimed to determine the prevalence of junk food consumption in 6-8 aged children in a province, to investigate relationship between consumption junk food and health one, to evaluate body mass index percentile properties according to energy intake form junk food.

#### **Methods:**

This study was carried out 524 children in six public and seven private primary schools. Data were collected by Child-Family Information Form, Parental Form of Childrens Healthy Food and Junk Food Consumption Frequency, Children's Food and Drink Consumption 24-Hour Recall Method. Chi-square, Mann-Whitney U, Kruskal-Wallis, Pearson Correlation and Binary Logistic Regression analysis and descriptive statistics were used for data analyze.  $p \leq 0.05$  was considered significant.

#### **Findings:**

It was determined that children were 53.1% female, 34.7% slightly fat or obese, 63.5% their mothers were housewives and 40.9% of mothers lack of primary school education. The average daily calorie of children was 356.25 kcal / day (196.21-646.37). According to socioeconomic level, total energy median taken from junk food did not differentiate ( $p > 0,05$ ), while there was difference between daily energy median of salty foods and fast food ( $p < 0,05$ ). While the consumption levels of children from "fruits", "milk and dairy products", "meat, fish, egg, legumes and oilseed foods" were related to consumption of junk food ( $p < 0,05$ ), it was not related to "vegetables" and "bread-cereals" group ( $p > 0,05$ ).

#### **Results:**

The most energy was obtained from sugar, salty foods, fast food and sugary drinks respectively. The possibility of children receiving high energy from junk food were enhanced daily allowance 2,9 times (OR = 2,969,  $p < 0,001$ ), school access 1,7 times (OR = 1,734,  $p = 0,008$ ), sugared / salted junk food in the house 2.2 times (OR = 2,281),  $p < 0,008$ , the presence of fast food at home 3.9 times (OR = 3,900,  $p = 0,009$ ), consumption of milk and dairy products above the recommended level 1.6 times (OR = 1.601,  $p = 0,037$ ). According to this study results, ensuring that children with low socioeconomic status are fed from school cafeterias, undertaking initiatives to increase the food literacy of children and their families, disseminating school nursing in order to closely monitor the development of healthy eating habits.

**Keywords :** Junk food consumption, obesity, school-age child

**Publication No : S-002**

## **EVALUATION THE EFFECT OF SOCIAL SUPPORT ON SELF-CARE BEHAVIOURS AND QUALITY OF LIFE IN PATIENTS WITH HEART FAILURE**

Sule MUMCU<sup>1</sup>, Fatma İlknur ÇINAR<sup>2</sup>

<sup>1</sup>Bingöl University, Faculty of Health Sciences, <sup>2</sup>University of Health Sciences, Gülhane Faculty of Nursing

### **Goal:**

The aim of this study was to evaluation the effects of social support on self-care behaviours and quality of life in heart failure patients.

### **Methods:**

The sample of this descriptive study consists of 133 patients who applied to the cardiology inpatient clinic or outpatient clinic of a university hospital between April and December 2019, met the participation criteria of the study. Self-report scales, which are Descriptive and Disease-Related Characteristics, Multidimensional Scale of Perceived Social Support, European Heart Failure Self-Care Behaviors Scale-12, Minnesota Living with Heart Failure Scale were applied to collect data. Statistically, Descriptive statistics, Shapiro-Wilk normality test, Mann Whitney U test, Kruskal-Wallis test and Spearmann correlation analysis were used to evaluate the data. Statistical significance level was accepted as  $p < 0.05$  value.

### **Findings:**

It was found that the social support perceived by the participants was above the medium level and they mostly received social support from a special person, then friends and family. The perceived social support was found significantly higher in patients with high income levels and who have easy access to the treatment center. Also, perceived social support from family was found significantly higher in male patients, patients who have easy access to the treatment center and patients who have quit smoking. The level of perceived social support from friends was found to be high in the patients who have easy access to the treatment center. The level of social support perceived by the special person was found higher for the patients who have a person in their care. The patients' quality of life was found to be below the moderate level and their self-care behaviors were appropriate. In the current study, there was no significant relationship between the participants' perceived social support scores and their self-care behaviors and quality of life.

### **Results:**

As a result, it is important to determine which social support mechanisms that patients have and to provide them with special education about the patient and their illnesses. It is suggested to create interventions that increase social support resources, improve self-care skills and improve quality of life for patients with HF.

**Keywords :** Heart failure, self-care and quality of life, social support

## **ATTITUDES OF CANCER PATIENTS AND THEIR RELATIVES TOWARDS CANCER STIGMA AND AFFECTING FACTORS**

Tuğba MENEKLİ<sup>1</sup>, Ferhan DOĞAN<sup>1</sup>

<sup>1</sup>İnönü University, Faculty of Nursing, Internal Medicine Nursing

### **Goal:**

Cancer is seen as a social problem due to the social and economic burden it brings to society. This situation increases the negative perceptions and attitudes about cancer. The most important negative attitude and behavior towards cancer patients is stigmatization. The study was conducted to examine the attitudes of cancer patients and their relatives towards stigma and the factors affecting it.

### **Methods:**

The sample of the descriptive study was composed of inpatients and outpatients (n: 250) and their relatives (n: 250) who were treated in the oncology clinic of Malatya Turgut Özal Medical center between January-June 2019. To all participants; The Sociodemographic Data Form, the Attitudes towards Cancer Questionnaire (Cancer Stigma)-patient version (ATCQ), and the patient relatives, the Attitudes towards Cancer Questionnaire (Cancer Stigma)-community version (ATCQ) were applied. The research was conducted in accordance with the Helsinki Declaration principles from its design to the reporting stage. The data were evaluated using the SPSS 25 program, with complementary statistics, ANOVA analysis of variance, t test and Pearson's correlation test.

### **Findings:**

The average age of the individuals participating in the study is  $40.15 \pm 11.09$ , 51.3% of them are women. It has been determined that patients (ATCQ) indicate a negative attitude of 73% in the impossibility of recovery subscale, 45% in the labeling of cancer patients subscale, and approximately 49% in total. In the relatives of the patients, only 23% of negative attitudes were found in the cancer diagnosis / dissemination subscale, while there was no negative attitude in the other subscales and about 88% in total. A statistically significant difference was found between the age, gender, educational status, disease diagnosis, duration and stage of the patients, and the relatives of the patients: gender, being a first-degree relative of the patient, having another cancer in the family, having a chronic disease, and the total score average of the ATCQ ( $p < 0.05$ ).

### **Results:**

It has been determined that cancer patients and their relatives have negative attitudes towards cancer. Considering the findings obtained, attitudes towards cancer should be measured and education and awareness programs can be developed in this context. Thanks to these training programs, it is thought that by accepting the problems and limitations brought by the disease, emphasizing that the disease is a part of life and that it can happen to everyone will reduce the stigma that cancer patients and their relatives will experience during the disease process.

**Keywords :** Cancer patient, patient relative, stigma

**Publication No : S-004**

## **THE EFFECT ON CARE BEHAVIORS OF THE EMPATHY LEVELS AMONG STUDENTS ATTENDING COURSES IN SURGICAL NURSING**

Aylin AYDIN SAYILAN<sup>1</sup>, İlknur YÜCEL<sup>2</sup>

<sup>1</sup>Kırklareli University, School of Health Science, Department of Nursing, <sup>2</sup>İstanbul University Medicine Faculty, Gastroenterology Unit. / Kırklareli University Institute of Health Sciences

### **Goal:**

This descriptive study was performed to determine the effect on caring behaviors of empathy levels among students attending courses in surgical nursing.

### **Methods:**

The study population consisted of nursing department students in a public university. No sampling was performed, and the study was completed with 94 students consenting to participate. Data were collected using a personal information form, the Toronto Empathy Questionnaire, and the Caring Behaviors Inventory-24. Number, percentage and mean values and the Mann Whitney-U test and Spearman correlation analysis were used during data evaluation.

### **Findings:**

The nursing students' mean Caring Behaviors Inventory-24 score was  $5.17 \pm 0.50$  (min. 3.71, max. 6), and their mean Toronto Empathy Questionnaire score was  $38.63 \pm 8.14$  (min. 28, max. 62). A statistically significant negative correlation was determined between Toronto Empathy Questionnaire and Caring Behaviors Inventory and Assurance subscale scores.

### **Results:**

Nursing students exhibited positive caring behaviors, but possessed only moderate empathy levels. We therefore recommend that measured aimed at improving empathy be included in the curriculum.

**Keywords :** Care behaviors, empathy, nursing students

**Publication No : S-005**

**EFFECT OF VEIN IMAGING DEVICE AND FIST CLENCHING ON DETERMINATION OF APPROPRIATE VEIN AND SUCCESSFUL CATHETER PLACEMENT TIME IN PATIENTS RECEIVING CHEMOTHERAPY: A RANDOMIZED CONTROLLED TRIAL**

Handan EREN<sup>1</sup>, Nurcan CALIŞKAN<sup>2</sup>

<sup>1</sup>Yalova University, Health Sciences Faculty, <sup>2</sup>Gazi University, Health Sciences Faculty

**Goal:**

As the vein structure gets damaged in patients receiving chemotherapy treatment, placement of peripheral intravenous catheter becomes difficult. In order to improve vein visibility and to increase the success of peripheral intravenous catheter placement, vein imaging device and fist-clenching can be used. This study aimed to determine the effect of vein imaging device and fist-clenching on determination of appropriate vein and successful catheter placement time in patients receiving chemotherapy.

**Methods:**

This randomised controlled study included 135 patients who are receiving chemotherapy were randomly assigned to either vascular imaging device group (n:45), fist-clenching group (n:45), or control groups (n:45). In the vascular imaging group, the vascular imaging device was used to determine the appropriate vein; in the fist-clenching group, the patients were asked to open and close their palms to determine the appropriate vein; and in the control group, no extra interventions except for the process steps were applied and one single nurse carried out the peripheral intravenous catheter insertion.

**Findings:**

It was determined that the duration of determining the appropriate vein and the duration of successful peripheral intravenous catheter insertion were shorter in the device group at a significant level ( $p < 0.05$ ). The duration of determining appropriate vein and duration of successfully placing catheter in fist-clenching group were lower than control group. However, this was not at a statistically significant level ( $p > 0.05$ ). The satisfaction levels of the patients and the nurse were higher in the device group at a significant level ( $p < 0.05$ ).

**Results:**

The vascular imaging device was effective in determining the proper vein and in successful peripheral intravenous catheter insertion time in patients who were receiving chemotherapy. For this reason, it is recommended that the vascular imaging device is used more commonly in clinics. Besides, results of the study can be the practical evidence basis by which to develop a standard of procedure or guideline for clinical practice.

**Keywords :** Fist clenching, successful catheter placement, vein imaging device

**Publication No : S-006**

## **BARRIERS TO ANTENATAL PSYCHOSOCIAL ASSESSMENT AND DEPRESSION SCREENING IN PRIVATE HOSPITAL SETTINGS**

Tanya CONNELL<sup>1</sup>

<sup>1</sup>Unisa

### **Goal:**

The evidence of benefit for antenatal psychosocial assessment and depression screening has been sufficient to lead the implementation of screening in public hospitals in all states of Australia. Details of the implementation of perinatal screening in private obstetric settings is less well known. As any successful implementation relies on the identification of local barriers, we aimed to determine what perceived or actual barriers may exist for the implementation of evidence-based perinatal screening interventions in private obstetric care, and specifically within small private hospitals.

### **Methods:**

The integrative literature review method offers a structured systematic approach to organise, synthesise and critique research from a range of sources. This method was used to determine what barriers \_have been identified in implementing psychosocial assessment and depression screening with women receiving obstetric care in private hospital settings.

### **Findings:**

The integrative review findings suggest that barriers to implementing psychosocial screening in the private sector are similar to those experienced in the public sector but may also be influenced by the corporate focus of private services. Barriers were identified among health professionals, within the personal and psychosocial context of women and their families, and at provider or system level.

### **Results:**

Once identified, barriers can be systematically addressed to enhance the success of implementing psychosocial and depression screening in the private sector. Screening is likely to be influenced by the business models and operating systems of private service providers. Health professionals working within this environment need more support to conduct perinatal assessment within this context.

**Keywords :** Private obstetrics, psychosocial screening

**PERINATAL PSYCHOSOCIAL ASSESSMENT-WHAT ARE THE VIEWS OF HEALTH PROFESSIONALS WORKING IN THE PRIVATE OBSTETRIC SECTOR?**

Tanya CONNELL<sup>1</sup>

<sup>1</sup>Unisa

**Goal:**

Women are not universally or routinely screened ante-or postnatally for psychosocial risk factors, depression and anxiety in the private sector in Australia. There are limited studies that explore health professionals' views on screening or perceived barriers to the screening process. The aim of this study was to discuss the health professionals' views of psychosocial screening and assessment who work in the private obstetric sector.

**Methods:**

Semi-structured face-to-face interviews were completed with 11 midwives, 1 social worker and 2 obstetricians. Three hospital sites were chosen, of which only one currently screens women for psychosocial risk factors. Thematic analysis was applied to interview transcripts. Three researchers then discussed reoccurring themes and a consensus in themes and subthemes was reached.

**Findings:**

Only one hospital was screening women and had midwives trained in psychosocial assessment including depression screening. There were mixed views on the process and barriers to screening were identified, e.g. lack of support systems, cultural barriers, inaccurate answers, power barriers with obstetricians, husband interference, fear and powerlessness. Benefits were recognised: early identification of difficulties, standardisation and patient-focused care. Concerns were, however, also evident: suicide ideation, intrusiveness of questions, whether women responded honestly, not wanting to screen all women.

**Results:**

There was an identified concern by midwives that obstetricians did not take seriously any concerns highlighted by the midwife about women's psychosocial problems. There was a sense of a lack of 'ownership' of the women, therefore a feeling of helplessness in addressing their needs. Suggestions were made: appropriate education and training of midwives, flagging high risk women, more in-house resources and external resources/community links and employing a central midwife with interest and expertise in psychosocial screening.

**Keywords :** Views, psychosocial assessment, private sector, health professionals



**Publication No : S-008**

## **THE EFFECT OF MUSIC THERAPY AND SOUND ISOLATION ON COMFORT IN PATIENTS WITH MECHANICAL VENTILATION SUPPORT**

Sinem ÇALIŞKAN<sup>2</sup>, Esra AKIN PALANDÖKEN<sup>1</sup>, Mehmet UYAR<sup>4</sup>

<sup>1</sup>İzmir Katip Çelebi University Faculty of Health Sciences, <sup>2</sup>İzmir Katip Çelebi University Institute of Health Sciences, <sup>4</sup>Ege University Department of Anesthesiology and Reanimation

### **Goal:**

This study was carried out experimentally to examine the effect of music therapy and sound isolation on comfort in patients who are hospitalized in the Anesthesiology and Reanimation Intensive Care Unit and applied with the support of mechanical ventilation.

### **Methods:**

The research was carried out in the Anesthesiology and Reanimation Intensive Care Unit between November 2019 - January 2020. The sample of the study consisted of 24 patients who met the research criteria, and each patient had his own experiment and control. 3 different attempts were applied to the patients, including classical western music, classical Turkish music of nihavent maqam, and sound isolation. Hemodynamic values, Critical-Care Pain Observation Tool(CPOT) scores, and the American Association of Critical-Care Nurses Sedation Assessment Scale (AACNSAS) scores were recorded at 0, 30 and 60 minutes.

### **Findings:**

The average age of the patients participating in the research is  $64.88 \pm 14.05$ . The mean duration of hospitalization in patients in intensive care unit is  $18.87 \pm 20.57$ , and the average duration of stay in mechanical ventilation support is  $18.79 \pm 20.64$  days. Patients' systolic, diastolic blood pressure, pulse rate, respiratory rate, CPOT score values were influenced by Classical Western Music, Classical Turkish Music of Nihavent maqam and sound isolation practices and there was a significant difference in these hemodynamic values, and this difference was systolic, diastolic blood pressure, pulse rate, respiratory rate and CPOT scores were found to in the direction of decreasing. It was determined that the patients' oxygen saturation values were affected by the Classical Turkish Music application and there was a significant difference between these values and this difference was in the direction of increasing the oxygen saturation value.

### **Results:**

As a result of this study; it was determined that music therapy and sound isolation applied to patients with mechanical ventilation support positively affect the hemodynamic parameters of the patients and decrease the severity of pain perceived by the patients and the need for sedation. In this context, the most important finding of our study is that in patients with mechanical ventilation support, an attempt in which their voices about the intensive care environment are purified increases the level of comfort in patients. Therefore, it is an important and critical result of our other research that music therapy also acts as an attempt to clear the sound-related stimulant.

**Keywords :** Comfort, music therapy, sound isolation

**Publication No : S-009**

## **INVESTIGATION OF EARLY PERIOD COGNITIVE FUNCTIONALITY OF CANCER PATIENTS WHO COMPLETED THEIR TREATMENT**

Özlem TEKE<sup>1</sup>, Elçin BABAOĞLU<sup>2</sup>

<sup>1</sup>Göztepe Prof. Dr. Süleyman Yalçın City Hospital, <sup>2</sup>Üsküdar University

### **Goal:**

This research conducted as definitive the early period cognitive functionality of patients who completed their cancer treatment.

### **Methods:**

Research was conducted between the dates of September 2018 - February 2019 in a public hospital on oncology department. Purposeful sampling method was used and research was made with 100 patients in total. "Identifier Characteristics for Individuals" which is developed by the researchers and consists of total 14 articles and "Montreal Cognitive Assessment Scale (MoCA)" which assesses the cognitive functions are applied to the sample group. In the analysis of MoCA Scale was used One-Way Anova test, Independent Samples t test, Anova analysis, Mann-Whitney U test and Kruskal-Wallis tests.

### **Findings:**

The sample group consisted of women (81%), married (88%), primary school graduates (65%) and unemployed (69%) patients. It was found that half of the patients received breast cancer treatment (50%), 41% received chemotherapy, radiotherapy and surgical treatment, 68% received 6-8 cures, and 41% had chronic disease. As a result of the study, the average of the general scores obtained from the scale was  $18.73 \pm 3.7$ , and 70% of the patients had low cognitive functioning. When the sub-dimensions are examined; patients received lower than average points which could be received especially in language ( $1,31 \pm 0,971$ ) and delayed recall ( $0,9 \pm 1,168$ ) dimensions. In half of the eight domains, patients scored 0 in visual / spatial, language, abstract thinking and delayed recall.

### **Results:**

According to the study, risk groups that may affect cognitive functioning after cancer treatment; female gender, being married, being older, having low education and not being in active job. It was concluded that there was no statistically significant difference between the chronic disease condition, the type of cancer or treatment regimens in terms of cognitive functioning ( $p > 0.05$ ). Therefore, it is recommended to evaluate the cognitive functioning of patients who have completed cancer treatment, especially in risky groups.

**Keywords :** Cancer, cognition, cognitive functioning

## **INTRODUCTION**

Cancer; it has become an important health problem today in terms of its incidence. Turkey Statistical Institute (TUIK), in 2018 examined the causes of death shows that when cancer takes place immediately after the second row of the circulatory system diseases. According to Tuncer (2009), it is predicted that death rate due to cancer will increase and rank first in the world until

2030. In addition, it has been observed that the life expectancy of cancer survivors has been prolonged due to reasons such as the increase in early diagnosis and treatment methods and easier access to health services. At this stage, while continuing or after completing cancer treatment, the control of side effects caused by cancer or cancer treatments has become important in terms of quality of life (Babaoğlu & Yıldırım, 2018).

Psychosocial needs are as important as physical needs affecting the quality of life in cancer patients (Lange et al., 2019; Taillibert et al., 2007). These requirements may continue in the early period after treatment. Psychosocial needs that continue after cancer treatment are as follows; changes in cognitive functions, body image changes, depression, fear of relapse, post-traumatic stress disorder, sexual function problems, family and social support problems, and socioeconomic barriers (Stanton, 2012). When the literature information is examined in recent years, it is seen that change in cognitive functions is often a factor in the formation of psychosocial problems. It is stated that the main reason for frequently observed psychological problems such as depression and anxiety is the changing cognitive functionality after cancer treatment (Götze et al., 2020; Laush et al., 2018; Szafryna-Kliwicka & Litwiniuk, 2011).

Chemotherapeutic agents, which are frequently used in cancer treatment, cause changes in cognitive functionality (Ahles et al., 2012; Wefel et al., 2010). These changes may occur during or after cancer treatment process and cause significant problems in their daily lives (Edwards et al., 2018; Fitch et al., 2008; Myers, 2013; Pearre & Bota, 2018). According to the literature, a decrease in cognitive functions has been reported at a rate varying between 17% and 75% of patients treated for breast cancer, and it has been observed that these problems generally persist for six months to twenty years (Ahles et al., 2002; Edwards et al., 2018; Fitch et al., 2008; Hurria et al., 2006; Myers, 2013; Pearre & Bota, 2018). As reported by Ahles et al. (2012), patients also experienced problems in areas such as memory, attention, naming, and performing multitasking, in addition to a general decline in cognitive functions (Ahles et al., 2012). Cognitive functions were evaluated in another study comparing patients receiving standard dose adjuvant chemotherapy (n: 31), patients who completed the treatment two years ago (n: 40), and healthy controls (n: 36). In this study; mild and moderate cognitive functions were found to be low in 15 of 31 patients who were receiving treatment, 20 of 40 patients who completed treatment, and 4 out of 36 patients in the healthy control group. It was observed that memory and language areas were affected especially in the group receiving chemotherapy (Brezden et al., 2000). Reid-Arndt et al. (2009) found significant changes in executive functions and verbal fluency in their study with 46 patients who were treated for breast cancer. In this study, they reported that poor executive function was associated with decreased productivity, community participation and social role functions (Reid-Arndt et al., 2009). Taillibert et al. (2007) reported that this change in cognitive functions affects patients' return to their normal professional, clinical and social lives. In the study conducted by Lange et al. (2019) with 1393 people, it was stated that 75% of the patients had cognitive problems, and 76% of them had problems such as continuing work and sleep disorders. The change in cognitive functions after chemotherapy brought the concept of "chemobrain" to the agenda in the 1980s (Ahles et al., 2012; Hess & Insel, 2007; Kovalchuk & Kolb, 2017; Oxman & Silberfarb, 1980). Chemobrain is a general concept about the side effects of chemotherapy on cognitive functions and has changed over time (Barry et al., 2018; Hurria et al., 2006; Pearre & Bota, 2018). When the literature is examined; it has been observed that some interventions for cognitive functions in the early period after cancer treatment increase cognitive functions and quality of life (Campbell, 2014; Ferguson et al., 2016; Kesler et al., 2013; Milbury et al., 2013). The effects of aerobic exercises on cognitive functions were investigated in an experimental study conducted by Campbell et al. (2014) in patients with breast cancer (n = 19). A six-month aerobic exercise program was applied to the participants before and after the intervention; cognitive functions and quality of

life were evaluated. As a result of the study, statistically significant improvements were found in verbal fluency and motor processing speed in the experimental group compared to the control group. In the experimental study conducted by Ferguson et al. (2010) with patients who have completed early stage breast cancer treatment, the experimental group was subjected to Memory and Attention Adaptation Training (MAAT), twice a week for two months after treatment. As a result of MAAT, improvements were observed in the verbal memory and quality of life of the patients. In the experimental study conducted by Kesler et al. (2013) with 41 patients who received breast cancer treatment; The effect of computer-based cognitive training on executive functions was examined. The training tasks in this training lasting twelve weeks in four sessions per week; Keying games, mental rotation games, memory games, spatial sequence memory games, word completion games, direction planning games and puzzle games. As a result of the evaluation, it was observed that there were significant improvements in cognitive flexibility, verbal fluency, information processing speed, verbal memory and executive functions in the experimental group. In the study of Milbury et al.(2013) with patients who completed breast cancer treatment (n = 41); Tibetan Sound Meditation (TSM) was applied to the experimental group for a period of six weeks, two sessions a week. According to the study, it has been observed that TSM improves memory and information processing speed.

Improving the cognitive functionality of cancer survivors is important in terms of quality of life. Holistic care is important in cancer patients as well as in other patient groups. This is especially necessary to recognize interrelated symptoms and to meet patients' care needs (Yıldırım et al., 2013). Consultation liaison psychiatry (CLP) nursing, which is a sub-branch of psychiatric nursing, has an important place in providing the psychosocial aspect of care. One of the duties of CLP nursing is to determine the behavioral, emotional and cognitive aspects of the physical state and to provide interdisciplinary communication (Ekinci & Okanlı, 2010). This task is included in the Nursing Regulation dated 08.03.2010 and numbered 27515 as "Helps the individual with physical illness and his family to adapt to the disease, to the treatment, to develop and regain adaptive functions." The evaluation of cognitive status in oncology patients is an issue that should not be neglected, as well as the duty, authority and responsibility of CLP nurses. In Turkey, cancer patients who are receiving treatment or has completed treatment was not achieved in a study evaluating the cognitive functioning. This study will determine which cognitive functions generally have difficulties in patients who have completed their treatment and will contribute to the literature on determining some factors affecting this condition.

## **OBJECTIVE**

This study was conducted to evaluate the early cognitive functionality of patients who have completed cancer treatment

## **METHOD**

This study was carried out using descriptive method. The research was conducted in a public hospital. The universe of the study consists of outpatient clinic patients who come to the outpatient chemotherapy service, who have completed cancer treatment over the age of 18, and come to their control in the sixth month. Patients with auditory or visual impairment, using psychotropic medication, having a neurological disease, receiving radiotherapy to the head or neck region, and having metastasis were not included in the sample group, to evaluate cognitive functionality correctly. The sample size could not be calculated due to insufficient hospital records, and a study was conducted with 100 patients using purposeful sampling method. The

research data were collected between September 2018 and February 2019, after obtaining the ethics committee permissions.

### **Data Collection and Measurement Tools**

In the study, the "Identifier Characteristics for Individuals", which was created by the researchers by examining the literature, and the "Montreal Cognitive Assessment Scale (MoCA)" of the Turkish validity and reliability study of Selekler and Cangöz (2009) were used.

" Identifier Characteristics for Individuals " forms consists of 14 items with open and closed-ended questions. The form includes that; demographic characteristics such as age, gender, marital status, educational status and occupation, and general information about disease characteristics and treatment.

The Montreal Cognitive Assessment Scale was developed as a rapid screening test for mild cognitive impairment in 1996 by Dr. Created by Ziad Nasreddine. Turkish validity and reliability study was conducted in 2009 by Kaymak Selekler et al. MoCA is a screening scale developed to measure different stages of cognitive impairment. The cut-off value for the MoCA total score was determined as 21 points, and it was found to have a sensitivity of 81.08 and a specificity of 77.78, a positive predictor value of 45.5 and a negative predictor value of 94.7 (Selekler et al., 2010). MoCA evaluates different cognitive functions. The areas evaluated are: attention and concentration, executive functions, memory, language, visual structuring skills, abstract thinking, calculation, orientation. The application time of MoCA is an average of 10 minutes, and the range of points that can be taken from the test is 0 - 30. The cut-off point of the scale in Turkish society is 21. Those below this score are considered to have low cognitive functionality, and those below 21 are considered normal. The subheadings are as follows: Tracing test, visual structuring skills (cube and clock drawing), naming, memory, attention, alertness, 7 in series, sentence repetition, verbal fluency, abstract thinking, delayed recall and orientation ( Selekler et al., 2010).

### **Data Analysis**

SPSS 17.0 program was used to evaluate the data. In the normality analysis, it was found that the sub-dimensions of the MoCA scale were not normally distributed, and the whole scale was normally distributed. In the analysis of the MoCA scale with independent variables; One-Way Anova test was applied for more than two groups and Independent Samples t test was applied for pairs. In the Anova analysis, Tukey test was applied to homogeneously distributed groups in order to determine from which group the significance originated in those who were statistically significant ( $p < 0.05$ ). Because the sub-dimensions of the MoCA scale were not distributed normally, the Mann-Whitney U test was used for paired groups, and Kruskal-Wallis tests were used for more than two groups. In the post hoc analysis of the Kruskal Wallis test, Mann-Whitney U test was used as paired comparisons between groups. In all evaluations, when the p value is below 0.05, it was accepted that there were statistically significant differences between the groups.

## **FINDINGS AND DISCUSSION**

In Table 1, the introductory characteristics and characteristics of diagnosis and treatment of patients who have completed cancer treatment are given. According to Table 1, 66% of the patients are over the age of 46, 81% are female, 88% are married, 65% are primary school

graduates, 69% have not worked in an active job. Considering the diagnosis and treatment characteristics of the patients; half of them received breast cancer treatment, 51% of the patients received treatment at the third stage. Looking at the distribution regarding the type of cancer treatment; provided that all patients received chemotherapy; 49% of the patients received Chemotherapy + Radiotherapy + Surgical treatment. 41% of the patients received only taxane-containing chemotherapy treatment, and 68% received 6-8 treatment cures.

**Table 1:** Demographic And Disease Characteristics Of The Patients (N=100)

		n(%)
<b>Age</b>	18-30	5 (5,0%)
	31-45	29(29,0%)
	Over 46 age	66(66,0%)
<b>Gender</b>	Female	81(81,0%)
	Male	19(19,0%)
<b>Marital Status</b>	Married	88(88,0%)
	Single	12(12,0%)
<b>Educational Status</b>	Primary School	65(65,0%)
	High School	20(20,0%)
	College	15(15,0%)
<b>Active Working Status</b>	Working	31(31,0%)
	Not Working	69(69,0%)
<b>Chronic Diseases Status</b>	Yes	41(41,0%)
	No	59(59,0%)
<b>Type of Cancer</b>	Breast	50(50,0%)
	Gynecological	20(20,0%)
	GİS	16(16,0%)
	Lung	8(8,0%)
	Urological	6(6,0%)
<b>Stage of Cancer</b>	1. Stage	11(11,0%)
	2. Stage	38(38,0%)
	3. Stage	51(51,0%)
<b>Type of Treatment</b>	Only CT	7(7,0%)
	CT+ RT	6(6,0%)
	CT +Surgical	38(38,0%)
	CT +RT+Surgical	49(49,0%)
<b>Content of CT agent†</b>	Platinum Content	24(24,0%)
	Taxane Content	41(41,0%)
	Taxane and Platinum Content	25(25,0%)
	Not containing Platinum and Taxane	10(10,0%)
<b>Number of Chemotherapy Cures</b>	1-3 cures	12(12,0%)
	4-5 cures	20(20,0%)
	6-8 cures	68(68,0%)

CT:Chemotherapy

**Table 2:** Distribution Of The Patients According To Their Moca Points (N=100)

		n(100)	%
<b>Below 21 points</b>	Min: 10	70	70
<b>Above 21 points</b>	Maks: 28	30	30
<b>Total</b>		100	100,0

In this study, in which cognitive functionality was evaluated in the early period after treatment in cancer patients, the cognitive functionality of 70% of the patients was found to be low (Table 2).

**Table 3:** Distribution of Scores the Patients Got from MOCA and Its Sub-Dimensions (n=100)

	<b>Min.</b>	<b>Max.</b>	<b>Mean –Standard Deviation</b>
<b>Visual / Spatial</b>	0	5	3,52±1,306
<b>Naming</b>	1	3	2,41±0,683
<b>Attention</b>	1	6	3,76±1,372
<b>Language</b>	0	3	<b>1,31±0,971</b>
<b>Abstract Thinking</b>	0	2	1,12±0,782
<b>Delayed Recall</b>	0	4	<b>0,9±1,168</b>
<b>Orientation</b>	4	6	5,71±0,498
<b>Overall Score Average</b>	10,00	28,00	<b>18,73±3,79</b>

As seen in Table 3, the mean and standard deviation score of MoCA is  $18.73 \pm 3.79$  and is below the cut-off score (21). When the sub-dimensions of MoCA are examined, there is no patient who got a full score (5), especially in delayed recall. There are patients who scored 0 in half of the eight domains. These areas are; visual spatial functions are language, abstract thinking and delayed recall. The average of the scores obtained from delayed recall is  $0.9 \pm 1.168$ , which is below the average score. Similarly, the average score of the language is  $1.31 \pm 0.971$ , which is below the average score.

### **Comparison of Patients' Descriptive Features with Cognitive Function Scores**

In Table 4, the comparison of the patients' introductory characteristics, diagnosis and treatment characteristics with their cognitive function scores are given. According to Table 4, it was observed that the cognitive functionality of the patients was affected by their gender, educational status and active working status ( $p < 0.05$ ). When cognitive functionality was examined by gender, it was seen that both groups received scores below the cut-off score, but the cognitive functionality of female patients was found to be statistically significantly lower than that of men ( $p < 0.05$ ). When the sub-dimensions are examined according to gender; women scored significantly lower than men in naming and attention dimensions ( $p < 0.05$ ). When cognitive functionality is examined according to educational status; statistically significant differences were found between the groups in terms of attention, language, abstract thinking and overall score average ( $p < 0.05$ ). According to the post hoc analysis, the significance in the attention sub-dimension stems from the difference in scores between primary school graduates and high school and college graduates; the significance in the language sub-dimension stems from the difference in scores between primary school graduates and college graduates; It was observed that the significance in the abstract thinking sub-dimension was due to the difference in scores between primary school graduates and college graduates ( $p < 0.05$ ). When cognitive functioning was examined according to active working status, it was observed that the visual spatial, naming, attention and language mean scores of the working patients were statistically significantly higher than the non-working group ( $p < 0.05$ ).

According to Table 4, when the disease and treatment characteristics of cancer patients were compared with their cognitive score averages, it was seen that there were significant differences in some sub-dimensions, although there were no statistically significant differences in their overall mean scores. When cognitive functionality was examined according to cancer type, it was seen that there were statistically significant differences in attention and abstract thinking sub-dimensions ( $p < 0.05$ ). In the post hoc analysis, the analysis was made according to the results found by comparing it with the Mann Whitney U test in the form of pairs. Accordingly, it was seen that the significance in the attention sub-dimension was due to the difference between breast cancer, gynecological cancers and urological cancers; breast cancer and

gynecological cancer patients scored lower than urological cancers ( $p < 0.05$ ). The reason for the statistical significance in the abstract thinking sub-dimension was found to be due to the difference between lung cancers and urological cancers; lung cancer patients scored lower than urological cancer patients ( $p < 0.05$ ). When cognitive functioning was examined in terms of treatment type, although all groups scored below the cut-off score in the overall score, no statistically significant difference was found ( $p > 0.05$ ). When the cognitive functionality was examined according to the contents of the chemotherapeutic agents taken, although the average score obtained from the scale was below the cut-off score in all groups, no statistically significant difference was found between the groups ( $p > 0.05$ ). When analyzed according to sub-dimensions, statistically significant differences were found between groups in abstract thinking ( $p < 0.05$ ). It was found that the difference in the abstract thinking sub-dimension was caused by the difference between platinum and taxane-containing cured areas and platinum-containing cured areas. Platinum and taxane-containing cures received lower scores than those with taxane-containing cures ( $p < 0.05$ ).

When the general scores of cognitive functioning were compared according to the demographic data of the patients, it was seen that gender, educational status, and active working status affected cognitive functionality. When compared according to the characteristics of the disease and treatment, it was observed that there were no statistically significant differences between the overall mean scores according to the disease, treatment content or treatment type. According to these results, female gender, low educational status, not working in an active job are among the risk factors that affect cognitive functioning. When the sub-dimensions are analyzed according to risk groups; visual spatial functions were affected by inactivity; naming sub-dimension was affected by female gender and not being active; the attention sub-dimension was affected by female gender, being a primary school graduate, and not working in an active job; The language sub-dimension was affected by being a primary school graduate and not working in an active job, and the abstract thinking sub-dimension was affected by primary school graduates, having lung cancer, and those who received taxane and platinum-containing chemotherapy (Table 4).

When the literature was reviewed, no studies evaluating cognitive functionality among different cancer types could be found. However, in terms of the sample group, although it is seen that most of the studies were conducted on breast cancer patients, it is observed that there is a decrease in cognitive functioning at rates varying between 17% and 75% (Ahles et al., 2002; Edwards et al., 2018; Fitch et al., 2008; Hurria et al., 2006; Myers, 2013; Pearre & Bota, 2018). Considering that 50% of the sample in this study has received breast cancer treatment; The fact that 70% of the patients have low cognitive functions is compatible with the literature.

When the literature is examined, it has been observed that some of the factors that can change the cognitive status of cancer patients are age, gender, pre-treatment cognitive status, socioeconomic status, educational status and marital status, the content of chemotherapy, the type of treatment and the type of surgical procedure (Ahles et al., 2002; Lange et al., 2014). This study is partially compatible with the literature. Risk factors include female gender, low educational status and the patient's inability to work in an active job. Considering that the majority of the sample consists of women (81%), low education level (65%), and not working in an active job (69%); Low cognitive functionality in 70% of the patients is consistent with the literature.



**Table 4:** Comparison of Descriptive Characteristics of Cancer Patients with Cognitive Scores-Mean  $\pm$  S.S.

		Visual / Spatial	Naming	Attention	Language	Abstract Thinking	Delayed Recall	Orientation	Overall Score Average
Age†	18-30	3,80 $\pm$ ,447(4)	2,40 $\pm$ ,548(2)	4,80 $\pm$ ,837(5)	1,40 $\pm$ ,548(1)	1,80 $\pm$ ,447(2)	1,20 $\pm$ 1,304(1)	6 $\pm$ ,00 (6)	21,4 $\pm$ 1,14(21)
	31-45	3,34 $\pm$ 1,261(3)	2,34 $\pm$ ,721(2)	3,93 $\pm$ 1,361(4)	1,34 $\pm$ 1,010(1)	1,10 $\pm$ ,817(1)	,69 $\pm$ 1,105 (0)	5,83 $\pm$ ,384(6)	18,58 $\pm$ 3,55(19)
	Over 46 age	3,58 $\pm$ 1,371(3) X <sup>2</sup> = 1,223 p= 0,543	2,44 $\pm$ ,682(3) X <sup>2</sup> = 0,431 p= 0,806	3,61 $\pm$ 1,380(3) X <sup>2</sup> = 4,606 p= 0,100	1,29 $\pm$ ,98(1) X <sup>2</sup> = 0,233 p= 0,890	1,08 $\pm$ ,771(1) X <sup>2</sup> = 4,134 p= 0,127	,97 $\pm$ 1,189(0) X <sup>2</sup> = 1,907 p= 0,385	5,64 $\pm$ ,545(6) X <sup>2</sup> = 4,680 p= 0,096	18,59 $\pm$ 3,97(18) F= 1,313 <sup>§</sup> p= 0,274
Gender ‡	Female	3,48 $\pm$ 1,305(4)	2,33 $\pm$ ,707(2)	3,54 $\pm$ 1,323(3)	1,27 $\pm$ ,949(1)	1,12 $\pm$ ,765(1)	,85 $\pm$ 1,184(0)	5,67 $\pm$ ,524(6)	18,27 $\pm$ 3,68(19)
	Male	3,68 $\pm$ 1,336(4) U = 696,5 p: 0,508	2,74 $\pm$ ,452(3) U = 536 <b>p = 0,022</b>	4,68 $\pm$ 1,204(5) U = 415 <b>p= 0,001</b>	1,47 $\pm$ 1,073(1) U = 687 P = 0,448	1,11 $\pm$ ,875(1) U = 766,5 P = 0,978	1,11 $\pm$ 1,100(1) U = 653 P = 0,259	5,89 $\pm$ ,315(6) U = 611 P = 0,071	20,68 $\pm$ 3,71(21) t = -2,565 <sup>¶</sup> <b>p = 0,012</b>
Education al Status†	Primary School	3,23 $\pm$ 1,260(3)	2,29 $\pm$ ,744(3)	3,37 $\pm$ 1,306(3)	1,08 $\pm$ ,889(1)	,95 $\pm$ ,759(1)	,78 $\pm$ 1,152(0,5)	5,68 $\pm$ 0,503(6)	17,38 $\pm$ 3,325(18)
	High School	3,85 $\pm$ 1,309(4)	2,65 $\pm$ ,489(3)	4,40 $\pm$ 1,314(5)	1,45 $\pm$ ,887(1)	1,35 $\pm$ ,754(1)	1,15 $\pm$ 1,137(1,5)	5,70 $\pm$ 0,571(6)	20,40 $\pm$ 3,202(21)
	College	4,33 $\pm$ 1,113(5) X <sup>2</sup> = 2,246 p = 0,325	2,60 $\pm$ 0,507(3) X <sup>2</sup> = 4,485 p = 0,106	4,60 $\pm$ 1,056(5) X <sup>2</sup> = 14,625 <b>p = 0,001</b>	2,13 $\pm$ ,990(3) X <sup>2</sup> = 13,380 <b>p = 0,001</b>	1,53 $\pm$ ,743(2) X <sup>2</sup> = 9,225 <b>p = 0,001</b>	1,07 $\pm$ 1,280(1) X <sup>2</sup> = 2,246 p = 0,325	5,87 $\pm$ ,352(6) X <sup>2</sup> = 1,879 p = 0,391	22,13 $\pm$ 3,159(23) F = 16,156 <sup>§</sup> <b>p = 0,00</b>
Active Working Status‡	Working	3,94 $\pm$ 1,315(4)	2,83 $\pm$ ,408(3)	4,42 $\pm$ 1,232(4)	1,71 $\pm$ 1,071(2)	1,23 $\pm$ ,805(1,5)	1,10 $\pm$ 1,165(1)	5,77 $\pm$ ,497(6)	20,77 $\pm$ 3,547(21)
	Not Working	3,33 $\pm$ 1,268(3) U=753,5 <b>p=0,015</b>	2,28 $\pm$ ,725(2) U = 726,0 <b>p=0,004</b>	3,46 $\pm$ 1,335(3) U=663,0 <b>p= 0,002</b>	1,13 $\pm$ ,873(1) U = 734,0 <b>p=0,009</b>	1,07 $\pm$ ,773(1) U= 951,0 p=0,346	,81 $\pm$ 1,167(0) U= 895,5 p=0,153	5,68 $\pm$ ,500(6) U=958,5 p=0,248	17,77 $\pm$ 3,469(18) t= -3,980 <sup>¶</sup> <b>p=0,000</b>
Type of Cancer†	Breast	3,48 $\pm$ 1,328(4)	2,38 $\pm$ ,697(3)	3,52 $\pm$ 1,297(4)	1,26 $\pm$ ,965(1)	1,28 $\pm$ ,671(1)	,96 $\pm$ 1,245(1)	5,66 $\pm$ ,519(6)	18,54 $\pm$ 3,39(19)
	Gynecological	3,45 $\pm$ 1,504(4)	2,35 $\pm$ ,671(2)	3,45 $\pm$ 1,356(3)	1,20 $\pm$ 1,056(1)	,90 $\pm$ ,852(1)	,65 $\pm$ 1,137	5,60 $\pm$ ,598(6)	17,6 $\pm$ 4,23(18)
	GIS	3,50 $\pm$ 1,211(3)	2,31 $\pm$ ,793(2,5)	3,94 $\pm$ 1,289(3,5)	1,56 $\pm$ ,892(2)	,94 $\pm$ ,854(1)	1,00 $\pm$ 1,095(1)	5,81 $\pm$ ,403(6)	19,06 $\pm$ 4,18(19)
	Lung	3,63 $\pm$ 1,302(4)	2,75 $\pm$ ,463(3)	4,63 $\pm$ 1,506(5,5)	1,00 $\pm$ 1,069(1)	,50 $\pm$ ,356(0)	,63 $\pm$ ,916(0)	5,88 $\pm$ ,354(6)	19 $\pm$ 3,89(18,5)
	Urological	4,00 $\pm$ ,894(4) X <sup>2</sup> = 0,777 p = 0,941	2,67 $\pm$ ,516(3) X <sup>2</sup> = 3,208 p = 0,524	5,17 $\pm$ ,983(5,5) X <sup>2</sup> = 11,54 <b>p = 0,021</b>	1,83 $\pm$ ,753(2) X <sup>2</sup> = 4,83 p = 0,305	1,83 $\pm$ ,408(2) X <sup>2</sup> = 14,045 <b>p = 0,007</b>	1,33 $\pm$ 1,21(1,5) X <sup>2</sup> = 2,916 p = 0,572	6,00 $\pm$ ,000(6) X <sup>2</sup> = 4,99 p = 0,288	22,83 $\pm$ 1,83(22,5) F = 2,401 <sup>§</sup> p = 0,055
Type of Treatment †	Only CT	1,43 $\pm$ 1,618(4)	2,71 $\pm$ ,488(3)	4,00 $\pm$ 1,414(4)	1,43 $\pm$ 1,397(2)	1,00 $\pm$ ,816(1)	1,43 $\pm$ 1,618(1)	5,57 $\pm$ ,535(6)	19,4286 $\pm$ 6,45(21)
	CT+ RT	,67 $\pm$ 1,033(4)	2,17 $\pm$ ,753(2)	4,00 $\pm$ 1,673(4,5)	1,17 $\pm$ 1,169(1)	,67 $\pm$ 1,033(1)	,67 $\pm$ 1,033(0)	5,67 $\pm$ ,516(6)	18,1667 $\pm$ 5,11(17,5)
	CT +Surgical	,79 $\pm$ ,991(3)	2,32 $\pm$ ,702(2)	3,92 $\pm$ 1,402(4)	1,37 $\pm$ 0,883(1)	1,11 $\pm$ ,764(1)	,79 $\pm$ ,991(0)	5,76 $\pm$ 0,431(6)	18,7368 $\pm$ 3,88(19)
Content of CT agent†	CT +RT+Surgical	,94 $\pm$ 1,248(4) X <sup>2</sup> =0,874 p=0,832	2,47 $\pm$ 0,680(3) X <sup>2</sup> =3,366 p=0,339	3,57 $\pm$ 1,323(3) X <sup>2</sup> =1,917 p=0,590	1,27 $\pm$ ,974(1) X <sup>2</sup> =0,602 p=0,890	1,20 $\pm$ ,763(1) X <sup>2</sup> =2,248 p=0,485	,94 $\pm$ 1,248(0) X <sup>2</sup> =1,166 p=0,761	5,69 $\pm$ ,548(6) X <sup>2</sup> =1,154 p=0,764	18,6939 $\pm$ 3,16(19) F = 0,122 <sup>§</sup> P = 0,947
	Platinum Content	3,71 $\pm$ 1,08(4)	2,38 $\pm$ ,711(2)	4,17 $\pm$ 1,308(4)	1,42 $\pm$ ,830(1)	1,04 $\pm$ ,859(1)	1,13 $\pm$ 1,11(1)	5,83 $\pm$ ,381(6)	19,66 $\pm$ 3,9(20)
	Taxane Content	3,44 $\pm$ 1,28(3)	2,37 $\pm$ ,698(3)	3,46 $\pm$ 1,306(3)	1,27 $\pm$ 1,001(1)	1,37 $\pm$ ,662(1)	,93 $\pm$ 1,25(2)	5,73 $\pm$ ,449(6)	18,56 $\pm$ 3,29(19)
	t+p	3,52 $\pm$ 1,53(4)	2,44 $\pm$ ,651(3)	3,84 $\pm$ 1,546(4)	1,24 $\pm$ 1,091(1)	,80 $\pm$ ,816(1)	,60 $\pm$ 1,04(0)	5,68 $\pm$ ,557(6)	18,12 $\pm$ 4,41(18)
	t-p	3,40 $\pm$ 1,43(4) X <sup>2</sup> = 0,648 p = 0,885	2,60 $\pm$ ,699(2,5) X <sup>2</sup> = 1,254 p = 0,74	3,80 $\pm$ 1,229(4) X <sup>2</sup> = 3,757 p = 0,289	1,40 $\pm$ ,966(1,5) X <sup>2</sup> = 0,978 p = 0,807	1,10 $\pm$ ,738(1,5) X <sup>2</sup> = 8,016 <b>p = 0,046</b>	1,00 $\pm$ 1,24(1,5) X <sup>2</sup> = 3,135 p = 0,371	5,40 $\pm$ ,699(6) X <sup>2</sup> = 4,445 p = 0,217	18,7 $\pm$ 3,91(19) F = 0,725 <sup>§</sup> p = 0,54

†= Kruskal Wallis Testi, ‡= Mann Whitney U Testi, §= OneWayAnova Testi, ¶=Student t Test, t + p =Taxane and platinum , t - p =Not containing Platinum and Taxane CT: Chemotherapy

When the diagnoses of the patients, the type of treatment they received and the content of the treatment were compared with the cognitive functionality general mean scores, it was observed that there were no statistically significant differences between the groups. This situation suggests that the study is incompatible with the literature due to its method. Since there are no studies comparing different diagnosis or treatment methods in the literature, commenting was limited due to the method chosen in this study. However, when examining the studies where sub-dimensions were evaluated with different test methods, it was observed that dimensions such as attention, abstract thinking, memory and language were particularly affected (Ahles et al., 2012; Fitch et al., 2008; Quesnel et al., 2009; Reid-Arndt et al. , 2009).

## CONCLUSION AND RECOMMENDATIONS

Considering the introductory features, disease and treatment characteristics of the patients; 66% are over 46 years old, 81% are women, 88% are married, 65% are primary school graduates and 69% are not actively working, 50% are breast cancer, 51% are in the third stage of cancer, 49% of them received Chemotherapy + Radiotherapy + Surgical treatment, 41% were found to be cured with only taxane.

When the patients were examined in terms of cognitive functioning, it was seen that 70% of the patients had low cognitive functionality and the average score they got from the MoCA scale was  $18.73 \pm 3.79$  and was below the cut-off score (21).

Risk factors affecting cognitive functionality; female gender, low educational status, not working in an active occupation.

Evaluation of the cognitive functionality of these patients in the risk group is recommended for their quality of life. More studies are needed to explain the changes in cognitive functions after cancer treatment. Cognitive functions after cancer treatment are generally investigated in a diagnosis group, and comparative studies are recommended in terms of treatment content. In order to investigate the effects of cancer treatment on cognitive functioning, it is recommended to measure the cognitive functions of patients before treatment and to ask about their profession before treatment. Cognitive functionality after cancer treatment; It is recommended to investigate the relationship between anxiety and depression. It has been found that patients can reduce problems in these dimensions, especially with interventions such as physical exercise, Memory and Attention Adaptation Training, and computer-based cognitive training (Campbell, 2014; Ferguson et al., 2016; Reid-Arndt et al., 2009). It is recommended to evaluate the cognitive functionality of the patients according to the factors and to develop intervention methods.

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## **THE PERIOPERATIVE EXPERIENCES OF PATIENTS WHO UNDERWENT SURGERY DURING THE COVID-19 PANDEMIC: A QUALITATIVE STUDY**

Betul GÜVEN<sup>1</sup>, Özlem İBRAHİMOĞLU<sup>2</sup>, Eda AKYOL<sup>2</sup>, Merve GÜNGÖR<sup>3</sup>  
<sup>1</sup>Demiroğlu Bilim University, <sup>2</sup>Istanbul Medeniyet University, <sup>3</sup>Istanbul Sultan II. Abdülhamid Han Training and Research Hospital

### **Goal:**

The coronavirus disease (COVID-19) is an infectious disease caused by the most recently discovered coronavirus. The COVID-19 pandemic can affect physical health as well as mental health and well-being. Pandemic has also created a collateral health effect on the delivery of surgical care by causing disruptions in the preparation, implementation and healing process of surgical interventions. The aim of this qualitative study was to explore perioperative experiences of patients who underwent surgery during the COVID-19 pandemic.

### **Methods:**

Semi-structured interviews were conducted by telephone with 20 patients after being discharged from a training and research hospital in Istanbul, Turkey. Interviews were recorded, transcribed, and analyzed thematically. Content analysis of the text was performed.

### **Findings:**

Four main themes emerged from the analysis “life during the pandemic,” “decision making for surgery,” “situations during the stay at the hospital,” “influence of pandemic on patient's recovery at home.”

### **Results:**

Most of the patients expressed that they had fear of transmission of the virus and felt lonely because they could not go out during the pandemic. They coped with these feelings by resorting to God and with the support of their families. Patients stated that they decided to have surgery by trusting the hospital and their doctors, and even though they were afraid, pain and limitation of movement obliged them to make decision. Patients reported the possibility of being with patients with COVID-19 during their hospitalization made them uncomfortable. Nevertheless, most patients expressed that they trust in the precautions healthcare providers took. After being discharged from hospital patients' relatives changed the wound dressing because patients were afraid to leave the house and go to the hospital. Patients stated that they paid more attention to cleanliness and social distance than they are used to from the first days of the pandemic. Although patients hesitated to undergo surgery during the pandemic due to the risk of transmission of the virus, they tried to overcome the perioperative period by relying on the precautions they and healthcare professionals took. Healthcare professionals must understand and recognize patients' experiences during perioperative period in times of crisis like a pandemic to provide appropriate care.

**Keywords :** Covid-19, qualitative research, surgery

**EVALUATION OF THE DECISION TREE APPLICATION EFFICIENCY IN PATIENTS WHO START DIALYSIS TREATMENT URGENTLY**

Zehra AYDIN<sup>1</sup>, Şeyda ÖZCAN<sup>2</sup>

<sup>1</sup>Istinye University Health Science Faculty, <sup>2</sup>Koç University Faculty of Nursing

**Goal:**

The aim of the study is to evaluate the effect of the "Dialysis Training Program and Decision Tree" application, which was developed in order to support the decision of the renal replacement therapy option that is most suitable for the lifestyle of the patients with renal failure who started chronic dialysis treatment under emergency conditions.

**Methods:**

The research was conducted in a controlled and experimental manner. During the training program and decision tree application development process. Dialysis Training Program and training tools were created. A "Decision Tree" was developed to provide support and guidance to patients in their decision-making process after receiving their training. In the power analysis by taking into account 80% power and 0.05 type 1 error, 86 patients were included in the study, including 43 in the "control group" and "43" in the "training group". Simple sequential sampling method was used. The control group received two sessions of 25 minutes each, as part of the training program. For the training group, after the 25-minute training sessions, the third interview was carried out with the "Decision Tree" simulation application. Pre-test and post-test were applied to the patients, and the effects of decision tree application on treatment compliance, treatment satisfaction and self-care ability were evaluated together with dialysis training. The effects of the application on the decision-making process were evaluated.

**Findings:**

It was found that treatment compliance scores decreased significantly in the control group after the training, and increased significantly in the education group ( $p < .001$ ). The treatment satisfaction score of the patients in the control group decreased by an average of 3.65 points compared to the pre-intervention group, a very significant difference was found between the treatment satisfaction score difference of the two groups ( $p < .001$ ) In the education group, it was determined that the difference between the Self-Care Ability Assessment Scale scores was significantly high ( $p < .001$ ). Considering the effect of education and decision support on the decision-making process of the treatment method, it shows that 39.5% of the patients chose Peritoneal Dialysis, which is the home treatment, and 60.5% of the patients chose Hemodialysis treatment.

**Results:**

The results we obtained from the education and decision tree application shows that the implementation of the decision tree together with the training, increased treatment compliance and satisfaction in patients, and it was seen that patients better manage their chronic diseases and self-care.

**Keywords :** Decision aid, patient education, urgent start

**VALIDITY AND RELIABILITY OF TURKISH VERSION OF THE SCALE ON COMMUNITY CARE PERCEPTIONS (SCOPE) FOR NURSING STUDENTS**

Tuba BAY<sup>1</sup>, İrem Nur ÖZDEMİR<sup>2</sup>, Abdullah BEYHAN<sup>3</sup>, İlknur YALÇIN<sup>4</sup>, Hasibe KADIOĞLU<sup>3</sup>

<sup>1</sup>Haydarpasa Numune Training and Research Hospital, <sup>2</sup>Bakirkoy Dr. Sadi Konuk Training and Research Hospital, <sup>3</sup>Marmara University, Faculty of Health Science, Public Health Nursing Department, <sup>4</sup>Unilever

**Goal:**

As the importance of community-based care increased, a scale is needed to assess the perception of students and consider community care as a career option. Thus, Van Iersel et al (2018) developed the Scale on Community Care Practices Scope (Van Iersel et al., 2018). The purpose of the present study was to conduct a study on validity and reliability of Turkish version of the scale on community care practices perceptions for nursing students.

**Methods:**

This methodological study was conducted in two of the universities located in Istanbul with 386 students between the dates May and December in 2019. The study population included nursing students taking the course of Public Health Nursing. During the designation of the Turkish version of the scale back-translation method was utilized for the language adaptation. The data were assessed using SPSS 20 and LISREL 8.8. Content and construct validity analysis for the validity and internal consistency and test-retest analysis for reliability of the scale were held by the researchers. Average, percentage and standard deviation parameters were utilized in the analysis of descriptive findings. In the validity and reliability of the scale, Content Validity Index for content validity; Confirmatory Factor Analysis for construct validity; Cronbach's Alpha Coefficient for Internal Consistency; Pearson's Correlation Analysis for item analysis and test-retest were benefited.

**Findings:**

The mean ages of participants were 22.37±1.88 and 81.1% of them were females. 76.9% of them studied in public university. Cronbach's Alpha coefficient was found as .94 and sub-dimensions ranged between .65-.88. Item total correlation was found over .20 excluding 26th, 28th items, test-retest correlation was calculated as .72. According to scores stated by 10 professionals the mean item Content Validity Index score was found .90-1.00 and it was .99 for the scale in total. 33 itemed, 3 factors structure of the scale was approved by Confirmatory Factor Analysis.

**Results:**

Turkish version of the Community Care Perception Scale developed by Margriet Van Ierse et al was deduced as reliable and valid. It might be used to assess the community care perceptions of nurses having received the practice section of Public Health Nursing course.

**Keywords :** Community care perception, nursing, scale

**FACTORS AFFECTING VACCINATION ACCEPTANCE AND REJECTION OF PARENTS WITH CHILDREN AGED 0-24 MONTHS**

Merve KAYA<sup>1</sup>, Nurbanu ARSLAN<sup>1</sup>, Sedanur AKSU<sup>1</sup>, Gizem ÖZTÜRK<sup>1</sup>, Abdullah BEYHAN<sup>1</sup>, Hasibe KADIOĞLU<sup>1</sup>

<sup>1</sup>Marmara University, Health Sciences Faculty Nursing Department

**Goal:**

This study was conducted to determine the factors affecting vaccine acceptance and rejection of parents with children aged 0-24 months.

**Methods:**

This descriptive study was conducted between 20.11.2018 and 31.01.2019 in 3 different Family Health Centers (FHC) in Üsküdar district. The population of the study was composed of parents with 0-24 months old children registered in FHC where the study was conducted (N = 1032). It was aimed to reach the entire population, but 370 parents were reached (Response rate: 35.85%). Data were collected using the Socio-demographic form, Vaccine Information Form, and Vaccination Confidence Scale based on self-information. Ethics committee approval was obtained for the study. The analysis of the data was made using the Mann-Whitney U test in the SPSS 21.0 program. The significance level was considered 0.05.

**Findings:**

In the study, 88.1% of the participants were the mother of the child, and 9.2 % (n=34) of the parents' rejection to have their child vaccinated. The factors that affect parents who reject vaccination to make this decision: "Some health professionals do not vaccinate their children" (n=21), "Experts in TV programs discuss the vaccine and say that vaccines are harmful" (n=20), "Texts and comments about the harm of vaccines that they read on social media" (n=19). To the question of "What harm do you think vaccination could do to your child?" parents answered "Vaccines can cause autism" (n=28), "Vaccines can cause infertility" (n=20), "Vaccines can cause paralysis of the child" (n=14), Vaccines can cause Alzheimer's (n=12). Parents answered correctly to an average of  $16.12 \pm 3.8$  (min 2- max 22) of the 22 questions in the Vaccine Information Form. Vaccine knowledge of parents who rejected the vaccine, the average number of correct questions was statistically lower than those who did not reject the vaccine ( $p < 0.001$ ). The total score of the Vaccination Confidence Scale ( $21.58 \pm 14.2$ ) of the parents who rejected the vaccine was found to be statistically lower than the parents who accepted the vaccine ( $64.53 \pm 10$ ). ( $p < 0.001$ ).

**Results:**

As a result of this study can be said anti-vaccine opinions of some health professionals and social media have a large impact on the reasons why parents reject the vaccine. Besides, the low knowledge of the parents about the vaccine is seen as another reason for vaccine rejection. Consequently, it is recommended that health professionals become aware of the vaccination and raise awareness of families.

**Keywords :** Vaccination confidence scale, vaccine, vaccine rejection



**EXAMINATION OF NURSING STUDENTS' OPINION, ATTITUDE, AND KNOWLEDGE LEVELS ABOUT LGBTIQ INDIVIDUALS**

Merve Bat Tonkus<sup>1</sup>, Eyup Coskun<sup>1</sup>

<sup>1</sup>Istanbul Yeni Yuzyil University, Faculty of Health Sciences, Nursing Department

**Goal:**

In the Universal Declaration of Human Rights, it is stated that all people should be free and born with equal rights, and everyone should be able to enjoy rights regardless of race, color, sex, language, religion, political or other opinions, national or social origin, property, birth or any other discrimination. Despite this, LGBTIQ individuals in many parts of the world are exposed to many stigmatizations such as not being accepted by society, mobbing, harassment, rape, prostitution, and prejudice. In addition, these individuals frequently apply to health institutions due to serious problems such as Sexually Transmitted Diseases (STDs), alcohol and substance addiction, violence, suicide, depression, and surgical operations for gender reassignment. Due to the prejudiced and sexist approaches of healthcare professionals who adopt a traditional life view, LGBTIQ individuals cannot receive effective health care.

It is important for LGBTIQ individuals to receive qualified and high-quality health care and to continue their lives in a healthy way, just like everyone else. For this reason, health professionals need to be informed about LGBTIQ issues and LGBTIQ and develop a positive attitude in order to provide non-discriminatory and prejudiced services. The aim of this study is to evaluate the knowledge, views, and attitudes of nursing students who will provide health services and counseling to LGBTIQ individuals in the future. The results obtained from the research are expected to bring a more modern breath to the literature, nursing science, and education.

**Methods:**

The research is a descriptive study conducted with 184 nursing students studying at a fountain university in Istanbul. The data was collected by using 'questionnaire forms' related to opinion, attitude, and knowledge levels about LGBTIQ individuals.

**Findings:**

It is determined that students with conservative and authoritarian families approach LGBTIQ individuals more negatively than students with democratic families and male students have more homophobic attitudes and views than female students.

**Results:**

As a result of the research, it was determined that the nursing students did not have enough information about the LGBTIQ concept and LGBTIQ individuals. In this context, it was suggested that universities provide awareness training.

**Keywords :** Discrimination, LGBTIQ, nursing

## **KNOWLEDGE LEVELS OF NURSING STUDENTS ABOUT INNOVATIVE PRACTICES IN NURSING**

Cengiz Arıcıoğlu<sup>1</sup>, Zeynep Yunusoğulları<sup>1</sup>, Gizem Kerimoğlu Yıldız<sup>2</sup>, Leyla İşbilir<sup>3</sup>

<sup>1</sup>Hatay Mustafa Kemal University, Nursing Department, <sup>2</sup>Hatay Mustafa Kemal University, Department of Pediatric Nursing, <sup>3</sup>Hatay Mustafa Kemal University, Department of Nursing Management

### **Goal:**

Innovative initiatives are an important part of health sciences and increasing in the field of nursing as it is in every field. It is important to raise the awareness of students who continue nursing education on the subject. This study was conducted to determine students' knowledge and thoughts about innovative and current developments.

### **Methods:**

The universe of this descriptive study was 51 students who attended the Innovation Management in Nursing lessons. The study was conducted at the Nursing Department of the Faculty of Health Sciences of a University between September-December 2019. The sample consisted of 44 students who volunteered to participate in the research. Data were collected by a questionnaire form and it included 41 questions. This questionnaire was applied twice (in the first lesson of the semester and in the last lesson of the semester). Students who did not attend the lesson twice in a row during the semester were excluded from the study. The obtained data were evaluated with chi-square and paired sample t-tests by using IBM SPSS 22 package program.

### **Findings:**

68.6% of the students who participated in the study were women. 92.2% of the students were 4th grade, 9.8% of them were graduates of Health Vocational High School and 86.3% of them were between 21-24 years of age. 96.1% of the students were not working as nurses. When the results of the students were examined before and after the lessons, it was observed that observing scientific research ( $X^2$ : 7.362, p: 0.007) and following scientific researches in nursing ( $X^2$ : 7.232, p: 0.008) were statistically significantly different. In addition, a statistically significant difference was found in the thoughts of the students about Innovative Nursing (t: 2.597, p: 0.013). Although the number of students who knew about the innovative nursing products increased, this increase was not statistically significantly different ( $p > 0.05$ ).

### **Results:**

It has been determined that the Nursing Innovation Management lessons were effective in developing students' attitudes to follow up-to-date nursing research and their thoughts on Innovative Nursing. Therefore, it is recommended to expand the lessons of innovation management in nursing, enrich the content of the lessons with the introduction of innovative nursing products, support lessons for further development and to be included in the nursing education curriculum and to be examined with long-term studies.

**Keywords :** Innovation, innovative nursing, nursing education

**COMPARISON OF COMPASSION FATIGUE, BURNOUT AND COMPASSION SATISFACTION (PROFESSIONAL QUALITY OF LIFE) LEVELS OF NURSES WORKING IN ONCOLOGY-HEMATOLOGY AND DIALYSIS UNIT**

Tuğba Pehlivan<sup>1</sup>, Zehra Aydın<sup>2</sup>  
<sup>1</sup>Koc University Hospital, <sup>2</sup>Istinye University

**Goal:**

The aim of the study is to compare the levels of compassion fatigue, burnout and compassion satisfaction of nurses working on oncology-hematology and dialysis.

**Methods:**

This study was carried out as descriptive and correlational design. The sample of the study consisted of totally 278 oncology-hematology and dialyses nurses. The data were collected by personal information form, professional quality of life scale-IV. SPSS 24 package program was used to analyze the data of the study. Descriptive statistics, numbers and percentages and  $X \pm SD$  were used according to the data type. The factors affecting dependent variables were tested with t test, two-way factorial ANOVA and ANCOVA. Statistical significance value was taken  $p < .05$ .

**Findings:**

In the study, 55.8% (n: 155) of the nurses were working at oncology-hematology unit, 44.2% (n: 123) was dialysis nurse. 91% (n: 253) of the nurses were women, 46.4% (n: 129) were married, 61.5% (n: 171) have Bachelor's degree, mean age was  $32.03 \pm 8.90$ , and the average years of total working at the current unit was  $6.33 \pm 6.46$ , the average weekly working hours was  $47.26 \pm 5.62$ , 69.4% (n: 193) said that the social support is not enough. 78.1% of the nurses stated that they willingly choose the profession and 96.4% of them loved the department they work. When the mean scores of the study population were examined, the compassion fatigue was  $14.92 \pm 7.43$ , burnout was  $23.07 \pm 7.46$ , compassion satisfaction was  $37.47 \pm 7.24$ . A sub-analysis comparing the dialysis specialty with the oncology-hematology revealed that dialysis nurses report significantly higher levels of compassion fatigue scores than oncology nurses (respectively  $17.07 \pm 7.36$ ,  $13.22 \pm 7.05$ ;  $p = < .001$ ;  $t = -4.429$ ).

**Results:**

This is the first study to compare the compassion fatigue, burnout and compassion satisfaction levels of oncology-hematology and dialysis nurses. It is known that oncology nurses are at risk in terms of compassion fatigue. In our study, compassion fatigue was found statistically higher in dialysis nurses. The results of the study also show the need for programs aimed at preventing compassion fatigue for dialysis nurses. In addition, this study guides the interventional studies to be planned in the future.

**Keywords :** Dialysis nurses, oncology-hematology nurses, professional quality of life

**THE EFFECTS OF MOTHER'S VOICE AND WHITE NOISE ON APGAR SCORES OF NEWBORNS AND ATTACHMENT PROCESSES: A RANDOMIZED CONTROLLED TRIAL**

Zeynep Aközlü<sup>1</sup>, Özlem Öztürk Şahin<sup>2</sup>

<sup>1</sup>Maltepe University, Vocational School, Department of Medical Services and Techniques, Anesthesia Program, <sup>2</sup>Karabük University, Faculty of Health Sciences, Department of Nursing, Department of Pediatric Nursing

**Goal:**

The aim of this study was to establish the effects of mother's voice and white noise on the APGAR scores and attachments of newborns.

**Methods:**

The study was a randomized controlled trial and concluded with 87 newborns [maternal voice (MV): 29; white noise (WN): 28; and control group (CG): 30]. The MV and WN groups were exposed to recordings, and the broadcast continued on for five minutes. Afterwards, the APGAR scores and attachment processes of all groups were examined. APGAR scoring system, Mother Information Form, Newborn Information Form, Attachment Behavior Observation Form, pulse oximeter, recorder, white noise demo, speaker and decibel meter, weighing and tape measure, computer and chronometer were used as the data collection tools.

**Findings:**

The 1<sup>st</sup> and 5<sup>th</sup> minute APGAR scores in CG were found to be lower than MV (1<sup>st</sup>  $P = .05$ ; 5<sup>th</sup>  $P = .001$ ) and WN (1<sup>st</sup>  $P = .015$ ; 5<sup>th</sup>  $P = .002$ ). The rooting ratio was found to be higher in MV and WN in comparison to the newborns in CG ( $P = .004$ ). The newborns in CG had lower latching on rates in comparison to MV and WN ( $P = .002$ ). It was observed that both MV and WN exhibited positive effects on APGAR scores, rooting and latching on. However, only MV had a positive effect on attachment behaviours.

**Results:**

In line with the findings obtained in the study, it was determined that both sounds affected the APGAR scores positively. However, when which one of the sounds was more effective in increasing the APGAR scores was questioned, no difference was found between mother's voice and white noise. When the effects of the mother's voice and white noise listened by the newborns on the attachment process were examined, the positive effects of both sounds on the newborn's rooting and latch-on behaviours were determined. Only mother's voice was found to have a positive effect on attachment behaviours as skin-to-skin contact, first successful sucking time eye-to-eye contact.

**Keywords :** Apgar score, attachment, newborn

**PATIENCE, ACCEPTANCE OF DIVERSITY AND COMPASSIONATE LOVE IN NURSING CARE: A MIXED-METHOD STUDY**

**Özlem İbrahimoğlu<sup>1</sup>, Sevinç Mersin<sup>2</sup>, Merve Çağlar<sup>2</sup>**

<sup>1</sup>Istanbul Medeniyet University, Faculty of Health Science, Nursing Department, <sup>2</sup>Bilecik Şeyh Edebali University, Faculty of Health Science, Nursing Department

**Goal:**

Patience, acceptance of diversity, and compassionate love are all closely related to each other, and nurses who learn to respect and accept differences and show patience and compassionate love for others are more likely to provide quality health care to their patients. Therefore, this study was examined the relationship between patience, acceptance of diversity, and compassionate love, and identify evaluations regarding their place in nursing care by nursing students.

**Methods:**

This mixed-method study was conducted with students in a nursing school in Turkey. Data were collected using an Information Form, the Patience Scale, the Compassionate Love Scale, and the Acceptance of Diversity Scale and having individual interviews with students to determine these concepts' place in nursing care.

**Findings:**

According to the results of this study, a positive statistically significant relationship was determined between the Compassionate Love Scale and the Patience Scale and the Acceptance of Diversity Scale. The themes that emerged after the interviews are as follows; "Being patience is for the benefit of nurse", "Acceptance of diversity is for the benefit of nursing" and, "Compassionate love is for the benefit of humanity". In addition, the results of this study reveal some of the benefits of patience, acceptance of diversity, and compassionate love for nurses, nursing, and humanity.

**Results:**

Although it was determined the relationships of these concepts in this study, further studies are needed to test patience, acceptance of diversity, and compassionate love for nursing students and nurses. Because the development of students' patience, acceptance of diversity, and compassionate love in thought and behaviour will make a positive contribution to their professional future preparation. Therefore, nurse educators should determine their students' needs and integrate them into the curriculum.

**Keywords :** Acceptance of diversity, compassionate love, patience

**EVALUATING THE EFFECT OF GIVEN HEALTHY LIFESTYLE BEHAVIORS  
EDUCATION TO THE PARENTS OF CHILDREN WITH CEREBRAL PALSY**

Sümeyye Kaya<sup>1</sup>, Rana Yiğit<sup>1</sup>  
<sup>1</sup>Mersin University

**Goal:**

Cerebral palsy, a life-long period of recurrent crisis, common motor dysfunctions and cognitive, sensory and perceptual disorders, affects the child and the child's family in many ways. It is known that parents experience mental, physical and social health problems under these conditions. The study was designed to evaluate the education of healthy lifestyle behaviors given to the parents of children with a diagnosis of cerebral palsy.

**Methods:**

The research was carried out in a quasi-experimental pre-test and post-test design. The study included 119 child parents between the ages of 3-18 who were studying at the Special Education and Rehabilitation Centers in Mersin between 02.01.2019-13.08.2019. Dependent groups t-test, independent sample t-test, one-way analysis of variance, Pearson correlation analysis were used in the analyzes.

**Findings:**

94.1% of the parents were female, 89.9% were married and 89.1% were not working, and 72.2% had secondary school or below education. Their average age is 38.46. HLBS II mean score of the parents is  $129.29 \pm 17.62$ . There is no difference between the HLBS II mean scores before and after the education according to the characteristics of the parents such as education levels, monthly incomes, number of children and chronic illness ( $p < 0.05$ ). As the parents' age increased, the total scale scores they received increased ( $p < 0.05$ ), and as the degree of disability of the children increased, the mean scale scores decreased ( $p < 0.05$ ). After the education given to parents, HLBS mean scores and their scores from sub-dimensions increased ( $p < 0.05$ ).

**Results:**

According to study results; It can be said that educational practices on the protection and improvement of the health of parents of children who need rehabilitation and special education have an impact on health behaviors. It may be suggested to evaluate the child and parents as a whole, to develop the health services provided to the family in a multidisciplinary manner, to carry out advanced researches and projects.

**Keywords :** Cerebral palsy, healthy lifestyle behavior, parents

**EVALUATION OF THE NUTRITIONAL STATUS OF BREASTFED PRETERM NEONATES IN A NEONATE INTENSIVE CARE UNIT**

Özlem Selime Merter<sup>1</sup>, Naime Altay<sup>2</sup>

<sup>1</sup>Firat University Health Sciences Faculty, Nursing Department, <sup>2</sup>Gazi University Health Sciences Faculty, Nursing Department

**Goal:**

An estimated 15 million babies are born preterm every year in the world. Most of them stay in neonate intensive care units until they are able to meet their nutritional and respiratory needs without assistance. Nutrition is one of those care needs. Nurses are primarily responsible for making sure that neonates are breastfed as much as possible. The aim of this study was to determine the nutritional status of preterm neonates in a neonate intensive care unit during the first two weeks of their lives.

**Methods:**

The study sample consisted of 40 neonates born at 28-36 weeks of gestation. The neonates were included in the study immediately after birth, and the types of feeding solutions (fresh breast milk, frozen breast milk and formula milk) were determined in numbers and percentages for two weeks. Data were collected using a “Descriptive Characteristics Form” and a “Baby Follow-up Form”. Of participants, 60% were fed with formula milk on the first day.

**Findings:**

The rates of fresh or frozen breast milk feeding on day one, week one, and week two were (37.5%), (62.5%), and (97.5%), respectively. The rate of breastfeeding increased up to 37.5% on day one and week one, and up to 52.5% on week two. Breastfeeding was low on day one and week one, but increased after week two.

**Results:**

Neonate intensive care unit nurses are primarily responsible for making sure that neonates are breastfed as much as possible in the early period. To achieve that, they should provide parents with training and counseling.

**Keywords :** Enteral nutrition, nursing, premature infants

**THE EFFECT OF THE APPLICATION OF ACUPRESSURE AND ABDOMINAL MASSAGE TO THE PATIENTS WITH TOTAL KNEE ARTHROPLASTY ON CONSTIPATION DEVELOPMENT: A RANDOMIZED CONTROLLED STUDY**

Mahinur Durmuş İskender<sup>1</sup>, Nurcan Çalışkan<sup>2</sup>  
<sup>1</sup>Kastamonu University, <sup>2</sup>Gazi University

**Goal:**

This study is planned for examining the effects of acupressure and abdominal massage application on constipation development for patients with total knee arthroplasty.

**Methods:**

This was a randomized controlled study. The sample consisted of 91 patients with total knee arthroplasty who matched the case selection criteria. The patients were randomly assigned to each group: control group (n=31), acupressure group (n=30) and abdominal massage group (n=30). The study data were obtained using the Patient Identification Form, Constipation Risk Assessment Scale, Visual Benchmarking Scale, Daily Constipation Follow-up Form, Bristol Stool Scale and Patient Follow-up Form.

**Findings:**

It has been determined that the severity of constipation and straining stool consistency of the groups in which acupressure and abdominal massage was applied are significantly lower than the control group ( $p<0,05$ ). When the first defecation times of the groups are analysed, it is seen that the patients to whom acupressure and abdominal massage are applied defecate significantly earlier than the control group ( $p<0,05$ ).

**Results:**

It has been concluded that safe non-invasive acupressure and abdominal massage that can be easily applied by health professions, healthy individuals and patients is effective on patients with total knee arthroplasty for the prevention of constipation.

**Keywords :** Abdominal massage, acupressure, constipation



## **NURSES' EXPERIENCES OF CARE FOR PATIENTS WITH FIGHTING WITH COVID-19**

Nurcan Uysal<sup>1</sup>, Hatice Demirdağ<sup>1</sup>, Besti Üstün<sup>1</sup>, Elçin Babaoğlu<sup>1</sup>  
<sup>1</sup>Uskudar University, Faculty of Health Science, Nursing Department

### **Goal:**

The aim of the study is to determine the experiences of nurses who care for infected patients in the COVID-19 pandemic.

### **Methods:**

This study, in which qualitative research method was used, was conducted with 17 nurses working in Covid-19 services. Research data were collected between May and June 2020 using the 'In-Depth Interview' method. Before the interview, the nurses were informed about the purpose of working on the phone and the time for an individual online interview was determined. Interviews lasted an hour on average. Socio-demographic information form and semi-structured interview form were used in collecting the data. The interviews were written down separately by the researchers and content analysis was conducted. Permission was obtained from the 'Non-Interventional Research Ethics Committee' in order to apply the study.

### **Findings:**

After the content analysis of the data, 4 main themes and 15 sub-themes were determined. The main themes determined are 'journey to unknown', 'we learned while living', 'two faces of life' and 'suggestions for the future'. Nurses stated that they felt unprepared for the pandemic process, did not know how to care for the infected patient, were afraid of being infected and transmitting the virus to their families, and were left alone in the COVID-19 services. Long working hours, difficulty in working with personal protective equipment, having infected colleagues, being excluded by employees outside the Covid-19 service, physicians' ordering before coming to the clinic, being stigmatized by the society, being unfair of the additional payments made even though they are the closest employees with the patients themselves. They stated that they were factors that force and cause conflict. Seeing the improvement of patients despite all the difficulties, the support of the family and society, the formation of team awareness, colleague solidarity, and realizing how important care is in the recovery of the patients have made them motivated. The nurses tried to cope with difficulties by avoiding the news, sparing more time for themselves, in collaboration with colleagues, and stated that they realized the meaning of life and the value of family. However, they emphasized that it was unfair to see that the nursing profession was not valued despite all their efforts.

### **Results:**

This study, in which the experiences of nurses in the pandemic are determined, provides important data to managers and institutions in order to be prepared for the process and to produce solutions to problems.

**Keywords :** Covid-19 pandemic, disease outbreak, nursing.

**EVALUATION OF THE RELATIONSHIP BETWEEN THE NEEDS AND  
PSYCHOLOGICAL WELL-BEING OF PATIENTS' RELATIVES IN  
REANIMATION INTENSIVE CARE**

Nezihe Kara<sup>1</sup>, Nevin Onan<sup>2</sup>

<sup>1</sup>Ankara University İbn-i Sina Hospital, <sup>2</sup>Karabuk University Faculty of Health Science,  
Nursing Department

**Goal:**

This research; In order to evaluate the relationship between the needs of the relatives of the patients with reanimation and psychological well-being, cross-sectional and relational search was performed.

**Methods:**

The study included 171 relatives of patients treated in the reanimation unit of a university hospital in Ankara. The data were collected by using Participant Information Form, Intensive Care Family Needs Inventory and Psychological Well-Being Scale (PWBS). Data collection tools were filled with face-to-face interviews over a 20-minute period so as not to interfere with patient visits of patients' relatives. Mann Whitney U test was used for comparative analysis and Spearman's correlation analysis was used to evaluate the relationship between two quantitative variables.

**Findings:**

The mean age of the participants was  $39.20 \pm 10.65$  and 58.5% were female. Mean inventory subscale mean score was  $44.81 \pm 6.91$ , knowledge  $41.75 \pm 4.38$ , confidence  $33.26 \pm 2.82$ , and comfort  $23.06 \pm 4.04$ , respectively. The mean total score of the PWBS was  $354.37 \pm 46.37$  and the mean subscale scores were positive relations with others  $63.04 \pm 10.89$ , personal growth  $60.54 \pm 9.69$ , purpose in life  $59.63 \pm 8.10$ , environmental mastery  $57.37 \pm 9.75$ , autonomy  $57.11 \pm 8.75$  and self-acceptance were found as  $56.70 \pm 9.08$ . There was no significant relationship between the need inventory, support and proximity subscale, and PWBS subscales. The requirement inventory trust sub-dimension and positive relationships with others ( $p = 0.011$ ) and purpose in life ( $p = 0.009$ ) sub-dimensions; Requirement inventory information subscale ranged between autonomy ( $p = 0.027$ ), environmental mastery ( $p < 0.001$ ), personal growth ( $p < 0.001$ ), purpose in life ( $p = 0.005$ ), and PWBS total score ( $p = 0.002$ ); Positive inventory significant relationships were found between the requirement inventory comfort subscale and the positive correlation subscale ( $p = 0.048$ ).

**Results:**

As a result; The psychological well-being of the relatives of patients increases as the needs of trust, positive relationship building, information retrieval and comfort are met. Considering the needs of relatives of patients receiving intensive care treatment, it may be recommended to provide holistic care.

**Keywords :** Needs, psychological well-being, the patients' relatives

**ADOLESCENT HEALTH PROMOTION: SCHOOL HEALTH NURSING ROLES  
AND PRACTICES**

Emel Malkoç<sup>1</sup>, Esmâ Kabasakal<sup>1</sup>

<sup>1</sup>Ankara Yıldırım Beyazıt University, Graduate School of Health Sciences

**Abstract:**

As health behaviors in adolescence period affect the health of the adult period as well as the period they are in, it is a period that should be focused on with sensitivity and careful attention in terms of public health. Increasing the health and well-being of the adolescent individual can be addressed in the way of developing healthy behaviors for physical activity and nutrition, preventing of substance dependence, preventing risky behaviors in accidents and injuries, supporting positive mental health by supporting social and psychological development, and increasing health literacy. Adolescent individuals spend a significant part of their time at school. Schools offer an important opportunity in protecting and promoting health. Each school day offers the opportunity for students to learn behaviors and skills required to gain them a healthy lifestyle. School health programs can reduce the prevalence of risky health behaviors among adolescents and have a positive impact on their academic performances. School health nursing, which is one of the application areas of public health nursing, is increasingly gaining importance. One of the main perspectives for promoting school health is to focus on promoting students' health-related behaviors. Adolescents' adoption and application of health-promoting behaviors depends on their learning and using appropriate information. Providing appropriate information to children and adolescents, by teaching decision-making, coping and community participation skills and strengthening them are among the important roles of nurses. Health promotion, a process that focuses on the positive, dynamic and empowering aspects of health, points out the roles of school nurses in developing students' skills to cope with life difficulties and mobilizing resources. Starting from the early period, school-based healthy nutrition and physical activity programs increase the health level of students in their future lives, reduce the risk of chronic diseases, and ensure the acquisition of healthy behavioral habits. It is stated that protecting and improving adolescent health will make an important contribution in terms of public health, economic and demography. In this article, the importance of adolescent individuals and school nurse carrying out health promotion and preventive activities at school is discussed.

**Keywords :** Adolescent health promotion, school health, school health nursing

The adolescent period is a period that begins with physiological normal puberty and ends with adult identity and behaviors and corresponds to the age ranging from 10 to 19. According to the World Health Organization (WHO), 'adolescent', *which is defined as a life period with special health needs and rights*, is also a period in which the acquisition of important qualifications and abilities also take place in order to develop knowledge and skills, learn to manage emotions and relationships and take on adult roles as well (Sacks 2003; WHO nd). The worldwide adolescent population is 1.2 billion. According to TUIK ([Turkish Statistical Institute](#)) data the adolescent population between the ages of 15-17 in Turkey has been reported as 3,736,093 (WHO, 2018; Turkish Statistical Institute, 2019).

According to WHO, the common health issues seen in adolescence period are discussed under the headings such as “injuries, mental health problems, violence, infectious diseases such as HIV / AIDS, diarrhea and lower respiratory tract infections, early pregnancy and birth, alcohol and drugs, nutrition and micronutrient deficiencies, malnutrition and obesity, physical activity, tobacco use and adolescent rights” (WHO, 2018). According to TUIK ([Turkish Statistical Institute](#)) data of 2017, the number of children between the ages of 15-17 who died from all causes in our country is 1,336. It is stated that 626 of these deaths are the result of external injury causes and poisoning. (Turkish Statistical Institute, 2019). With respect of the health and well-being of young people, if the multifaceted and diverse effects such as physical condition, being overweight, injuries, physical activity, establishing good relationships with their families, not experiencing stress and bullying in school-related issues, overall life satisfaction, and lack of physical or mental complaints are taken into consideration, preventing problems in adulthood is important for countries to be healthy (Kuntsche and Sieberer, 2015; WHO, 2018).

The adolescent period can be a critical period for the health and illness circumstances of adolescents in their future lives. For example, while alcohol addiction in adolescence period predominantly increases the probability of alcohol consumption in adulthood, food consumption during adolescence period is a predictor of adult food intake. As a result of this, some chronic diseases, by appearing, may progress during adolescence period. The fact that habits acquired in adolescence period can continue until adulthood period reveals the importance of health promotion behaviors starting at an early age (Marques, Lourerio, Aveler-Rosa, Naia and Gaspar de Matos, 2020). School is a place which significantly affects the development of children. One of the primary roles of the school nurse is to aim at public health, rather than individual, in focusing on the community for promoting health and carrying out preventive activities (Murray, 2008; NASN nd). Health promotion, a process that focuses on the positive, dynamic and empowering aspects of health, points out the roles of school nurses in developing students' skills to cope with life difficulties and mobilizing resources (Laholt, Guillemib, McLeod, Beddari and Lorem, 2019). In this article, the importance of adolescent individuals and school nurses in health promotion and preventive activities at school are discussed.

## **PROMOTING ADOLESCENT HEALTH**

The World Health Organization defined health development as "increasing people's control over their own health" (WHO, 2016). Numerous studies indicate the importance of health promotion behavior in order to reduce mortality and the occurrence of the disease (Chen, Lai, Chen and Gaete, 2014). Healthy lifestyle behaviors are generally acquired during adolescence period or are reshaped during this period (Kara, 2014). Adolescent period is a period during which health problems may arise in adolescents and, accordingly, healthy lifestyle behaviors that are important for improving adolescent health, due to environmental stressors, risky behaviors and psychosocial needs in adolescents, physical and mental changes (Ardıç, 2008). Bebiş et al. (2015) stated in a study they conducted on high school students that the health promotion behaviors of adolescents were not at the desired level (Bebiş, Akpunar, Özdemir and

Kılıç 2015). In the adolescent period, behaviors related to the health of the adolescent, such as smoking, substance dependence, unsafe sexual intercourse, malnutrition and insufficient exercise, which can greatly affect the outcomes of the adolescent's later life, can change his/her health to a major extent (Salam, Das, Lassi and Bhutta, 2016). During adulthood period, life habits that to be adopted during early development have an importance in developing the right behaviors in improving health (Chen et al., 2014).

## **DEVELOPMENT OF SCHOOL HEALTH AND SCHOOL HEALTH NURSING IN THE WORLD**

The implementation of school health programs in the world started in the 19<sup>th</sup> century, and in the first years of the 20<sup>th</sup> century, school health practices in developed countries were included in the scope of routine service (T.C. Ministry of Health, 2008). The school health program first started in 1793 in France. In the United States of America in 1880, information studies were carried out in schools on alcohol and narcotic drugs. In 1893, a school principal in Durury Lane requested the Metropolitan Nurses Association to assign a nurse for his school. In 1908, national school health services became widespread in England. A School Nursing Committee was established in the United States in 1913, managed by Lina Rogers. In 1991, the World Health Organization European Bureau established the "Health Promoting Schools Project" (Başar, 2008). School health services aim to approach the school community as a whole and to provide services to individuals at the level of health promotion. Each country provides services in subjects such as increasing physical activity, nutrition, and coping with chronic diseases at the standards they set in line with their own priorities (Çakır, 2005). When the Framework for 21<sup>st</sup> Century School Nursing Practice of NASN (National Association of School Nurses) (Table 1) is examined, an evidence-based school nursing practice and a student-centered nursing care are observed. The framework touches on a non-hierarchical overlap with the key principles of care coordination, leadership, quality improvement and community / public health with students, family and the school community environment. Additionally, it is expressed that the principles mentioned here are surrounded by the principle of 'Practice Standards', which is evidence-based, clinically competent, and essential for quality care. It is expressed in the framework that school nurses can use the skills specified in the application components of each principle daily by helping students to be healthy, safe and ready to learn (NASN Framework nd).

## **DEVELOPMENT OF SCHOOL HEALTH AND SCHOOL HEALTH NURSING IN TURKEY**

The oldest document on "School Health" studies in our country is the "Regulation on the Control and Prevention of Spread of Contagious Diseases in All Schools" dated 1912. Holding education authorities responsible for ensuring a healthy environment in schools, putting primary school inspectors in charge to examine the hygienic conditions and health status of students, and subsequently the Articles on school health of the "General Hygiene Law" are among the ongoing practices. By the year of 1961, with the implementation of the Law on "Socialization of Health Services", the health center physician was held responsible for the "School Health" services in the regions where health services were socialized, and the obligation to work as a team in cooperation with nurses, village midwives, health officers, school teachers, school personnel and the families of the child was also stated the law (T.C. Ministry of Health General Directorate of Public Health nd). In 1962, it was decided in the National Education Council to train school nurses (Çakır, 2005).

In the "Health Services Application Guide", the way school health services are handled and school health was defined in the 1980s (T.C. Ministry of Health General Directorate of Public

Health nd). In 1983, it can be seen that nurses were among the health care workers in boarding schools and pensions under the Ministry of National Education (Republic of Turkey Ministry of National Education, 2004). By 1994, our country also participated in the "Project on Health Promoting Schools" studies have been carried out by the World Health Organization in many European countries, with 10 pilot schools selected from various regions. In 2010, "Turkey Healthy Eating and Active Life Program" was put into practice. In addition, activities such as "Starting the School Milk Program in Primary Schools", "White Flag Project" to encourage the healthy implementation of nutrition services in school canteens and cafeterias, "Nutrition Friendly Schools Program", school canteens and cafeterias are among school health studies (T.C. Ministry of Health General Directorate of Public Health nd).

The duties and authorities of the "School Health Nurse" were defined with the amendment made in 2011 in the Nursing Regulation in our country. In this regulation, tasks such as early diagnosis of health risks, planning suitable interventions, taking precautions, controlling environmental health conditions at school (school environment, playground, etc.), health education, ensuring coordination among students, their families and teachers in preventing infectious diseases and conducting health counseling are specified (T.C. Official Journal, 2011). In the Regulation on Secondary Education Institutions issued by the Ministry of National Education in 2013, the statement "Nurses are assigned to carry out health services in schools" (T.C. Official Journal, 2013). Prof. Dr. Inci Erefe is the person who appears before us as the pioneer of the concept of nursing in our country and studies on this subject (Özbıçakçı, 2014). For the development of school health activities; "Protocol on School Health Nursing Field Practice" signed between the Provincial Directorate of National Education and University for the first time in Turkey in 2019 and "Protocol on School Health Service Implementation Cooperation" signed between the University and the District Directorate of National Education in 2019 can be given as examples both of which especially include School Health Nursing practices (Kabasakal, 2019a; Ege University, 2019). In the light of these studies, it is expected that school health nursing activities will become widespread.

## **SCHOOL HEALTH AND SCHOOL HEALTH NURSING**

School is an important health promoting environment for children and adolescents. One of the main perspectives for promoting school health is to focus on promoting students' health-related behaviors (Guldbrandsson and Bremberg, 2005). In a study conducted by Karaaslan et al. (2018) on high school students, it was found that students' healthy lifestyle behaviors were at a moderate level (Metin Karaaslan and Çelebioğlu, 2018). The levels of health of societies in the future depend on the permanency of both the knowledge of health to be comprehended during school years and health behaviors. The fact that students are together during the school period and that they gain more knowledge, attitudes and behaviors about their health in this environment make the school period an important period (Özdemir, 2008). Each school day offers the opportunity for students to learn behaviors and skills required to gain them a healthy lifestyle. School health programs can reduce the prevalence of risky health behaviors among adolescents and have a positive impact on their academic performances (Centers for Disease Control and Prevention nd).

Adolescents' adoption and application of health-promoting behaviors depends on their learning and using appropriate information. Providing appropriate information to children and adolescents, by teaching decision-making, coping and community participation skills and strengthening them are among the important roles of nurses (Pehlivan, 2011). As a matter of fact, developing healthy behaviors in this period is easier and more effective than changing unhealthy behaviors in adulthood (Centers for Disease Control and Prevention nd). A study made by Su and Lindell (2016) suggests that the information given by nurses to adolescents develops a positive attitude in adolescents and that school nursing is to be advocated. It has been stated that due to insufficient number of school nurses, adolescent female students often

do not have exact information about menstrual health and this can lead to wrong and unhealthy behaviors related to menstruation (Su and Lindell, 2016).

Schools are institutions where significant health outcomes can be attained for healthy students as well as those who suffer from chronic diseases or for inclusive students. In preparing the inclusive students for school and life, it is important for the families of the inclusive students to receive support from multidisciplinary professionals such as health institutions and schools. Kabasakal et al. (2020), in their study on inclusive student families, concluded that families with children who may have various health problems and necessities need information about their child's diagnosis and stated that the dissemination of school health nursing practice is important in providing health and information needs of inclusive students and their families (Kabasakal, Özcebe and Arslan, 2020). It is an important issue for children with special needs and disabilities to prepare for life together with their peers in the development of self-esteem and self-confidence. Kabasakal (2018), after a "rational emotional training" study she applied in classes with inclusive students, she found that students' irrational beliefs decreased and their levels of subjective well-being, self-efficacy and social acceptance increased. At this stage, we encounter the concept of rational nursing, which will enable individuals to deal with the irrational sides of their thoughts in a realistic way. When we consider it as school health, "Rational Emotional Behavioral Training" is a method that improves students' positive mental health. Kabasakal (2019) stated that school nurses can use "Rational Emotional Behavioral Training" as a psychoeducation method (Kabasakal, 2018; Kabasakal, 2019b). Improvements in students' chronic disease control have increased the attention towards childhood cancer. Valizadeh et al. (2020) stated that school health nurses can meet the needs of adolescents and prepare strategies for adolescents who have survived cancer with effective support such as physical education (exercise), social and psychological counseling services, school nutrition services, school health services (Valizadeh, Zmanzadeh, Ghahremania, Musavi, Akbarbegloo and Chou, 2020). In many countries, the school nurse has a very important role in facing the challenges of addressing the dual burden of both infection and chronic diseases by strengthening the strong connection between health and training. In an age where infectious disease epidemics continue, individual and institutional habits have also changed, especially in the process that the Covid-19 epidemic, which affects the world, continues to affect our country. When we consider this situation as a school health, the Ministry of National Education, in cooperation with TSE (Turkish Standards Institute), has published "Improving Hygiene Conditions in Educational Institutions and Infection Prevention Control Guide". The guide includes both hygiene aimed at protecting students, teachers, other employees and all related parties and prevention, prevention from infection and control recommendations in the matter of epidemics caused by hygiene and sanitation in educational institutions. Nurses, who have a vital role in communicating with students, school staff, public health offices, can improve the health of the school population through a focus on social distance, nutrition and hygiene, as well as taking other important precautions and teaching prevention (Fritsch and Heckert, 2007; Republic of Turkey Ministry of Education, 2020).

The family also has a serious function in shaping the child's physical, mental, psychological and mental health behaviors. This expression includes family-centered care in its context. Family-centered care is a care in which the family is involved in the health, learning and development of the child. In addition, individual-centered care where the physical and psychosocial needs of the individual also gain importance is also important. In the context of the coordination role of "School Health Nursing" mentioned in the Nursing Regulation (2011), it is expressed that the nurse should also consider student and family centered care within the coordination of care (Kabasakal and Emiroğlu, 2017).

It is common to address health-related behaviors (such as alcohol and drug use, smoking, physical inactivity) through health education in school settings (Guldbrandsson and Bremberg

2005). School nurses' role in developing adaptive behavior is important. School nurses provide resources for students by means of protection and screening services, intervention programs, and health education (Zalposki and Smith, 2017). Pbert et al. (2011) in their smoking cessation intervention study on adolescents, using 5A and Cognitive Behavioral Techniques counseling intervention methods or information-attention control condition; found the result of short-term abstinence among adolescent males and a short-term decrease in the amount and frequency of smoking for both sexes, and with this result, they proved that the intervention was effective and practicable (Pbert et al., 2011). Regarding health education, we can give the study made by Yılmaz (2014) in our country as an example. Yılmaz (2014) found out that health education improves healthy lifestyle behaviors and increases the quality of life in obese high school students and recommended to prevent obesity and related health problems by means of screening adolescents in primary care by public health nurses and school health nurses and by providing early diagnosis and necessary intervention and counseling services (Yılmaz, 2014).

School-based health education is a dominant strategy in preventing adolescents from taking risks (Steinberg, 2015). There are two reasons for providing a health promotion environment in schools; the first is that children spend too much time at school, and the second is the natural link between health and education (Langford et al., 2017). NASN (National Association of School Nurses) refers to the school nurse as a very important role building a bridge between health and education (NASN nd). Starting from the early period, school-based healthy nutrition and physical activity programs increase the health level of students in their future lives, reduce the risk of chronic diseases, and ensure the acquisition of healthy behavioral habits (Kalkanlı, 2019). We can exemplify this by a study made by Dupart et al. Dupart et al. (2019), *based on the fact that overweight and obese adolescents are at risk regarding their future health problems*, in their study they made to improve the anthropometry of adolescents, to examine the initial effectiveness and feasibility of weight management intervention that helps the development of physical activity behavior and healthy nutrition; they found out that weight management intervention was feasible for adolescents in the school setting as a result of a seven-week program of nurse-led and teacher-assisted nutrition and physical activity training and exercise classes (Dupart et al., 2019). In this context, it is thought that school health nursing activities are important in shaping adolescent health and gaining healthy attitudes and behaviors that will continue throughout life in the school environment that shapes students' behaviors and thoughts.

School nurses, other team members, partners, and communities can encourage the following interventions:

- Healthy eating and physical activity,
- Increasing general health knowledge and health literacy,
- Improving psychosocial health, improving self-esteem, protecting from bullying and discrimination, and solving conflict in a healthy way,
- Prevention of smoking and other substance use,
- Creating a safe environment to prevent accidents and injuries,
- Prevention of infectious diseases, adequate sanitation and clean water facilities
- Improving staff health,
- Parental health education and counseling services (Fritsch and Heckert, 2007).

## **CONCLUSION**

Young people are an important target group for public health. Studies aimed at gaining healthy lifestyle behaviors of adolescents should be emphasized. For adolescents, the school where they spend most of their day is the practice area of the school health nurse, which is also a part of public health nursing. School health nursing has an important role and responsibility in carrying out health promotion activities in the school community.



Having nurses in every school and increasing the studies and projects to be done with school health nursing are important for the future of school health nursing.

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## **DEVELOPMENT OF AN ETHICAL PROBLEMS SCALE FOR CLINICAL EDUCATION IN NURSING**

Merve Kırşan<sup>1</sup>, Esra Akın Palandöken<sup>2</sup>

<sup>1</sup>Bartın University, Faculty of Health Sciences, Fundamentals of Nursing, <sup>2</sup>Izmir Katip Celebi University, Faculty of Health Sciences, Fundamentals of Nursing

### **Goal:**

Clinical education in nursing is an educational process in which students' professional skills are developed in the clinical setting, taking into account the individual learning needs of nursing students. In the clinical education process in nursing, students face problems in different topics. One of the most common problems is ethical problems. In this context, the research was planned and applied in a methodological type to determine the validity and reliability of the scale developed in order to determine the ethical problems experienced by nursing students in clinical education.

### **Methods:**

The population of the study consisted of nursing students (N=706) who were studying in the nursing department of a university in Izmir. All of the population was included in the study and sample selection was not made. The study was conducted with 506 students who accepted to participate in the study and the data were evaluated with a total of 506 questionnaires. "Student Description Form" were used to collect the data. By researchers, in nursing clinical teaching occur that related to the ethical problems many studies in literature was examined and "The Scale of Ethical Problems in Clinical Education in Nursing" which consists of two sub-dimensions "Health Professionals" and "Clinical Educator" was developed. When it was first developed, the draft scale consisting of 58 items was completed with 52 items as a result of the necessary validity and reliability studies. In this context; "Exploratory Factor Analysis, Confirmatory Factor Analysis, Barlett Test, Chi-Square Test, Cronbach's Alpha Test, Shapiro-Wilk Test, Hotelling- T Test, Spearman Brown's Test, Guttman Split-Half Coefficient Test" were used in the development of the scale.

### **Findings:**

In the validity and reliability study of the "Scale of Ethical Problems in Clinical Education in Nursing" Content Validity Index was found to be 0,87 for "Health Professional" subscale and was found to be 0,89 for "Clinical Educator" subscale. The total Cronbach alpha value of the scale was 0,96. Cronbach's alpha value of "Health Professional" sub-dimension was determined as 0,94 and "Clinical Educator" sub-dimension was determined as 0,92.

### **Results:**

Content validity of the Ethical Problems Scale for Clinical Education in Nursing was 0,87 for the Health Professional subscale and 0,89 for the Clinical Educator subscale. Total Cronbach's alpha was 0,96; for the Health Professional subscale it was 0,94 and for the Clinical Educator subscale was 0,92.

**Keywords :** Clinical education, development of scale, ethical problem

## THE EFFECT OF SIMULATION STRATEGY ON EMPOWERMENT OF NURSING STUDENTS' PERCEPTIONS OF THE PROFESSIONAL READINESS

Merve Tarhan<sup>1</sup>, Aytolan Yıldırım<sup>2</sup>

<sup>1</sup>Istanbul Medipol University, <sup>2</sup>Istanbul Atlas University

### **Goal:**

The quasi experimental design pretest-posttest with control group study was conducted to determine the effect of simulation strategy on empowerment of final year nursing students' perceptions of the professional readiness. The transition to professional life is quite challenging for new graduates. Therefore, nursing education programs should empower nursing students' professional readiness.

### **Methods:**

The population of the study consisted of 128 students enrolled in Istanbul Medipol University Nursing Department in the 2017-2018 academic year and the sample consisted of 78 students in accordance with the inclusion criteria. Individual Characteristics Form, Nursing Competency Perception Scale, Nursing Professional Readiness Perception Scale, Basic Knowledge Exam, Simulation Performance Rubric, Simulation Evaluation Questionnaire before graduation and Nursing Transition Shock Scale after graduation were used as the data collection tools. After participating in the "Transition to Professional Life Program", the students were divided into intervention and control groups. 39 students in intervention group participated in the three different simulation based experiences that structured according to simulation best practices criterias. In data analysis process, descriptive statistics, Mann Whitney U test, Kruskal-Wallis variance analysis, Wilcoxon signed ranks test, Spearman correlation analysis, Friedman variance analysis, chi-square test, Kappa statistics, Cronbach alpha and Kuder-Richardson 20 coefficient were used.

### **Findings:**

In the intervention group, the correct mean response in Basic Knowledge Exam and the mean score in the Nursing Professional Readiness Perception Scale at the posttest were significantly higher than the pretest ( $p < 0.01$ ). In the posttest, correct mean response of intervention group in Basic Knowledge Exam ( $p < 0.01$ ) and mean score in 'professional competence' sub-dimension of Nursing Professional Readiness Perception Scale ( $p < 0.05$ ) were significantly higher than the control group. The mean score of the students in Simulation Performance were significantly higher in the third simulation-based experience than in the first and second ( $p < 0.001$ ). There was no significant difference between the mean scores of the students in the intervention and control groups from the Nursing Competence Perception Scale before graduation and Nursing Transition Shock Scale after graduation ( $p > 0.05$ ).

### **Results:**

The results of study show that simulation strategy empowers nursing students' perceptions of professional readiness, but doesn't affect their perceptions of competence and transition shock levels. It is suggested that transition programs that act as a bridge between nursing education and the health care system should be structured in collaboration with the school-hospital and to design multi-patient and repetitive simulation-based experiences that reflect the reality of the health care system.

**Keywords :** Competence, nursing students, simulation

**COVID-19 POSITIVE PARENTS' EFFORT TO COMMUNICATE WITH THEIR CHILDREN: QUALITATIVE STUDY**

Melike Yavaş Çelik<sup>1</sup>, Erhan Elmaoğlu<sup>1</sup>  
<sup>1</sup>Kilis 7 Aralık University

**Goal:**

It is known that all kinds of crisis risks, especially the epidemic, affect the person and his environment and thus the family structure in different dimensions. In the process we have experienced recently, family communication and relationships have also been affected due to the new type of coronavirus (Covid-19) pandemic. The negative effects of the communication problems that parents experience among themselves as a result of the deficiencies and mistakes in communication during crisis and illness periods can be clearly seen. To identify communication problems parents experience with their children when they are Covid-19 positive.

**Methods:**

This study has been designed qualitatively. 16 parents were reached with the snowball sampling method who were positive for Covid-19 and agreed to participate in the study. Then, parents were asked to write down the communication problems they experienced with their children during the treatment and isolation process (using social media). Description method was used in the analysis of the data.

**Findings:**

The themes in the study were determined as follows; 1-Theme; The children's fear of losing their parents and the inability to explain the concept of death and disease to the child, 2-Theme; Separation anxiety; Difficulty in explaining the necessity to stay separate from them. 3-Theme; Behavioral problems in children; Refusing to communicate with the parent, exhibiting aggressive behavior, thinking that the parent has abandoned them.

**Results:**

The main result obtained in this study is that parents have serious communication problems with their children when Covid-19 is positive. Parents stated that their children fear losing their parents due to the spooky news about covid-19 they heard from social media, they think their children abandoned them, children exhibit behavioral problems and have difficulty coping with separation anxiety.

**Keywords :** Children, communicate, covid-19

## **INTRODUCTION**

The coronavirus (Covid-19) infection that occurred in Wuhan, China in December 2019 has affected the whole world (Huang & et al., 2020). In March, 2020 Covid-19 was declared as a pandemic outbreak by the World Health Organization (WHO) (WHO, 2020).

Interruption of the family process is the breakdown of continuity in functioning effectively due to situational crises in a family, which is supportive and functions effectively under normal circumstances, and the disruption in the process of coping with stressors. This condition might be caused by the disease, breakdown of family routines, alteration in family function, loss of a family member, abandoning, separation, divorce, economic problems and emotional changes in members due to treatments. These individuals may fail in adapting to the disease or crisis, show non-functional responses, may not able to communicate openly, and may not able to meet, help or want to meet the (physical, mental, social, moral) needs of family members and not express their emotions (Wilkinson, 2018).

It is known that all kinds of crisis risks, especially the epidemic, affect the person and his environment and thus the family structure in different dimensions. Acting as a mother and a parent is a very complex, multi-stage process. Also, in the process we have experienced recently, family communication and relationships have also been affected due to the new type of coronavirus (Covid-19) pandemic. (Wang et al.,2020; Çelik,2020)

The negative effects of the communication problems that parents experience among themselves as a result of the deficiencies and mistakes in communication during crisis and illness periods can be clearly seen. The effects of the interactional behaviors of parents (especially mothers) as primary caregivers, who are among the close environment of children and with whom they interact most in childhood, on children's development have been demonstrated both theoretically and practically (Mahoney ve MacDonald, 2004; Mahoney et al., 2007). Therefore, this research was planned to examining communication problems of parents with their children when they are Covid-19 positive.

## **DESIGN AND METHODS**

**Research Type:** This is a qualitative and descriptive study.

### **Research Population and Sample**

Research population covers covid-19 positive all persons in Turkey. Sample to be participation from every region in Turkey was determined as 16 people who agreed to participate in the research, can be reached via social media search, have 0-12 age children. For sample selection, the snowball sampling technique was utilized. Participation in the research was on a voluntary basis. No fees were paid to the participants for the study. They participated in the study voluntarily. In addition, no additional financial resources or an advertisement were used to conduct the study.

### **Collection of Data**

The study was conducted with 16 participants on 10 July-30 August 2020. 16 parents were reached with the snowball sampling method who were positive for Covid-19 and agreed to participate in the study. Then, parents were asked to write down the communication problems they experienced with their children during the treatment and isolation process (using social media). Description method was used in the analysis of the data.

## **APPLICATION OF THE RESEARCH**

Research data were remotely collected by researchers through video calls because face-to-face communication was inconvenient due to the pandemic. Interviews were recorded. Firstly, information on the research was introduced to the participant, and participant's consent for participating in the research was received. As the participant was in a remote location, individualized in-depth interview technique was employed. Participants were selected through snowball sampling method. the interview period was limited to maximum 20 minutes. The interview was finished once the interviewer started to identify redundancies in the collected data

## **ANALYSIS OF DATA**

For the analysis of data, the descriptive analysis was utilized. Firstly, a framework was created for data analysis. Under what themes the data would be grouped was specified alongside this framework. Subsequently, data grouped as per the created framework were read, categorized, defined and coherently compiled together.

## **ETHICAL ASPECT OF THE RESEARCH**

For performing the research, permission was obtained from the Ethics Committee of Kilis 7 Aralık University (Permission No. 2020/17). The aim of the research was referred to in the form which was created in digital format, and the voluntary basis of the participation was emphasized prior to the application of the research. This study was designed and conducted in compliance with the principles of the Declaration of Helsinki.

## **RESULTS**

The themes in the study were determined as follows;

### **1-Theme; The children's fear of losing their parents and the inability to explain the concept of death and disease to the child.**

Children are a special group. It is necessary to convey the concept of illness and death to them in a way that they can understand according to age periods. It would be wrong to expect young children to understand the concept of illness and death like we do. Also, we cannot expect him to find ways to cope with the fear of losing his parents. It is a difficult situation for children to interpret their imagination and the concepts they hear from their environment during the pandemic period (Gentzler et al., 2005; Ochs et al., 2005) As explained by participants;

“When I first started to explain the situation to my daughter, my daughter said that you will die, crying at me. I know he says so on TV, Covid-19 is killing people. That's why you will die too, right? I want to die too. He started crying. Then every time we talk on the phone and when I say I'm fine, he didn't believe me and said that you are bad, you are hiding from me and you will never come to us. I could not explain this situation to him”(Participant 1).

“It was very difficult to explain the situation to my children, when my children heard that I was covid-19, they started crying. Also, they cried that you will not come again, we will not see you again. I hardly had to say goodbye to my children before I could hug them”(Participant 2).

### **2-Theme; Separation anxiety; Difficulty in explaining the necessity to stay separate from them.**

Children were of course affected by this situation. In some instances, there was an interruption of the relationship process which is based on trust-love and interest between parent-baby / child (Kaya et al., 2018). Children in the younger age group may perceive this situation as abandoning them, since they are not in a position to understand why their parents abandoned



and left them during the covid process. In our study, there are statements of the participants who revealed this situation.

“I could not explain the situation to my children at first, I was scared. I told them I am going somewhere, I have a job and left the house. Then it was evening and when I did not come home, their father had to explain the situation to them, but they did not believe it. Later, no matter how much I tried to explain the situation by calling the phone, they were lying, saying that you left us, you will not come again, and they never talked to me until I came home”(Participant 6).

“They never believed me when I talked to my kids on the phone and said I was going to get better. They were constantly saying that this virus is enough. Also, the Kids used phrases that we don't believe in you anymore. I was very surprised when I saw a picture drawn by my children. The content of the picture included the cut form of the corona virus with a knife”(Participant 5).

“I was having a video chat with my kids. But this was not enough for us. Later, the children started to draw and send me pictures to express their feelings, in the first days they were drawing our family together in the pictures they sent, and in the following days they started to draw me in a separate area away from them. One day they said to me as if you were in prison and it was forbidden to see you. That's when I realized that they didn't accept this situation”(Participant 9).

### **3-Theme; Behavioral problems in children; Refusing to communicate with the parent, exhibiting aggressive behavior, thinking that the parent has abandoned them.**

Along with the illness, parental skills, parents' mental health status, and relationship status between parents impact the development of behavioral problems in children (Suzuki et al., 2019). Participants explained some of the issues that developed when the child was too young to understand the situation:

“At first, my daughter was laughing at me on the phone, playing and playing. After a week, my daughter did not want to meet with me, every time her father picked up the phone, she would pick it up and throw it to the ground. My daughter was offended by me, she did not want to see me, it was not easy to make peace with her”(Participant 3).

“When the children realized that they could no longer see their mother, they behaved the way they reacted. They did not want to leave first, when the ambulance came and picked me up, they cried behind. They are a little calmer now. But my little son was constantly fighting with his brothers for no reason, biting them, wetting his bottom. He does not go to the toilet, he says my mother come.” (11th participant).

## **CONCLUSIONS**

For all parents, the quarantine process and the fear of Covid-19 increased their ' concerns about their children. But for the participants in this study, Covid19 positivity made things even more difficult. The main result obtained in this study is that parents have serious communication problems with their children when Covid-19 is positive. Parents stated that their children fear losing their parents due to the spooky news about covid-19 they heard from social media, they think their children abandoned them, children exhibit behavioral problems and have difficulty coping with separation anxiety.

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**THE EFFECT OF DIFFERENT SIMULATION METHODS FOR COVID-19 ON  
LEARNING SATISFACTION OF NURSING STUDENTS**

Ebru ÖZTÜRK ÇOPUR<sup>1</sup>, Melike YAVAŞ ÇELİK<sup>1</sup>, Fatma KARASU<sup>1</sup>, Rabia ARPACI<sup>1</sup>,  
Zehra CAN<sup>1</sup>, Hacı Yusuf GÜLEÇ<sup>1</sup>

<sup>1</sup>Kilis 7 Aralık University Yusuf Serefoglu Health Sciences Faculty, Nursing Department,

**Goal:**

The Covid-19 epidemic, which affected the world, interrupted nursing education. This study aims to investigate the effect of different simulation methods for Covid-19 on the learning satisfaction of nursing students.

**Methods:**

The study was conducted in Kilis 7 Aralık University Nursing department, in Kilis province, Turkey. The students who participated in the study were on the 2nd, 3rd, and 4th. This study was planned in a descriptive and comparative way in order to determine the satisfaction of nursing students and their self-confidence in learning using different simulation methods toward Covid-19. Owing to Covid 19 outbreak, the training provided is limited to 20 students. Before the beginning the study, online web-based simulation training programs toward Covid-19 were scanned. One of these programs, the Body Interact program, benefited from the free training provided toward Covid-19. In this study, the same Covid-19 case was explained to nursing students through both the mannequin simulation and the web-based clinical simulation application. The training was conducted on the specified day and time. The training took 30 minutes in total. After training, students filled “Socio-Demographic Questionnaire Form”, “Student Satisfaction and Self-Confidence in Learning Scale”.

**Findings:**

It was determined that 55% of the nursing students were 21 years old, 80% were female and 65% were 3rd-grade students. It was determined that 75% of nursing students got training for Covid-19, 85% were worried about Covid-19, 10% caught Covid-19 disease, and 25% students of their family members had Covid-19 disease. In addition, it was determined that 70% of nursing students had information about nursing practices toward Covid-19, 90% found distance nursing education insufficient, %95 of gave training other people toward Covid-19 and 85% wanted to take an active role in outbreaks after graduation. When the Student Satisfaction and Self-Confidence in Learning Scale scale scores were examined, it was determined that the web-based simulation method toward Covid-19 was  $49.45 \pm 8.56$  points, and the mannequin simulation method was  $51.60 \pm 4.07$  points. In the comparison of scale scores, a significant difference was found between the mannequin method toward Covid-19 and the web-based clinical simulation method. Question of the status of wanting to take an active role in outbreaks after graduation was found to be statistically significant in the mannequin method.

**Results:**

It was found that the students were more satisfied with the mannequin simulation method. It is being recommended to conduct the study with a larger sample group.

**Keywords :** Covid-19, nursing student, simulation

**Publication No : S-029**

## **CHANGES IN COVID-19 POSITIVE MOTHERS OF MATERNAL ROLES AND PARENTAL BEHAVIORS**

Melike YAVAŞ ÇELİK<sup>1</sup>, Erhan ELMAOĞLU<sup>1</sup>

<sup>1</sup>Kilis 7 Aralık University Yusuf Serefoglu Health Sciences Faculty, Nursing Department,

### **Goal:**

It is aimed Changes in Covid-19 Positive Mothers of Maternal Roles and Parental Behaviors.

### **Methods:**

The questionnaire form and Semantic Differential Scale-Myself As Mother (SDS), and Mothers's Parental Behavior Scale - Parental Form (MPBS) were used to collect the data. The research had done in Gaziantep from Turkey. Also The research had done at September. A web-based survey has been designed (A face-to-face study could not be conducted due to the Covid-19 epidemic).

### **Findings:**

66.7% of the participants are between the ages of 18-32. 66.7% of the participants have high school and above education. %97.4 of the participants have 1 and 2 child. 53.8% of the participants are housewife. 84.8% of the participants haven't chronic ill. 86.4% of the participants don't live with an old person. 82.9% of the participants don't need hospitalization. 36.4% of the participants were covid-19 positive at August. 62.1% the participants have more than one symptoms. Also, most of participants have weakness (15.2%). 47.7% of the participants used hygiene rules for actions to protect from covid-19. 93.2% of the participants's social relative affected negative from covid-19 process. 80.3% of the participants's family relative affected negative from covid-19 process. SDS total score of the participants were 38.63±8.10. SDS mean score of 18-32 between age mothers was down than other mothers and there is statistical significance between the two mother groups (18-32 age and 33 and above age). MPBS total score of the participants were 49.03±6.30. Significance was found among the demographic data of the participants in terms of MPBS score. But, every group have down MPBS total score mean.

### **Results:**

As a result of this research; it is determined Covid-19 Positive Mothers of Maternal Roles and Parental Behaviors have down scores.

**Keywords :** Children, communicate, covid-19

**THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE LEVELS AND TEAMWORK ATTITUDE OF FUTURE HEALTH PROFESSIONALS STUDENTS: THEORETICAL MODEL**

Pınar DOĞAN<sup>1</sup>, Merve TARHAN<sup>1</sup>, Ahu KÜRKLÜ<sup>2</sup>, Ilkay DOĞAN<sup>3</sup>

<sup>1</sup>Istanbul Medipol University, Faculty of Health Science, Nursing Department, <sup>2</sup>Bahçeşehir University, Faculty of Health Sciences, Nursing Department, <sup>3</sup>Gaziantep University, Faculty of Medicine, Bioistatistic Department

**Goal:**

Luca and Tarricone define emotional intelligence as "invisible" teamwork skills. However, studies in the literature emphasized that employees with high emotional intelligence and perception are successful in active participation in teamwork, motivation, high-level job performance and activating emotional abilities. Studies examining these variables of students studying in departments related to health sciences are limited. The aim of this study is to determine whether there is a relationship between students' teamwork attitudes and emotional intelligence levels and to define the related theoretical model.

**Methods:**

This descriptive and correlational study was performed by 1214 students who were studying in the Health Sciences departments of a university in Istanbul. Data were collected using the Personal Information Form, the Emotional Intelligence Assessment Scale (EIAS), and Teamsteps-Teamwork Attitudes Questionnaire(T-TAQ). The data were analyzed in SPSS and AMOS programs.

**Findings:**

When the distribution of the mean total scores of EIAS and T-TAQ is examined; The students' total mean score of EIAS was 134,92±21,21, and their total T-TAQ mean score was 115,57±15,46. There was a statistically significant difference was found between the students' T-TAQ total/ sub-dimension scores and their emotional intelligence average score levels (p <0.05). In the structural equation modeling, a positive and significant correlation was found between the students' EIAS and T-TAQ levels (r=0,67; p <0.05). While the most important variable on the emotional intelligence levels of the students was Empathy with a 0.99 coefficient, it was determined that the most important variable on teamwork attitudes levels was the situation monitoring sub-dimension with a coefficient of 0.98. A statistically significant difference was found between the students' mean EIAS and T-TAQ scores and the department and the experience of clinical practice (p <0.05).

**Results:**

As a result of the study, it was determined that there was a significant relationship between the emotional intelligence levels and their teamwork attitudes of the students. In this context, it was thought that educational activities to increase the emotional awareness of students would contribute to effective teamwork. However, developing emotional intelligence skills takes time. In this process, students need to be fed with knowledge, skills, values and attitudes. In achieving this development, the integration of educational activities into the curriculum that will enable active learning such as simulation-based learning that will enable the student to understand the feelings of himself and the individual he serves is important.

**Keywords :** Emotional intelligence, health sciences students, teamwork

**EXPERIENCE OF NURSING ON COVID-19 - PROMOTE AND DEVELOP  
NURSING KNOWLEDGE TO BUILD THE SCIENTIFIC FOUNDATION FOR  
CLINICAL PRACTICE**

Mustafa YAVUZ<sup>1</sup>

<sup>1</sup>Nevsehir State Hospital

**Goal:**

Experience of nursing on covid-19. Promote and develop nursing knowledge to build the scientific foundation for clinical practice.

**Methods:**

Current and past experiences and observation.

**Findings:**

Although the importance of nursing is understood and it is a professional profession, unfortunately, not being a branching at during studying like medicine, the fact that nursing has not evolved in this sense has prevented the achievement of the desired quality in nursing services. Nursing services are seen as a routine civil service, become an ordinary job by nurses, and even become commonplace and close themselves to innovations related to their professions, causing their profession to be devalued by both themselves and other people. They lose their excitement in the first years of their professional life, they are not happy enough in any branch due to adaptation problems arising from constantly working in different places, and they cannot improve themselves after graduation.

The duties of nurses are not only to make orders given by the doctor, to carry out vitals and treatments of patients. In the operating room, like an assistant surgeon, together with the surgeon, nurses should be able to learn by questioning the purpose and the course of the surgery performed in the current operation and to give ideas when necessary. The nurses should be both a coordinator and an intuitive and observational planner suitable for the scientific background of the work between the patient and doctor and other staff in the ward and intensive care units. On the other hand, based on our experience in the covid pandemic, we have seen that our nurses, who have worked for a long time or only in a certain place, had serious difficulties in covid services, outpatient clinics and intensive care units, and perhaps there were problems in follow-up.

**Results:**

In the meantime, the issue we need to discuss is how nurses working in different branches can quickly adapt to general and basic nursing information and services in case of epidemics, as well as branching in nursing, active treatment and patient management.

Is professional branching possible together active participation in general services as in branching when necessary?

**Keywords :** Active participation, nursing on covid

**THE INFORMATION AND PRACTICES OF NURSING STUDENTS REGARDING  
THE COVID-19 OUTBREAK**

Aslıhan AKSU<sup>1</sup>, Aysu BULDUM<sup>1</sup>, Tuba GÜNER EMÜL<sup>1</sup>, Ayda ÇELEBİOĞLU<sup>1</sup>  
<sup>1</sup>Mersin University

**Goal:**

Covid-19 emerging in China has quickly become a global health problem. WHO emphasizes that practices such as reducing contact, isolation of cases, and correct use of personal protective equipment to against contamination are the main points in combating the epidemic. Healthcare professionals are of great importance in providing the most reliable and up-to-date information on measures to be followed to combat Covid-19. Among health professionals, nurses are very important in terms of having the knowledge and skills to provide the necessary education and counseling to sustain and support public health in the pandemic. This study aims descriptively to determine information and practices of nursing students regarding the Covid-19 outbreak.

**Methods:**

The sample of the research consists of 304 students studying in the nursing department. “Personal Information Form” and “Covid-19 Information and Practices Form” were used to collect the data. The data obtained were evaluated using descriptive statistics, t test, One Way Analysis of Variance and Tukey test.

**Findings:**

The mean age of the students was found  $21,47 \pm 2,88$ . It was determined that 23.4% of the students were in the first grade, 31.3% in the second, 23.4% in the third and 22% in the fourth , and 67.1% were women. It was determined that 86.8% of them stayed with their families during the pandemic process, and 24% did not go out at all. Protective practices (PPS) and information (IS) against the Covid-19 epidemic mean scores of the students are  $5.85 \pm 1.03$  (min=0, max=7) and  $28.95 \pm 4.46$  (min=0, max=35) respectively. In the study, it was determined that students staying with their families had higher PPS than other students, and students staying in dormitories had higher IS than other students ( $p < 0.05$ ). In addition, it was determined that the students who stated that they never closed their mouths while coughing/sneezing had lower IS than other ( $p < 0.05$ ). In the study, no significant difference was found between PPS and IS of the students according to age, gender, grade, and the presence of an individual diagnosed with Covid-19 in close circle ( $p > 0.05$ ).

**Results:**

In the study, it is seen that most of the students have acquired the necessary information and practices for the Covid-19 outbreak. However, it is important that all nursing students, who are candidates for healthcare professionals who will take an active role in the epidemic, acquire the right information and practices. Therefore, we think that the training of nurses, who can be described as the backbone of the development of public health, about the pandemic will have positive individual and social effects.

**Keywords :** Covid-19, information, protective practies

## THE EFFECT OF TREATMENT ADHERENCE TRAINING ON THE PATIENTS WITH BIPOLAR DISORDER ON TREATMENT ADHERENCE, SOCIAL FUNCTIONING AND QUALITY OF LIFE

Ebru BAŞKAYA<sup>1</sup>, Satı DEMİR<sup>2</sup>  
<sup>1</sup>Usak University, <sup>2</sup>Gazi University

### **Goal:**

The aim of this study is to determine the effect of treatment adherence training to the patients with bipolar disorder on treatment adherence, social functioning and quality of life.

### **Methods:**

The study consists of two stages in which qualitative and semi-experimental research designs are used. In the preliminary stage, descriptive qualitative research method has been used in order to determine the information needs in treatment process of bipolar patients. Data were collected from 11 patients registered to the Community Mental Health Center between September<sup>th</sup> 15 and December 15<sup>th</sup>, 2018 by using in-depth interview method and analyzed using descriptive analysis method. Second stage has been carried out between January 15<sup>th</sup> – September<sup>st</sup> 1, 2019 with 19 patients registered to Community Mental Health Center and 21 patients who were outpatients in Psychiatry Policlinic of a university hospital and met the inclusion criteria. Participant Information Form, Semi-Structured Interview Form, Medical Treatment Compliance Rate Scale, Social Functioning Scale and World Health Organization Quality of Life Scale Short Form were used in the study. The data were collected before and after treatment adherence training and in the third month. Treatment adherence training created in accordance with the data obtained from the in-depth interviews with patients was individually applied by the researcher to the intervention group (n=19) as totally five sessions one day per week. After the training, a training booklet was handed out to the patients in the intervention group and telephone counseling was given once a week for three months. Following the pre-test the control group (n=21) was not intervened, counseling was provided in accordance with their needs after the follow-up measurement was completed and the training booklet was handed out.

### **Findings:**

There was no significant difference between the descriptive characteristics and pre-test scale scores of the patients in the intervention and control groups before treatment adherence training, but the groups were similar ( $p>0,05$ ). The mean scores of adherence to treatment, social functioning and quality of life of the patients in the intervention group were found higher in the post-test and follow-up than the patients in control group ( $p<0, 05$ ).

### **Results:**

In conclusion, the treatment adherence training had an effect on increasing the patients' treatment adherence social functioning and quality of life. As a result of the study, it may be suggested to integrate treatment adherence training for bipolar patients into the treatment process of the patients.

**Keywords :** Bipolar disorder, nursing, treatment adherence training



## **THE MENTAL STATUS OF NURSING STUDENTS IN COVID-19 PANDEMIA**

Filiz DEĞİRMENÇİ<sup>1</sup>, Ahu AKSOY<sup>1</sup>, Asiye ÇELEBİ<sup>1</sup>, Duygu VEFİKULUÇAY YILMAZ<sup>1</sup>  
<sup>1</sup>Mersin University Nursing Faculty

### **Goal:**

The Covid-19 pandemic, affected the whole world, threatens mental health as well as physical health. It has been found that 40.4% of the youth have a tendency to experience mental problems during the Covid-19 pandemic. It was determined that one out of every four university students experienced mild anxiety during the Covid-19 outbreak. In this process, universities have taken intensive measures to prevent the spread of Covid-19 and to protect all students and staff. Within the scope of these measures, students had to switch from the formal education they were used to, to online teaching platforms. It is stated that these students, who have to leave their campus life and their friends at the university, may face many behavioral and mental problems ranging from anxiety, depression, substance addiction, sleep and eating disorders to life-threatening suicide risk. Considering these problems, the mental health of nursing students, who will be the future health protectors, should be evaluated as well as their physical health. This research was conducted in a descriptive and cross-sectional manner in order to determine the mental states of nursing students during the Covid -19 pandemic.

### **Methods:**

The sample of this descriptive and cross-sectional study consisted of 323 students studying in the nursing department of a university between 15/06/2020 and 15/07/2020. The data of the study were collected by an online questionnaire consisting of three parts: "Personal Information Form", "The State-Trait Anxiety Inventory (STAI) - State Anxiety Scale (S-anxiety)" and "Mental Health Continuity Scale (MHCS)". Obtained data were evaluated using 'descriptive statistics', 'Student's t test' and 'one way ANOVA'. Pearson Correlation Coefficient was used to determine the relationship between two continuous variables.

### **Findings:**

Nursing students' mean S-anxiety score was  $49.04 \pm 11.09$ , and their average MHCS score was  $26.09 \pm 16.41$ . It was found that 78.9% of the nursing students were anxious. It was found that there is a moderately negative correlation between the nursing students' S-anxiety and MHCS scores. ( $r = -0.564$ ;  $p < .05$ ).

### **Results:**

It was found that most of the nursing students experienced anxiety and their mental well-being was negatively affected as their anxiety increased. It is recommended that nursing students, who will be an integral part of the healthcare team during the Covid -19 pandemic, be informed about scholarships in order to contribute to their economic status and to meet the material needs for distance education in order to maintain and protect their mental health.

**Keywords :** Covid -19, mental health, nursing student

## **ANXIETY STATUS OF THOSE WHO DEMANDED COVID-19 TEST**

Sibel DOĞAN<sup>1</sup>, Fatima ÖZDEMİR<sup>2</sup>

<sup>1</sup>Istanbul Medipol University, <sup>2</sup>Mardin State Hospital

### **Goal:**

Corona virus pandemic (Covid -19) was announced by the World Health Organization as a global pandemic. Covid -19 has produced much ambiguity due to both its nature and its effects upon social life and economy. Since that ambiguity directly influences our psychological and mental health, it is crucial to control our emotions and to cope with these emotions. Covid -19 is a stressing and new course for people and communities. Fears and anxieties about a disease may be distressful. When facing a situation that threaten people's own health or significant others' health –like corona virus- it is nature to be anxious. It is necessary to have anxiety to some degree because it motivates people for taking necessary measures. In some cases; anxiety may lose its protection function by increasing too much and may be threatening in terms of psychological and physical health. This study was descriptively done to determine anxiety status of those who demanded Covid -19 test.

### **Methods:**

The study was done in Covid -19 test unit at a hospital located in South-eastern Anatolia Region of Turkiye after ethical committee approvals and official permissions from hospital management were obtained. 296 individuals who demanded Covid -19 test at the hospital and who accepted to join the study were included in the study. In the study, data were gathered using an Information Request Form and state anxiety scale. Data collection tools were administered to the participants before Covid -19 test by a psychiatric nurse via face to face interview.

### **Findings:**

90.2% of the participants were aged  $\leq 45$  years and average age was  $31.25 \pm 11.17$  years. The number of those with whom most of the participants lived together at home was four. 18.9% of the participants had chronic disease. Partners/family members of 24.3% of the participants had chronic disease, too. There were individuals with positive Covid -19 tests among the partners/family members of 22.3% of the participants. 22.7% of these positive cases were participants' spouses.

The participant's average anxiety score was  $46.58 \pm 10.71$ . It was identified that average anxiety scores were statistically and significantly higher among female participants, those with chronic diseases, partners'/family members' significant others who tested Covid -19 positive and spouses with positive Covid -19 tests ( $p < 0.05$ )

### **Results:**

Considering psycho-social effects of viral outbreaks like Covid -19, it's important that health personnel be informed about psychological complaints such as anxiety during pandemic period and psycho-social monitoring and support services be planned, improved and provided for individuals by psychological health team in which psychiatric nurses are available.

**Keywords :** Anxiety, covid -19, psychiatric nurses

## **THE PERSPECTIVE OF NURSING STUDENTS; HIDDEN CURRICULUM**

Pınar DOĞAN<sup>1</sup>, Merve TARHAN<sup>1</sup>, Ahu KÜRKLÜ<sup>2</sup>

<sup>1</sup>Istanbul Medipol University, Faculty of Health Sciences, Nursing Department, <sup>2</sup>Bahcesehir University, Faculty of Health Sciences, Nursing Department

### **Goal:**

The hidden curriculum is the unintended outcome of the curriculum. Although nurse educators are not fully aware, students acquire adult professional roles, internalize Professional values and a professional identity through hidden curriculum. Therefore, it is important to examine the opinions of nursing students on this issue. In this study, it is aimed to examine the views of nursing students about the hidden curriculum.

### **Methods:**

The study in descriptive design was carried out with 658 students learning at a university. The data of the study were collected with the “Individual characteristics form” and “Hidden curriculum evaluation in nursing education scale. Data analysis, frequency, mean, Kruskal-Wallis and Mann Whitney U tests were used in the SPSS 24.0 package program. According to the results of the study, the Cronbach’s alpha coefficient was found as ,90 in the total of the scale.

### **Findings:**

Hidden curriculum evaluation mean total score of the students studying in the nursing program 147.34±21.59 (min: 59-max: 206), in the school climate sub-dimension 70.80±14.91 (min: 21-max: 105), vocational It was determined that he had an average score of 46.24±8.81 (min: 13-max: 60) in the learning outcomes sub-dimension and 30.21±8.09 (min: 14-49) in the student-teacher-school interaction sub-dimension. Students studying in the nursing program, It was determined that hidden curriculum evaluation total average score 147.34±21.59 (min: 59-max: 206), school climate sub-dimension average score 70,80±14,91 (min:21-max: 105), professional competence sub-dimension average score 46.24±8,81 (min:13-max:60) and students-teacher-school interaction sub-dimension mean score 30.21±8,09 (min:14-max:49). It was determined that the students under 21 years old, female, studying in the 5th semester and whose satisfaction and quality scores from the education program were above average, has statistically significantly higher levels of hidden curriculum evaluation (p<0,05).

### **Results:**

It was found that the hidden curriculum evaluation of nursing students for the program they were trained in was moderate and the students who had high quality and satisfaction with the education program had high levels of hidden curriculum evaluation. Students’ responses may be related to institutional teaching resources. For this reason, it can be suggested that each institution should carry out program improvement studies specific to its own resources, with studies to be carried out in different educational institutions.

**Keywords :** Hidden curriculum, nursing students

## **THE EFFECT OF GENDER AND EDUCATIONAL PROCESS ON EMOTIONAL INTELLIGENCE: A META ANALYSIS STUDY IN NURSING STUDENTS**

Nezaket YILDIRIM<sup>1</sup>, Hande YEŞİLBAŞ<sup>1</sup>, Filiz KANTEK<sup>1</sup>  
<sup>1</sup>Akdeniz University

### **Goal:**

Educating nurses with high emotional intelligence skills is one of the goals of nursing education. The aim of the study is to investigate the effect of students' gender and educational process on emotional intelligence using meta-analysis method.

### **Methods:**

Meta analysis method was used in the study. Web of Science (WoS), Scopus, MEDLINE, CINAHL Complete, Pubmed, Google Scholar, EBSCO Host, ULAKBİM databases were scanned to access the studies. For the literature screening, the keywords "nursing", "student", "emotional intelligence" and their Turkish equivalents "nursing", "student", "emotional intelligence" were used respectively. Nine studies to determine the effect of gender on emotional intelligence and five studies to determine the effect of education on emotional intelligence met the inclusion criteria. CMA (The Comprehensive Meta-Analysis Software) statistics program was used in the analysis of the data.

### **Findings:**

The total sample size for gender in the study was 1945, 506 of them were male and 1439 were female students. The total sample size for education was 469, 265 of them were 1st grade students and 204 were 4th grade students. As a result of the heterogeneity test, it was determined that the studies on gender and education showed homogeneous characteristics. As a result of the publication bias test, it was determined that there was no publication bias. According to the fixed effect model, the average effect size of gender on emotional intelligence was calculated as 0.088, and the average effect size of the education on emotional intelligence at 95% significance level was calculated as 0.189.

### **Results:**

The results of this study revealed that the effect of gender and education on emotional intelligence in nursing students is insignificant.

**Keywords :** Emotional intelligence, nursing, student

## **THE EFFECT OF PERCEIVED SOCIAL SUPPORT ON PREGNANCY STRESS**

Nülüfer ERBİL<sup>1</sup>, Özlem AKIN<sup>2</sup>

<sup>1</sup> Ordu University, Department of Nursing, Faculty of Sciences, <sup>2</sup>Department of Nursing, Institute of Health Sciences, Ordu University

### **Goal:**

This study was conducted to determine the effect of social support on pregnancy related stress of pregnant women.

### **Methods:**

The sample of this descriptive and cross-sectional study were included 460 pregnant women who admitted to outpatient clinic of the university hospital of two provinces in the Black Sea region of Turkey. The Personal Information Form prepared by the researchers and the "Pregnancy Stress Rating Scale-36 (PSRS-36)" and the "Multidimensional Scale of Perceived Social Support-MSPSS" were used to collect the data. Descriptive statistical methods, MannWhitney U Test, Student t test, One Way ANOVA, Kruskal Wallis test, correlation analysis and linear regression analysis were used in the evaluation of the data.

### **Findings:**

It is determined that the average age of the pregnant women was  $28.23 \pm 5.04$ . It was found that the PSRS-36 scale mean score was  $55.01 \pm 24.33$  (range 1-124) and the MSPSS mean score was  $65.63 \pm 16.75$  ( range 12-84). While there was no relationship between PSRS-36 and total MSPSS ( $p > 0.05$ ), only a weakly significant relationship was found between the "a special person" subscale of MSPSS ( $p < 0.05$ ). The difference between the groups in terms of the mean PSRS-36 scores according to the age, educational status, city of residence, spouse occupation, duration of marriage, relationship with spouse, number of pregnancies, number of living children and week of gestation were found to be statistically significant ( $p < 0.05$ ). The difference in MSPSS mean score was found to be statistically significant according to education status, profession, spouse's education, family type and family income level and relationship with spouse, number of pregnancies, number of living children, pregnancy and birth education ( $p < 0.05$ ). In addition, it was determined that the differences between the groups were statistically significant with high MSPSS scores in those who had their first pregnancy, those who didn't have a living child those who received pregnancy and birth training, and those who received support during pregnancy. When the test results regarding the significance of the regression coefficients were examined, it was found that the important predictors were the week of gestation ( $p < 0.01$ ), the relationship level of the pregnant woman with her partner ( $p < 0.01$ ), and the age of the pregnant woman ( $p < 0.05$ ).

### **Results:**

As a result, pregnancy stress is related to a "special person" subscale of multidimensional social support. In addition, the pregnancy week, relationship with partner and age of the pregnant woman were important predictors on pregnancy stress.

**Keywords :** Nursing, perceived social support, pregnancy stress

## LOCKDOWN DURING COVID-19: WHAT SUPPORT DO STUDENTS REQUIRE?

Albara ALOMARI<sup>1</sup>, Ritin FERNANDEZ<sup>2</sup>, Heidi LORD<sup>2</sup>

<sup>1</sup>Western Sydney University, <sup>2</sup>University of Wollongong

### **Goal:**

The Covid-19 pandemic has had a substantial impact on global population health and has caused varying degrees of social disruption. In Australia, there have been considerable public health measures undertaken to contain the spread of Covid – 19 by forcing communities into lockdown. During Covid -19 pandemic, universities were forced to abruptly reorganise traditional methods of teaching to comply with social distancing and congregation restrictions that sought to reduce the impact and spread of Covid –19 within the university and wider community.

The abrupt change to this routine potentially caused many students problems with social connection, peer support, university organisational connection and university organisational support. Compounding these challenges was the tertiary sectors' ability to adjust to this rapid change with areas such as existing IT infrastructure, IT support for staff and students, and digital literacy requiring rapid resources support and adjustment.

This study aimed to explore the perceptions of the support required by undergraduate student nurses' during the Covid -19 pandemic.

### **Methods:**

A convenience sample of university students who were enrolled in the Bachelor of Nursing (BN) program at one metropolitan university in New South Wales Australia were eligible to participate in the study. Data were collected via an online cross-sectional survey delivered using SurveyMonkey.

### **Findings:**

The participants in this study identified financial needs as their major concern, worried that the worsening financial situation that resulted from Covid -19 will impact their study progress. Four primary themes emerged, Support beyond academia, Academic support, Online learning readiness and Clinical practice units and clinical placement

### **Results:**

This study illustrates the challenges that students faced during the Covid -19 pandemic and offers a unique insight into a student's life during the university lockdown period. Addressing the factors identified by students could assist in shaping future crisis policy within universities so students are well supported to complete their studies.

This presentation will highlight:

- The perspectives of undergraduate nurses and the perceived support they require from the university
- The challenges of undergraduate nurses during the pandemic
- The needs of undergraduate nurses during pandemic for class and clinical teaching
- The effect of the pandemics on the undergraduate nurses emotionally and academically

**Keywords :** Covid - 19, student support, university support

## **THE EFFECTS OF DIFFERENT SIMULATION METHODS CRITICAL THINKING DISPOSITIONS AND SELF-EFFICACY LEVELS OF STUDENTS IN NURSING EDUCATION**

Pınar DOĞAN<sup>1</sup>, Merdiye ŞENDİR<sup>2</sup>

<sup>1</sup>Istanbul Medipol University, Faculty of Health Sciences, Nursing Department, <sup>2</sup>University of Health Sciences, Hamidiye Faculty of Nursing

### **Goal:**

This study is a pretest-posttest with control group with experimental desing and it aims to determine the effects of different simulation methods on students? critical thinking dispositions and self-efficacy levels in nursing education.

### **Methods:**

While the population of this study was composed of 71 nursing students who were studying nursing at Istanbul Medipol University from February to July 2014. The study sample consisted of among the nursing students who were willing and volunteer participate in the research Research data is collected from; “Structured Student Information Form”, “The California Critical Thinking Disposition Inventory (CCTDI)”, “Self-Efficacy Scale(SE)”, “Knowledge Exam”, “Objectively Structured Clinical Exam(OSCE)” and “Simulation Evaluation Survey”.

### **Findings:**

It is determined that the mean age of the students was  $20.39 \pm 0.87$ . According to the study groups of students (which are HFPS, SP, Control), when knowledge exam score and CCTDI average scores were evaluated in before and after the simulation, there were no statistically significant differences in groups ( $p > 0.05$ ). When the SE scores were examined, mean scores of both HFPS and SP groups were no significantly significant difference and there was statistically significant lower than that SE scores of Control group ( $p < 0,05$ ). In addition, when the mean OSCE scores are analyzed by two independent observers, in the subscale of “communication”, the means score of HFPS group were significantly higher than that of SH group ( $p < 0.001$ ). Moreover, the students in HFPS group had higher mean scores than the students of SP group when the Simulation Evaluation Survey was examined, and there was no statistically significant difference in between groups ( $p > 0.05$ ).

### **Results:**

In a conclusion, it was determined to be positive effects of different simulation methods respectively HFPS and SP on students? critical thinking dispositions and the self-efficacy levels of nursing students.

**Keywords :** Critical thinking-self efficacy, nursing education, simulation

## **EVALUATING OF HEALTH LITERACY IN HEART FAILURE PATIENTS**

Berna DINCER<sup>1</sup>

<sup>1</sup>Istanbul Medeniyet University, Faculty of Health Sciences, Department of Internal Medicine Nursing

### **Goal:**

Being chronic, progressive, and common, heart failure is one of the leading causes of morbidity and mortality. As being one of the most important factors managing this illness, health literacy is knowledge, motivation, and sufficiency that accessing, understanding, measuring, and using of essential medical knowledge to prevent illnesses, and making decisions in their daily lives, to increase the quality of life. Profiling the level of health literacy of heart failure patients is important for managing chronic illnesses and preventing complications. The aim of this study was to evaluate the level of health literacy of heart failure patients.

### **Methods:**

A descriptive, cross-sectional, target population study was formed by 110 patients which consulted to a cardiology polyclinic of a university hospital between 1 March 2019 and 1 August 2019. Data of the study was collected with patient information form and survey of Health Literacy Research – European Union (HLR-EU). Permission was obtained from the ethical committee (2019\0102) to carry out the study.

### **Findings:**

The average age of the patients is  $50.75 \pm 2.15$  and %48.7 is female and %75.7 is married. Also, %61,8 of the patients stated that they are members of a midlevel economical class. The health literacy index point average of patients is  $31.3 \pm 9.7$  over 50. When health literacy of patients analyzed according to index point average, %20,8 has insufficient, %34,7 has restricted, %20,5 has sufficient, and %23,9 has the perfect level of health literacy. It is detected negative correlation ( $r: -.123$   $p: 0.041$ ) between HLR-EU and age.

### **Results:**

More than half of heart failure patients are identified as having insufficient and restricted health literacy. It is important to develop the level of health literacy of patients and to expand awareness on hospital administrations, healthcare staff, patient companions, and all segments of society.

**Keywords :** Cardiology, health literacy, heart failure, patients.



## INTRODUCTION

Heart failure, which is a chronic, progressive and common disease, is among the important causes of mortality and morbidity. (Degertekin et al., 2012; Ponikowski et al., 2016; Benjamin et al., 2017). With the progression of the disease, the difficulties experienced such as increase in symptom burden, limitations in work life, negative influence in sexual life, weakening in social relations and spiritual well-being, and side effects due to the treatments used cause deterioration in the self-care of patients. Self-care of patients is important in the prognosis of heart failure. (Conley et al., 2015; Garin et al., 2014; Rogers et al., 2010; Staniute et al., 2015) As stated in the guidelines of ESC (2012), self-care in HF is an important part of successful treatment and care and has a significant effect on symptoms, general health and disease management (McMurray et al., 2012). In developing self-care, it is important to reach the right information and practices. With the widespread use of technology, it was possible to reach a lot of information through the media and the internet. However, in order to reach real and reasonable information, it must be able to obtain and critically evaluate the information. This condition is called Health literacy (Mancusa 2008).

"Health literacy", which is one of the important factors in managing chronic diseases of individuals, is linked to general literacy, to make decisions about people's health in their daily lives, to increase and maintain their quality of life, to access, understand, evaluate and use the necessary health information to improve their health and prevent diseases. information, motivation and competence to provide (Başgöl, 2016). Health literacy is defined by the World Health Organization (WHO) as "the cognitive and social skills of individuals about access to health information, their ability to understand and use information and their desires in order to maintain and improve health well-being". (<http://www.who.int/healthpromotion/conferences/7gchp/track2/en>).

It is up to health professionals to determine the current situation of individuals in health literacy and to provide the necessary information. By increasing the health literacy of individuals, their effective and correct use of health services and their compliance with drugs and diseases increase (Mancusa, 2008; Başgöl, 2016). In the light of all this information, the aim of this study is to determine the health literacy levels of patients with heart failure.

## METHODS

This descriptive and cross-sectional study was conducted with heart failure patients who applied to the cardiology clinic of a training and research hospital in Istanbul, Turkey, between 1 March 2019 and 1 August 2019. The population of the study was composed of 110 patients with heart failure who applied to the cardiology outpatient clinic of a training and research hospital in Istanbul. The criteria for inclusion of patients in the study were; a) having received a diagnosis of class 1, 2 and 3 heart failure according to the New York Heart Association (NYHA), b) being 18 years of age or older, c) being literate and able to speak in Turkish, d) obtained normal scores for patients over 65 years from the Mini Mentality Test, and e) volunteered to participate in the research. Patients who were class 4 according to NYHA functional classification of heart failure were not included in this study due to medical and ethical reasons and the fact that they showed severe symptoms.

### Data collection

Data of the study was collected with patient information form and survey of Health Literacy Research – European Union (HLS-EU).

*Patient Informaiton Form:* The form that was prepared by the researchers as a result of literature review was comprised of 5 questions including the sociodemographic features.

*European Health Literacy Scale ((HLS-EU):*This scale, developed by the HLS-EU, is a self-report measure used to evaluate the HL level for individuals over 15 years old. It includes three topics (treatment, prevention from diseases and improving health) and 47 items. Each item has four possible answers: 1 = Very difficult, 2 = Difficult, 3 = Easy and 4 = Very easy. A ‘Don't know’ answer is coded as 5. The total score ranges from 47 to 188. To ease the calculation, the total score was standardised between 0 and 50 via a formula. Categories were created as 0–25, insufficient HL; >25 to ≤33, problematic-limited HL; >33 to ≤42, sufficient HL; >42 to 50, perfect HL (HLS-EU Consortium, 2012). A Cronbach's alpha coefficient for the whole scale was .95 in validity and reliability of the Turkish version (Abacigil et al. 2018).

### **Ethical considerations**

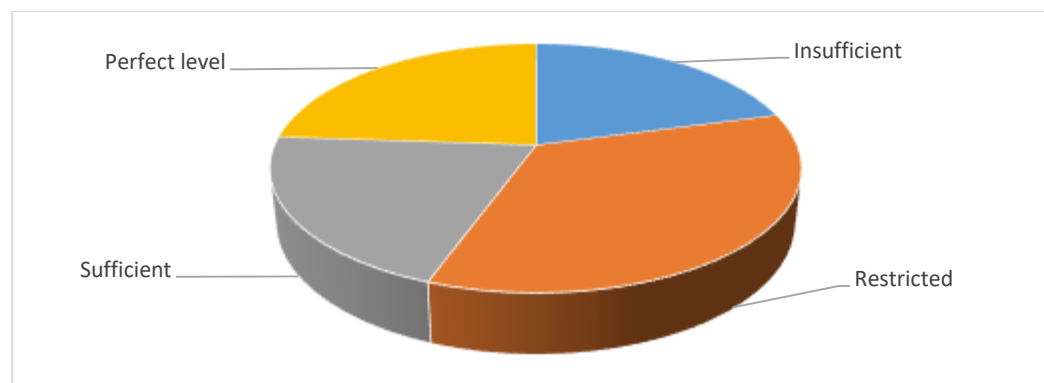
In order to conduct the research, consent was obtained from the Ethics Committee (2019\0102) and the research institution. Written permission was obtained from the owner of the scales used. In addition, the study was initiated by obtaining the voluntary consent of the patients included in the study. The study was conducted in accordance with the Declaration of Helsinki.

### **Data analyses**

Data were analyzed using SPSS (Statistical Package for Social Sciences, Chicago, Illinois) version 16.0. The Shapiro Wilks test was used to assess whether the data had a normal distribution. In the statistical evaluation of the data, the averages, percentages, frequencies, mean values (min – max) were calculated. For determining the correlation between the HLR-EU and age Pearson Chi-Square Test were also used. All results were considered statistically significant at p value <0.05 and a confidence interval of 95%.

### **FINDINGS**

The mean age of the participants was  $50.75 \pm 2.15$  (min:39, max. 79), 48.7% were women, the majority were married (75.7%). Also, %61.8 of the patients stated that they were member of midlevel economical class.



Health literacy index point average of patients was  $31.3 \pm 9.7$  over 50. When health literacy of patients analyzed according to index point average, 20.8% had insufficient, 34.7% had restricted, 20.5% had sufficient, and 23.9% had perfect level of health literacy.

**Table 1. HLS-EU and Age correlation**

Scale	$\bar{x} \pm Sd$	Age	
		r	p
SOYA-AB	31.3±9.7	-.123	0.041

It was detected negative correlation (r: -.123 p: 0.041) between HLR-EU and age.

## RESULTS

More than half of heart failure patients are identified as having insufficient and restricted health literacy. It is important to develop the level of health literacy of patients and to expand awareness on hospital administrations, healthcare staff, patient companions and all segments of society.

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**THE EFFECT OF REIKI THERAPY ON CANCER PAIN MANAGEMENT IN  
PALLIATIVE CARE PATIENTS: A SYSTEMATIC REVIEW**

Dilek YILDIRIM<sup>1</sup>, Meryem ERCEYLAN<sup>2</sup>

<sup>1</sup>Istanbul Sabahattin Zaim University, Faculty of Health Sciences, Department of Nursing

<sup>2</sup>Istanbul Kent University, Faculty of Health Sciences, Department of Nursing

**Goal:**

This systematic review was conducted to demonstrate the effectiveness of the use of reiki therapy in cancer pain management and to draw attention to the availability of this application in palliative care units.

**Methods:**

The studies on cancer pain management, both in English and Turkish, whose full text versions were accessible, were systematically analyzed, the studies without full text were not included. The study was conducted by reviewing CINAHL, EBSCOhost, MEDLINE, ScienceDirect, Ovid, ProQuest, Web of Science ULAKBİM National DataBases. Keywords such as "Cancer Pain", "Cancer Pain Management", "Reiki" and "Palliative Care" were used to access the studies. 19 research papers were accessed and 5 of them were found to be compatible with the inclusion criteria of our study. Cochrane was established as the guideline to determine levels of evidence.

**Findings:**

While, three were experimental studies, and the other one was meta-analysis. In our day, randomized controlled studies examining the effect of reiki therapy on pain in cancer patients who receive palliative care are limited. In particular, studies have shown that reiki is even more effective in reducing pain when used in addition to pharmacological treatment and conventional nursing care. Pain assessments are usually performed with visual scale and numeric scale, reiki sessions are performed in the range of 10-90 minutes and 2-6 sessions per week.

**Results:**

When we examine the effect of Reiki on physical and psychological recovery in cancer patients treated in palliative care, it is reported that reiki has a positive effect on reducing pain.

**Keywords :** Cancer pain, cancer pain management, palliative care, reiki

**THE EFFECT OF HEALTH BELIEF MODEL BASED CREATIVE DRAMA EDUCATION ON THE HEALTH LOCUS OF CONTROL AND PERCEPTION OF SMOKING IN ADOLESCENCE**

Sultan Esra Sayar<sup>1</sup>, Cantürk Çapık<sup>2</sup>

<sup>1</sup>Atatürk University, Faculty of Health Sciences <sup>2</sup>Atatürk University, Department of Nursing

**Goal:**

This study aims to investigate the effect of the health belief model based creative drama education on the health locus of control and perception of smoking in students.

**Methods:**

This randomized experimental study with a control group was conducted in two secondary schools located in the province of Erzurum, Turkey, between January and December 2019. The study sample consisted of 80 patients determined by the power analysis. Three instruments were used in the data collection: Personal Information Form, Multidimensional Health Locus of Control Scale and Decisional Balance Scale. The students in the experimental group were given 6 sessions of creative drama training based on the health belief model. SPSS 20.0 statistical package program was used for the coding, statistical analysis and evaluation of the data. In the evaluation of the data, the mean, standard deviation, number and percentages, as well as the analyses such as independent samples chi square analysis, ttest, Mann Whitney – U test and Paired Samples t test were used in statistical comparisons according to the characteristics of the data

**Findings:**

There was a significant increase in the internal control sub-dimension ( $T = -5.090$ ;  $p = 0.000$ ) of the Multidimensional Health Locus of Control Scale ( $T = -5.090$ ;  $p = 0.000$ ) and a significant decrease in the external control sub-dimension ( $U = -3.369$ ;  $p = 0.001$ ). In the Decision Balance Scale, there was a significant decrease in the post-test score of the benefit subscale ( $T = -5.535$ ;  $p = 0.000$ ) of the students in the experimental group, and a significant increase in the loss subscale ( $U = -3.934$ ;  $p = 0.000$ )

**Results:**

Drama applications have led to a positive change in health locus of control and perception of smoking. From this perspective, it may be recommended to integrate drama applications into health education, and to ensure students' active participation in this education.

**Keywords** : Creative drama, health belief model, locus of control, nursing, perception of smoking

## **KNOWLEDGE LEVELS OF NURSING STUDENTS REGARDING RATIONAL USE OF DRUGS**

Yeliz SÜRME<sup>1</sup>, Gökçen AYDIN AKBUĞA<sup>2</sup>  
<sup>1</sup>Erciyes University <sup>2</sup>Bozok University

### **Goal:**

This descriptive study was aimed to evaluate the knowledge levels of the nursing students regarding rational drug use.

### **Methods:**

The universe of the study is composed of nursing students of Yozgat Bozok University Faculty of Health Sciences. 257 nursing students who volunteered to participate in the study and who could be reached online between 01.11.2020-12.11.2020 were included in the study. Ethical approval was obtained from the Yozgat Bozok University ethics commission, and verbal and written consent was obtained from the students before starting the study. The data were collected using the sociodemographic information form and the Rational Drug Use Scale. The Shapiro-Wilk test was used to check whether the numerical data were suitable for normal distribution. Descriptive statistics such as number, percentage, mean, standard deviation and Man Whitney U test, Kruskal Wallis analysis were used in the analysis of the data.

### **Findings:**

It was determined that 79.4% of the students were women, 34.6% were in the second grade, and the average age was  $20.37 \pm 1.81$ . We found that 79.0% of the students chose the profession willingly, 96.1% did not have any chronic diseases and 97.7% did not have a regular medication and 79.0% of the students had not received training on rational drug use before. The mean score of rational drug use scale of the students was found to be  $33.43 \pm 2.93$ , and 77.4% of them had insufficient knowledge (scale score  $\leq 34$ ). Statistically significant difference was not found between the mean score of the scale and the descriptive characteristics such as age, gender, grade level, presence of chronic disease, and prior rational drug use training ( $p > 0.05$ ).

### **Results:**

As a result, it was found that more than half of the nursing students had insufficient knowledge regarding rational drug use. Nursing students should be educated regarding rational drug use throughout their undergraduate education, the effectiveness of the education should be evaluated and support should be provided to develop attitudes and behaviors.

**Keywords :** Knowledge level, nursing, rational medicine, student

## INTRODUCTION

Rational drug use has been defined by the World Health Organization (WHO) as the use of drugs at doses that meet their personal needs, for a sufficient period of time, with the least cost to themselves and the community (World Health Organization, 1987). Irrational drug use is one of the most basic health problems in the world, especially in developing countries, and is a difficult habit to treat. This situation causes both economic problems and many health problems (Ekenler & Koçođlu, 2016). In addition, irrational drug use causes increased antimicrobial resistance, drug reactions, serious morbidity and mortality in chronic diseases (Akıcı et al., 2002; Aydın & Gelal, 2012; Alper, 2006). It is the duty of the physician to initiate drug treatment, and its application and monitoring are among the duties of the nurse. Ensuring the use of drugs within safety criteria is among the most important responsibilities of nurses. Nurses, who observe the effects and side effects of the drugs and evaluate the patient first and inform the physician in case of a negative situation, should evaluate the effect, side effect, application method and interaction with other drugs and apply the right drug to the right person at the right time, in the right way (Özer & Özdemir, 2009; Gürol Arslan & Eşer, 2005). Nurses should comply with the principles of rational use of drugs both in the treatment of their own diseases and in the treatment of hospital patients. This situation reveals the need for nurses to act rationally in drug use and administration. Rational drug use is an important habit that should be acquired by nurses and nursing students.

When the literature is examined, there are a limited number of studies evaluating the rational drug use of nursing students. Therefore, this study aimed to evaluate the knowledge levels of the nursing students regarding rational drug use.

## METHOD

### Study Design and Sample

This is a descriptive, cross-sectional and self-reported study. The universe of the study is composed of nursing students of Yozgat Bozok University, Faculty of Health Sciences. 257 nursing students who volunteered to participate in the study and could be reached online between November, 2020 were included in the study.

### Ethical Considerations

Ethical approval was obtained from the Yozgat Bozok University ethics commission (2020:15/08), and verbal and written consent was obtained from the students before starting the study.

### Data Collection

The data were collected using the sociodemographic information form and the Rational Drug Use Scale.

**Sociodemographic information form:** This form, which was created by the researchers by scanning the literature (Özer & Özdemir, 2009; Alper, 2006; Gürol Arslan & Eşer, 2005) consists of 8 questions containing introductory information such as age, gender, class, presence of chronic disease.

**Rational Drug Use Scale:** It is a 21-item scale, which was validated and reliable by Demirtaş et al., 2018 and used to determine the level of rational drug use knowledge. Correct answer received in scale items is evaluated as 2, I do not know 1, and wrong answer as 0 points. 35 points and above, rational drug usage knowledge is considered sufficient. It is accepted that the score obtained from the survey increases as the level of knowledge increases.



The questionnaire were uploaded to the Google form by the researchers. The questionnaire link was sent to the students via WhatsApp. Participants filled in on a voluntary basis via mobile phone or computer.

### Statistical analysis

The Shapiro-Wilk test was used to check whether the numerical data were suitable for normal distribution. Descriptive statistics such as number, percentage, mean, standard deviation and Man Whitney U test, Kruskal Wallis analysis were used in the analysis of the data.

## FINDINGS AND DISCUSSION

It was determined that 79.4% of the students were women, 34.6% were in the second grade, and the average age was  $20.37 \pm 1.81$ . We found that 79% of the students chose the profession willingly, 96.1% did not have any chronic diseases and 97.7% did not have a regular medication and 79% of the students had not received training on rational drug use before. The mean score of rational drug use scale of the students was  $33.43 \pm 2.93$ , and 77.4% of them had insufficient knowledge (scale score  $\leq 34$ ) (Table 1)

**Table 1.** Distribution of students according to their sociodemographic characteristics (N=257)

<b>Sociodemographic characteristics</b>	<b>n</b>	<b>%</b>
<b>Gender</b>		
Female	204	79.4
Male	53	13.3
<b>Age</b>		
18-20	158	61.5
21-22	82	31.9
23-32	17	6.6
<b>The mean age <math>\pm</math> standard deviation</b>	20.37 $\pm$ 1.81	
<b>Grade</b>		
1 <sup>st</sup> Grade	51	19.8
2 <sup>nd</sup> Grade	89	34.6
3 <sup>th</sup> Grade	59	23.0
4 <sup>th</sup> Grade	58	22.6
<b>Choosing Voluntarily the Profession of Nursing</b>		
Yes	203	79.0
No	54	21.0
<b>Chronic illness *</b>		
Yes	10	3.9
No	247	96.1
<b>Presence of regularly used drugs **</b>		
Yes	6	2.3
No	251	97.7
<b>Having received rational drug use training before</b>		
Yes	54	21.0
No	203	79.0
<b>Thinking that the education received is sufficient</b>		
Yes	25	32.1
No	29	37.2
Partially	24	30.8

<b>Rational drug use information status</b>		
Sufficient (scale score $\geq 35$ )	58	22.6
Insufficient (scale score $\leq 34$ )	199	77.4
<b>Rational drug use scale mean score</b>	33.43 $\pm$ 2.93	

Statistically significant difference wasn't found between the mean score of scale and descriptive characteristics such as age, gender, grade level, presence of chronic disease, and prior rational drug use training ( $p > 0.05$ ) (Table 2).

**Table 2.** Distribution of rational drug use scale scores by socio-demographic characteristics of students (N=257)

<b>Socio-demographic characteristics</b>	<b>Rational drug use scale mean score Mean<math>\pm</math> SS</b>	<b>Median (Min-Max)</b>
<b>Gender</b>		
Female	33.44 $\pm$ 3.12	33(24-63)
Male	33.39 $\pm$ 2.01	33(30-38)
Test*	P=0.479 U=5070.000	
<b>Age</b>		
18-20	33.66 $\pm$ 3.41	33(24-63)
21-22	33.14 $\pm$ 1.86	33(31-42)
23-32	32.70 $\pm$ 2.02	32(30-39)
Test**	P=0.164 $\chi^2=3.617$	
<b>Grade</b>		
1 <sup>st</sup> Grade	33.58 $\pm$ 2.69	33(31-35)
2 <sup>nd</sup> Grade	33.92 $\pm$ 3.96	33(32-35)
3 <sup>th</sup> Grade	33.27 $\pm$ 2.30	33(32-34)
4 <sup>th</sup> Grade	32.72 $\pm$ 1.25	33(32-33)
Test**	P=0.115 $\chi^2=5.922$	
<b>Choosing Voluntarily the Profession of Nursing</b>		
Yes	33.35 $\pm$ 3.05	33(32-34)
No	33.74 $\pm$ 2.39	33(32-35)
Test*	P=0.150 U=4793.000	
<b>Chronic illness *</b>		
Yes	32.40 $\pm$ 1.34	32 (31-34)
No	33.47 $\pm$ 2.97	33(32-34)
Test*	P=0.199 U=944.000	
<b>Having received rational drug use training before</b>		
Yes	32.90 $\pm$ 1.15	33(32-34)
No	33.57 $\pm$ 3.23	33(32-35)
Test*	P=0.473 U=5138.000	

In our study, it was found that the average age of the students was  $20.37 \pm 1.81$  and 79.4% of them were women. Our study findings are in line with the literature (Karaman et al., 2019; Açıksöz et al., 2020; Kus, 2016). In our study, 3.9% of the students reported that they have a chronic disease. Similar to our study, Açıksöz et al. 2020, stated that 4.6% of the students had chronic diseases in their study.

In our study, it was found that 77.32% of the students had insufficient knowledge of rational drug use (scale score  $\leq 34$ ) and the mean score was  $33.43 \pm 2.93$ . Similar to our study, it was stated that the average score of the rational drug use scale of patients who applied to the family health center was  $33.6 \pm 6.2$  (Demirtaş et al., 2018). This situation reveals the necessity of increasing the rational drug use knowledge and attitude in nursing students who would educate the patients and society.

In our study, no significant difference was found between the presence of chronic disease and the level of rational drug use knowledge ( $p > 0.05$ ). In the study of Karaman et al., 2019, it was determined that students with chronic diseases use drugs more frequently, but there is no difference between chronic disease and taking the drug with prescription and on time, and reading the prospectus without using drugs. In this respect, there is similarity with our study findings. This may be due to the low proportion of students with chronic diseases.

## CONCLUSION AND RECOMMENDATIONS

As a result, it was found that more than half of the nursing students had insufficient knowledge regarding rational drug use. Nursing students should be educated regarding rational drug use throughout their undergraduate education, the effectiveness of the education should be evaluated and support should be provided to develop attitudes and behaviors.

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**DRAMATIC EFFECTS OF "STAY HOME": COVID-19 PANDEMIC AND ELDERLY FROM THE PERSPECTIVE OF SENIOR NURSING STUDENTS**

Gizem Deniz Bulucu Büyüksoy<sup>1</sup> Aslıhan Çatıker<sup>2</sup>, Kamuran ÖZDİL<sup>3</sup>, Gülhan Küçük Öztürk<sup>3</sup>,  
<sup>1</sup>Kırşehir Ahi Evran University <sup>2</sup>Ordu University <sup>3</sup>Nevşehir Hacı Bektaş Veli University

**Goal:**

The COVID-19 created a public health emergency at a global level (Huang et al. 2020). In most countries, restrictions were introduced on older adults were asked to stay at home to reduce physical contact with others. These social events have led to medical, social, psychological and religious problems (Burlacu et al. 2020). This study aims to examine the attitudes of senior nursing students regarding ageism as well as their views of the problems the elderly faced during the COVID-19 pandemic.

**Methods:**

The present study is a mixed study with quantitative and qualitative dimensions and it was conducted in a nursing school. The quantitative part of the research was conducted with 75 senior students, 13 of whom were also included in the qualitative part of the study. Quantitative data were collected using the Introductory Information Form and the Ageism Attitude Scale and qualitative data using a semi-structured interview form. Descriptive statistics, independent samples t-test, one-way analysis, Mann–Whitney U, and Kruskal–Wallis tests and content analysis were used.

**Findings:**

In the quantitative part of the study, it was determined that all students had positive attitudes toward the older adults. In the qualitative part of the study, their views of the elderly during the pandemic were distributed among the main themes of Vulnerable, Emotional Shake, Culture, and Iceberg. The nursing students stated that the pandemic process had made older adults more vulnerable and the cultural values of countries had been affected by the pandemic. According to the interviews, the older adults felt emotionally exhausted as they were no longer able to perform their usual social activities. The students reported that various existing or potential issues, such as the invisible face of the iceberg, would continue affecting the older adults.

**Results:**

In line with these results, it can be said that it is necessary to develop short- and long-term solutions for existing or potential health problems the older adults had or will have during the COVID-19 pandemic.

**Keywords :** Ageism, health promotion, nursing students, older adults, pandemics

## **PHYSICIAN-NURSE AND NURSE-NURSE COLLABORATION FROM THE PERSPECTIVE OF NURSES**

Ebru ŞAHİN<sup>1</sup>, Aslıhan ÇATIKER<sup>1</sup>, Kamuran ÖZDİL<sup>2</sup>

<sup>1</sup>Ordu University, Faculty of Health Sciences, Nursing Department <sup>2</sup>Nevşehir Hacı Bektaş Veli University, Health Services Vocational School, Aged Care Program

### **Goal:**

Physicians and nurses are the two most critical healthcare service providers in the clinical environment. The study aims to determine the physician-nurse and nurse-nurse collaboration levels of nurses and effective factors.

### **Methods:**

The study was carried out as a cross-sectional research. The sample of the study included 477 nurses with at least one year of professional experience. The data of the study were collected through “Nurse Identifying Information Form”, “The Jefferson Scale of Attitudes Toward Physician–Nurse Collaboration (JSAPNC), and “Nurse-Nurse Collaboration Scale” (NNCS). In the assessment of the data, descriptive statistics (mean, standard deviation, frequency) were used, and as the quantitative data did not show normal distribution, Mann Whitney U test, Kruskal-Wallis test and Spearman correlation analysis and Multiple Linear Regression Analyses were employed. In order to conduct the study, necessary permissions were obtained from X University Non-invasive Clinical Research Ethics Committee and the management of hospitals where the study would be carried out.

### **Findings:**

It was determined that JSAPNC mean score of the nurses participating in the study was  $49.23 \pm 7.99$  (Min:16; Max:60), and in the evaluation of sub-dimensions, “Nursing services in patient care” sub-dimension had the lowest mean score ( $9.81 \pm 2.07$ ). It was also found that NNCS mean score was  $2.92 \pm 0.46$  (Min:1.12; Max:4). It was also identified that as the ages, education levels and the length of professional experience of the nurses increased, the mean scores from NNCS decreased. Besides, it was determined that the mean scores of collaboration between the nurses varied depending on the marital status, hospital type, working unit, working status, employment type, working speed and that the difference between them was statistically significant.

### **Results:**

Physician-nurse and nurse-nurse cooperation are affected by a variety of factors. Healthcare services can be affected by nurses’ collaboration and communication with physicians and colleagues.

**Keywords :** Nurse- nurse collaboration, nursing, physician-nurse collaboration, quantitative research, teamwork

**THE EFFECTS OF ACTIVE AND PASSIVE DISTRACTION METHODS ON PAIN, FEAR AND ANXIETY DURING THE INVASIVE PROCEDURE IN CHILDREN**

Ayşe Gökoğlu<sup>1</sup>, Özge Sukut<sup>2</sup>

<sup>1</sup>Gumushane University, Faculty of Health Sciences, Department of Nursing, Gumushane

<sup>2</sup>Istanbul University-Cerrahpasa, Florence Nightingale Nursing Faculty, Department of Mental Health and Psychiatric Nursing, Istanbul

**Goal:**

Taking blood, IV, IM, SC initiatives, which are frequently applied in children aged 3-7, cause pain, anxiety and fear in the child. Knowing the pharmacological and non-pharmacological methods used to prevent pain, anxiety and fear in the process of invasive procedure makes the application easier and more comfortable for the child and family<sup>1,2,3,4</sup>. The research was carried out to investigate the effect of cartoon-demonstration and video-game playing application which are known as passive methods used before, during and after the invasive operation, on the pain, fear and anxiety of children aged between 3-7.

**Methods:**

The sample was conducted between November, 26th 2019 and January, 8th 2020 with 105 inpatient children who were 3 to 7 years old in General Pediatrics clinic at Training Research Hospital, in Istanbul. Children were divided into 3 groups by randomly each consisting of 35 children: the first as control group, second as cartoon-demonstration group and third as video-game playing group. The data were collected via the “Information form”, “Oucher Scale”, “Children’s Anxiety Scale- State Inventory” and “Children’s fear Scale”. The analysis of the collected data was conducted on SPSS program, via chi-square test, One-Way Anova and repeated measures analysis.

**Findings:**

It was found that, the children in control group had significantly high scores ( $p<,001$ ) in pain, anxiety and fear, when compared to cartoon-demonstration and video game playing group in before, during and after the invasive operation. While both cartoon-demonstration and video-game playing group went through less pain, anxiety and fear in comparison with control group ( $p<0,01$ ), video-playing game was found to result in lower points when compared to cartoon watching and control group before, during and after invasive operation ( $p<0,01$ ).

**Results:**

As a result, it was found out that both cartoon-demonstration and video-playing methods in order to decrease the pain, anxiety and fear during the invasive operations were effective methods to distract children, among these two, video-game playing method was found to be more preferable.

**Keywords :** Anxiety, child inpatient invasive intervention, fear, pain

**THE RELATIONSHIP BETWEEN COMPULSORY CITIZENSHIP BEHAVIORS  
AND PRESENTEEISM IN NURSES**

Esengul Elibol<sup>1</sup>, Merve Tarhan<sup>2</sup>, Arzu Kader Harmancı Seren<sup>3</sup>

<sup>1</sup>Istanbul Bilgi University <sup>2</sup>Istanbul Medipol University <sup>3</sup>University of Health Sciences

**Goal:**

Presenteeism refers to the behavior of attending work while ill (Johns, 2010). Employees in the healthcare sector, are forced to presenteeism behavior with different reasons (compulsory citizenship behavior, fear of dismissal etc.). Compulsory citizenship behavior (CCB) is defined as involuntary organizational citizenship behaviors or extra-role behaviors out of social pressure (Vigoda-Gadot, 2007). Presenteeism may be viewed as a form of CCB in that nurses may feel obliged to work while being ill. The aim of this study is to determine the level of CCB and presenteeism in nurses and to investigate the relationship between presenteeism and CCB.

**Methods:**

In this descriptive and cross-sectional study, 348 nurses were selected using random sampling from the five private hospitals affiliated with a university in Istanbul. The data were collected between January and April 2019 and analyzed using personal information form, Stanford Presenteeism Scale and The Compulsory Citizenship Behavior Scale were used. Descriptive statistics, Chi-square, Kruskal Wallis and Spearman's correlation analysis were performed.

**Findings:**

The mean age of the nurses was 27.45 (SD 7.08) (19-56) years, %81.3 female. The total mean CCB scale score was 2,5±1,4 and presenteeism total scale score was 2,09±1,13. There was a significant difference between the income level and CCB mean scores of nurses. There was a significant difference between the nurses' work shift and the CCB, SPS mean scores. It has been found that the nurses who work at night shift have a higher mean score than morning shift and rotating shifts.

**Results:**

Results indicated that nurses exhibit compulsory citizenship behaviors and presenteeism behaviors at a mid-level. There was a weak significant positive correlation between the nurses' CCB and SPS mean scores.

**Keywords :** Behaviour, compulsory citizenship, nurses, nursing, presenteeism

## AN INFECTION CONTROL METHOD IN HOME CARE PATIENTS WITH PRESSURE WOUNDS: EFFECT OF BAG TECHNIQUE ON CROSS CONTAMINATION RISK

Ahu KÜRKLÜ<sup>1</sup>, Nursen NAHCIVAN<sup>2</sup>

<sup>1</sup>Bahcesehir University, Faculty of Health Sciences, Nursing Department <sup>2</sup>Istanbul University - Cerrahpaşa Florence Nightingale Faculty of Nursing

### **Goal:**

Healthcare-associated infections are an important problem in all areas of healthcare. Although it is known that the "bag technique" used in home care services is an effective method in controlling these infections, its effect in preventing the risk of cross contamination at home is not very clear. In this study, it was aimed to examine the effect of the bag technique applied to home care patients with pressure wounds on the risk of cross contamination.

### **Methods:**

The sample of the study planned in the type of experimental design with the post-test control group in non-randomized groups consisted of 60 patients who received home care service in Istanbul and complied with the inclusion criteria. An "bag technique" initiative was applied to the intervention group (n = 30). Patients in the control group (n = 30) received standard home health care provided by a nurse. Both groups were compared in terms of outcome variables (pressure wound, home care nurse / researcher's hands, outer surface of the home visit bag, blood pressure measurement device, and pulse oximeter). The findings were analyzed with chi-square and odds ratio.

### **Findings:**

Except for the presence of chronic disease (p = 0.016) and wound surface area (p = 0.010) in the intervention and control groups, individual and pressure wound characteristics were similar in terms of home environment risk factors (p > 0.05). 11 (91.7%) of the 12 total cross contamination risks identified were in the control group (p = 0.001). The control group were 16 times more likely to develop Cross Contamination risk (OR = 16,789, 95% CI = 2.001-140.898).

### **Results:**

The findings showed that the bag technique can be used as an effective method to control the risk of cross contamination. The bag technique needs to be applied by home care nurses and tested in different home care patient groups.

**Keywords :** Bag technique, cross-contamination, home care, nurse, pressure ulcer/wound/sore



**INVESTIGATION OF ATTITUDE AND SATISFACTION LEVELS OF NURSING STUDENTS TO DISTANCE EDUCATION DURING THE COVID-19 PANDEMIC PROCESS**

Dilek ÇELİK EREN<sup>1</sup>, Mehmet KORKMAZ<sup>1</sup>, Özge ÖZ YILDIRIM<sup>1</sup>, İlknur AYDIN AVCI<sup>1</sup>  
<sup>1</sup>Ondokuz Mayıs University

**Goal:**

This study was conducted descriptively to examine the attitudes and satisfaction levels of nursing students towards distance education during the Covid-19 pandemic process.

**Methods:**

This study was conducted with 416 nursing students between July and October 2020. In data collection; participants were reached via the "Google Form" using a form consisting of 26 questions developed by the researchers and the "Distance Education Attitude Scale" consisting of 21 questions. Correlation and one way anova test were used for the data using SPSS 21.0 statistical package program. Statistical significance level was accepted as  $p < .05$ . Ethics committee approval was obtained before starting the study.

**Findings:**

The average age of the students included in the study was  $21.13 \pm 2.14$ , 34.9% had a positive effect on the learning process of distance education, 35.3% had technical problems while receiving distance education, and 54.4% had internet problems. . It was found that the satisfaction level of the students from distance education ( $5.85 \pm 2.34$ ) and their thinking that the distance education process was effective for the continuity of education during the pandemic period ( $6.55 \pm 2.42$ ) were found to be at a moderate level. The distance education model is an effective method for an applied department such as nursing, that the midterm exams and assignments given in this process are sufficient, the questions, ideas and troubles related to the process can be easily conveyed to the responsible teacher of the course, It was determined that the mean scores of the students who agreed that they could reach the course contents quickly were higher than the mean scores of the students who disagreed with these ideas and were indecisive ( $p < 0.05$ )

**Results:**

More than half of the students do not think that distance education system is not an effective method for an applied department such as nursing; however, it states that it is the right decision to switch to this system necessarily during the Covid-19 pandemic process.

**Keywords :** Covid-19 pandemic, distance education, nursing, nursing education

## **TRANSITION EXPERIENCES OF NEWLY GRADUATED NURSES**

Cennet ÇİRİŞ YILDIZ<sup>1</sup>, Yasemin ERGÜN<sup>2</sup>

<sup>1</sup>Istanbul Kent University, Faculty of Health Sciences, Department of Nursing <sup>2</sup>Marmara University, Faculty of Health Sciences, Department of Nursing

### **Goal:**

This is a qualitative study based on content analysis in order to reveal the transition experiences of nurses in the first year of their profession.

### **Methods:**

The study was carried out between January 2018 and March 2018 with 30 newly graduated nurses, who work in three Training and Research Hospitals, two University Hospitals and three Private Hospitals with JCI Quality Certificate and have a maximum of one year of professional experience. Data were collected through semi-structured in-depth individual interviews using face-to-face interviews.

### **Findings:**

Themes defined in the transition process of newly graduated nurses were emotional, sociocultural and developmental, physical and intellectual. In general, transition experiences of individuals were greatly influenced by the support that is given to the new graduate, the experience, the predictability, sincerity and consistency of the relationships with the individuals they were in contact with, and the expectations of the institution or experienced employees. In the first year of their professional experience, graduates do not feel themselves qualified, comfortable, safe and secure, and experience emotional and physical exhaustion in a short time. In addition, changes in life patterns and routines have emerged as distracting developments or unexpected burdens, particularly for new graduates experiencing adaptation problems.

### **Results:**

This study focused on the experiences of nurses during their first-year practice which is incredibly challenging for the new graduated nurses. It has been determined that formal and informal support programs are necessary for the new graduates to successfully start the profession.

**"This article was based on a part of PhD/MSc thesis of the first author."**

**Keywords :** Nurse, nurse's scope of practice, nursing staff, transition

**INVESTIGATION OF THE SELF-EFFICIENCY OF NURSES TO PREVENT  
FALLING PATIENT AND PATIENT SAFETY CULTURE**

Bahar EKİN<sup>1</sup>, Esra UĞUR<sup>2</sup>

<sup>1</sup>Istanbul Gedik University <sup>2</sup>Acıbadem Mehmet Ali Aydınlar University

**Goal:**

This research was carried out to evaluate nurses' self-efficacy levels in preventing falling patients and patient safety culture.

**Methods:**

The research was carried out methodologically with 150 nurses working in Acıbadem Maslak and Altunizade Hospitals who agreed to participate in the study. The data were collected using the Introductory Information Form, the Self-Efficacy Scale for Preventing Falling Patients (HDÖYÖ) - Nurse Form and the Patient Safety Culture Scale. The data obtained were analyzed using descriptive analyzes, t-test, Anova, exploratory factor analysis, and Pearson correlation tests.

**Findings:**

The average age of the nurses is  $24.13 \pm 4.27$ , the average duration of work in the profession is  $3.36 \pm 4.62$  years. 88.1% of the participants were women, 60.7% were undergraduate degrees and 65.9% were working in the service, 93.3% of them had received training on preventing falls. It was found that the nurses participating in the study had a mean score of  $5.66 \pm 0.46$  for the prevention of falling patients and the mean score of the patient safety culture was  $3.38 + 0.43$ .

**Results:**

No significant difference was found in the self-efficacy levels of nurses in preventing falling patients according to age, education, and the unit of study, and it was determined that the self-efficacy of men was higher. Within the scope of the study, a strong positive relationship was determined between the patient safety culture and the nurses' self-efficacy to prevent falling patients ( $p < 0.001$ ). According to the results of the research, it was determined that the Nursing Self-Efficacy Scale (HDÖYÖ) - Nurse Form was a valid and reliable tool for evaluating nurse self-efficacy, and it was recommended to conduct more comprehensive studies evaluating nurses' self-efficacy in preventing falling patients.

**Keywords :** Nurse, patient falls, patient safety, prevention of falls, self-efficacy

## PREMENSTRUAL SYNDROME PREVALENCE IN TURKEY: A SYSTEMATIC REVIEW AND META-ANALYSIS

Nülüfer Erbil<sup>1</sup>, Hüsne Yücesoy<sup>2</sup>

<sup>1</sup>Department of Nursing, Faculty of Health Sciences, Ordu University <sup>2</sup>Department of Nursing, Institute of Health Sciences, Ordu University

### **Goal:**

The aim of this study was to determine the prevalence of premenstrual syndrome among reproductive age women living in Turkey with a systematic review and meta-analysis study.

### **Methods:**

In this systematic review and meta-analysis study were scanned keywords [“premenstrual syndrome” and prevalence and Turkish] in the national and international databases including Turkish Medline, PubMed, Google Scholar, Scopus and ISI Web of Knowledge. This study included full-text research articles from conducted in Turkey, published in Turkish or English between 2014 and 2018 and indicating prevalence. The random effects model was chosen during meta-analysis processes and Microsoft Excel and Comprehensive Meta-Analysis package programs were used. In addition, the effects of potential heterogeneity factors on the prevalence of premenstrual syndrome were examined with the meta-regression model.

### **Findings:**

This study included a total of 18 studies conducted in Turkey reporting the prevalence of premenstrual syndrome and published in the years 2014 to 2018. A total of 6890 women participated in these studies. The overall premenstrual syndrome prevalence in the studies examined in this systematic review was 52.2%. Subgroup prevalence was found to be 59% (95% CI [0.547, 0.632] in high school students, 50.3% in university students (95% CI [0.489, 0.517]) and 66% (95% CI [0.621, 0.708] in the general population. In the meta-regression analysis showed that there was no significant relationship between the mean age of the participants with the prevalence of premenstrual syndrome.

### **Results:**

The result of the study showed that premenstrual syndrome was prevalent among Turkish reproductive age women. The majority of studies indicating the prevalence of premenstrual syndrome were with participation of university students. Premenstrual syndrome screening programs and further studies for coping of women with premenstrual syndrome were recommended.

**Keywords :** Meta-analysis, premenstrual syndrome, prevalence, systematic review, turkey

**THE USE OF WEARABLE TECHNOLOGY IN SURGICAL FIELDS: A  
SYSTEMATIC REVIEW**

Tugba Albayram<sup>1</sup>, Seher Deniz Oztekin<sup>2</sup>

<sup>1</sup>Gaziantep University, <sup>2</sup>Istanbul University- Cerrahpasa

**Goal:**

This study was planned to systematically review the studies evaluating the results of using wearable technology in surgical fields. Wearable technologies have become a suitable tool for nurses and other healthcare professionals. Further studies are needed to determine the best way to use smart glasses, the use of which is becoming widespread in surgical operations, on patients.

**Methods:**

The population of the study was composed of 1424 articles accessed by browsing the databases of "Pubmed, Web of science, Scholar Google, Wiley Cochrane, Scopus" between October-December 2019. In the review, articles published in English between 2014 and 2019 with the keywords of "simulation", "nursing education" and "simulation in nursing" and having an accessible full text were selected. From these articles, 15 studies meeting PRISMA decision criteria that is specific to systematic reviews and has international validity were included in the study.

**Findings:**

The sample of the studies included in the review was composed of 620 people. It was seen that the sample in the studies consisted of maximum 139 people (Panda 2019) and minimum 2 people (Pimentel 2019). Among the locations of the studies, 5 of them were the United States, 2 were Germany and Canada as well as England, Korea, Portugal, China, Kuwait, and Belgium. In the studies, wearable devices such as smart glasses (40%), smart wristbands (26.66%) and smartphone, T-shirts, WCDs, headbands, and action cameras (6.66% for each) were used and the application forms were filled in to evaluate the effectiveness of these devices. While the majority of the studies conducted on wearable technology usage were the studies conducted on patients (59.83%) and surgeons (36.12%), 8 of the data were collected during operation and 7 were collected after the operation.

**Results:**

Tendencies about using wearable technologies, developing digital medical systems, and using electronic health records in nursing education should be supported. Decision support mechanisms of nurses should be developed with technological innovations.

**Keywords:** Mobile health application, nursing, surgical, wearable technology.

**Publication No : S-055**

## **PATIENT SAFETY IN THE OPERATING ROOM OF TRAINING AND RESEARCH HOSPITALS IN ISTANBUL**

**Asist. Prof. Burcu (Ogun) Ozkan<sup>1</sup>, Professor Fatma Eti Aslan<sup>2</sup>**

<sup>1</sup>Istanbul Kent University, Faculty of Health Sciences, Nursing Department, <sup>2</sup>Istanbul Bahcesehir University, Faculty of Health Sciences, Nursing Department

### **Goal:**

This study was done descriptively to determine the practices for providing patient safety in the operating room.

### **Methods:**

The study environment and the sample group consisted of the general operating room of Training and Research Hospitals in İstanbul. The sample group included 21 hospitals. The data were collected with “Questionnaire Form of The Operating Room General Characteristic” by interviewing the manager of operating room nurses and “Check List of Patient Safety Goals in Operating Room” by interviewing a general surgery operating room nurse, who was at least two years experienced. In the assesment of the study number and percentages were used.

### **Findings:**

In this study result; it is found out that 4.8 % of the operating rooms weren't used wrist band for identify the patient, side and site marking for operative site and the surgeon weren't involved the patient in the marking process, 19 % of them weren't marked the site in surgery department, 9.5 % of them weren't used a check list to verify that all documents and equipment needed for surgery side and site marking, 71.5 % of them were transferred the patient from stretcher to operating room bed with surgical drapes, 28 % of them were used bad or room number for identify the patient, 33.3 % of them weren't saved the medicine case which were used in sterile field to operation ending. It is found out that all of the operating rooms were have fire tubes and have no problems in communication of operating room team members and all of the operating rooms staff were known about high risk patients and for positioning the patient all of them were used suitable position equipment. *In line with the findings of the study;* It can be said that patient safety in the operating room of Training and Research Hospitals in İstanbul is partially provided.

**Keywords:** Medical errors, operating room, patient safety, perioperative care

## INTRODUCTION

Every year millions of people have been had surgical procedure to provide and improve the level of health. If necessary, precautions are not taken, surgical procedure can be the most harmful treatment for the patient (Ogun 2008).

In recent years, medical errors are one of the issues that draw attention with the harm they cause to patients in the field of health and with an increasing rate (Buetow 2005, Akalin 2007). A medical error is a preventable adverse effect of medical care, whether or not it is evident or harmful to the patient (Hofer et al 2000). The frequency of encountering medical errors has led to the creation of a patient safety culture in health institutions in order to prevent these errors. Patient safety is the absence of preventable harm to a patient during the process of health care and reduction of risk of unnecessary harm associated with health care to an acceptable minimum ([www.who.int](http://www.who.int), Access date:01.12.2020, Hergul et al 2018).

While it is possible to see medical errors in all areas of health care, this rate is higher in some areas. One of the areas with a high rate of medical errors is the operating room departments of hospitals ([www.iom.edu.tr](http://www.iom.edu.tr), Access date: 01.12.2020).

Operating theaters, where surgical treatment is applied, are special places that require special knowledge, skills, equipment and attention in terms of complex internal structure, stressful working environment and the variety of medical devices used (Gocmen 2003). Due to these features, it can be said that operating rooms contain many elements that may threaten patient safety.

In 2008, World Health Organization (WHO) drew attention to the importance of patient safety and published its slogan "Safe surgery saves lives." After this slogan published, a series of measures published also to prevent / reduce medical errors ([www.who.int](http://www.who.int), Access date:01.12.2020). Besides WHO, the two organizations that have been working on patient safety for a long time were the Joint Commission International (JCI) and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). According to JCI, Patient Safety Goals are:

- Identify Patients Correctly.
- Improve Effective Communication Among Caregivers
- Improve the Safety of Using Medications
- Eliminate Wrong-Site, Wrong-Patient Procedure Surgery (Ensure safe surgery)
- Reduce the Risk of Health Care-Associated Infections
- Reduce the Risk of Patient Harm Resulting From Falls
- Reduce the Risk of Surgical Fires And Burns (Due to The Surgical Procedure And Environment)
- Determine The High Risk Patients.
- Prevent Pressure Ulcers (Decubitus Ulcers /Bedsore)

When the requirements of these patient safety goals are not practices correctly, medical errors occur. The medical errors caused by the operating room can be listed as follows: not identified the patient correctly, lack of communication between healthcare professionals, medication administration errors, wrong side/wrong patient/wrong surgical intervention, health care risks due to infection, falls, surgical procedure and related burns, not determining high-risk patients,

and pressure ulcers (Kaymakci 2001, Eastman 2006, Ogun 2008, www.iom.edu Date of access: 01.12.2020, www.jointcommission.org Accessed date: 01.12.2020).

It is a curious matter to what extent these goals, which are determined to ensure patient safety, are achieved when medical errors originating from the operating room are taken into consideration.

This study was done descriptively to determine the practices for providing patient safety in the operating room.

## METHODS

The study environment and the sample group consisted of the general operating room of Training and Research Hospitals in İstanbul. There were 25 training and research hospitals (environment) In İstanbul. But one of them was Vakif University Hospital (owned by an association) and three of them were Special Branch Hospital. Because of this reason, these hospitals were excluded from the research. The sample group included 21 hospitals.

The data collection started after the institution permission was obtained from where the study will be carried out. Collecting data continued until the entire universe was reached. Ethical principles were followed at every stage of the study. The data were collected by the researcher using face-to-face interview method. Hospital names were not used in the study and a code number were given the hospitals.

The data were collected through the «Questionnaire Form of The Operating Room General Characteristic» consisting of 12 questions containing information about the general characteristics of the operating rooms. and other form was a «Check List of Patient Safety Goals in Operating Room», which was used for determining the practices to ensure patient safety in the operating room and is based on nine patient safety goals of JCI. These forms were prepared by the researcher to fit for the purpose.

The “Questionnaire Form of The Operating Room General Characteristic” data were collected by interviewing the manager of operating room nurses and “Check List of Patient Safety Goals in Operating Room” by interviewing a general surgery operating room nurse, who was at least two years experienced.

In this study, it was accepted as a limitation that only the general operating rooms of the training and research hospitals in Istanbul were included in the study and the verbal statements of the interviewees were accepted as correct.

In the evaluation of data, number and percentages were used.

## FINDINGS

**Table 1. Patient Safety Goals in the Operating Room (N=21).**

<i>Patient Safety Goals in the Operating Room</i>	<i>Yes</i>		<i>No</i>	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
<b><i>Identity Identification</i></b>	<b>20</b>	<b>95.2</b>	1	4.8
➤ Is arm band used?	<b>6</b>	<b>28.6</b>	15	71.4
➤ Is bed number used to identify the patient?				

\* Hospitals that do not contain medication in the injector were listed in the "No" section.



<b><i>Communication Status</i></b>				
➤ Is there a telephone in every operating room?	<b>12</b>	<b>57.1</b>	9	42.9
➤ Is there a communication subject in the service education program	<b>19</b>	<b>90.5</b>	2	9.5
<b><i>Safe Drug Practice Principles</i></b>				
➤ Are medicines that have been used previously and have an uncertain opening date reused?	0	0	<b>21</b>	<b>100</b>
➤ Are the bottles of the drugs given to the sterile field kept until the end of the surgery?	14	66.7	<b>7</b>	<b>33.3</b>
➤ *Are the drugs into the injector tagged?	<b>19</b>	<b>90.5</b>	2	9.5
➤ ** Is premedication application controlled?	<b>18</b>	<b>85.7</b>	3	14.3
<b><i>Side Surgery Practice Principles</i></b>				
➤ Are sides and landmarks applied to the surgical site?				
➤ Is the marking done at the service?	<b>20</b>	<b>95.2</b>	1	4.8
➤ Does the surgeon ask the patient to confirm party and location?	<b>17</b>	<b>81</b>	4	19
	<b>20</b>	<b>95.2</b>	1	4.8
➤ Is a surgical invasive intervention form including side surgery created?	<b>19</b>	<b>90.5</b>	2	9.5
	<b>19</b>	<b>90.5</b>	2	9.5
➤ Does the circulated nurse verify and record the party and location?				
<b><i>Principles for Prevention of Infection-Related Risks</i></b>				
➤ Has the hand washing instruction been created?				
➤ Is the hand washing instruction hanging in a place where it can be seen?	<b>21</b>	<b>100</b>	0	0
	<b>18</b>	<b>85.7</b>	3	14.3
➤ Are the instructions for use of medical devices located near the device?	<b>16</b>	<b>76.2</b>	5	23.8
	<b>19</b>	<b>90.5</b>	2	9.5
➤ *** Are tools, needles, scalpels and sponges counted?	<b>18</b>	<b>85.7</b>	3	14.3
➤ Has a count registration form been created?	<b>20</b>	<b>95.2</b>	1	4.8
➤ **** Are implants placed on the patient recorded in the file?				
<b><i>Surgical Burn and Fire Precautions</i></b>				
➤ Are there fire suppression systems?	<b>13</b>	<b>61.9</b>	8	38.1
➤ Are there fire extinguishers?	<b>21</b>	<b>100</b>	0	0

\*\* Hospitals without premedication were listed in the "No" section.

\*\*\* Hospitals without abdominal and thoracic surgery were listed in the "No" section.

\*\*\*\* Hospitals where the patient is not implanted were listed in the "No" section.

Although the general principle of medicine is “do no harm first”, some forms of treatment may have benefit and harm inherent (Yildirim, 2005). Surgery, defined as a "controlled trauma", is a form of treatment that causes trauma in the patient as well as its benefits (Dagoglu 2002).

When "patient safety goals in the operating room" are examined in the operating rooms included in the study;

The patient identification which one of the goals of patient safety in the operating room, it was determined that 95.2% (n = 20) of the hospitals used arm bands for patients and 28.6% (n = 6) of them also used the bed number.

The risk of error will increase if patients are sedated, disorientated or sensory loss, the patient's service, bed or room has changed in the hospital, inadequate / incomplete patient evaluation and medical record control, illegible handwriting and abbreviations. (Kaymakci 2001, Yildirim 2005, Güven 2007, [www.jointcommission.org](http://www.jointcommission.org), [www.jcipatientsafety.org](http://www.jcipatientsafety.org), Access date: 01.12.2020). In the study, it is thought that re-checking the identity of the patient, obtaining informed consent, addressing the patient by name, keeping the records correct and complete before the applications in all operating rooms will be effective in preventing such errors.

When the communication status in the operating room is examined; In all operating rooms (N = 21), there was no problem in communication within the team, between teams and with support units. There was a telephone in general use, 57.1% (n = 12) had a telephone in each operating room, 90.5% (n = 19) had the subject of communication was also included in the clinical training program.

Davies (2005) stated that good communication is vital not only in the operating room, but also in ensuring safety in all areas of healthcare and patient care, as well as in other critical work areas. In addition, Awad et al. (2005) stated that unwanted events can be prevented and a safe environment can be created by improving communication in the operating room.

Considering that medical errors can also result from communication problems between team members and inter-team coordination problems (Makary et al 2006, Christian et al 2006, Alfredsdottir and Bjornsdottir 2007), it is gratifying that there are no communication problems in the operating rooms included in this study. It can be said that this situation will be effective in reducing medical errors caused by communication.

When the principles of safe drug administration are examined; It was observed that drugs that were previously used in all operating rooms (N = 21), whose opening date and who have not been opened were not re-used. The drugs in the sterile field were delivered during the change of duty. On the other hand, in 33.3% (n = 7) of the operating rooms, the bottles of the drugs given to the sterile area were not stored until the end of the surgery, 90.5% (n = 19) of the drugs taken into the injector were labeled according to the drug they contain, but in 9.5% (n = 2) It was determined that there was no medication in the injector. premedication was controlled in 85.7% (n = 18), but premedication was not applied to the patients in 14.3% (n = 3).

It is stated that medication administration errors in the operating room also develop due to misunderstanding of the name / dose of the drug due to the oral administration of drug requests and the use of masks (Demir and Dramali 2005). In order to prevent these errors, repeating the name and dose of the drug given to the sterile field loudly, keeping the drug bottles given to the sterile field until the end of the surgical procedure, but discarding the previously used drugs without labels, delivering all the drugs given to the sterile field during the change of duty, must be registered (Erdil 2001, Demir and Dramali 2005).

In line with the findings in this study, it can be said that possible medication errors that may occur in the operating rooms may occur only because the bottles of the drugs given to the sterile area are not stored until the end of the surgery.

When the application principles of side surgery are examined; the surgeon weren't involved the patient in the marking process, 19 % of them weren't marked the site in surgical clinic, 9.5 % of them weren't used a check list for surgery side/site marking.

Considering that the operating room environment is a risk factor that threatens patient safety, it becomes evident how important it is to use checklists and universal protocols to ensure environmental safety and consequently patient safety in the operating room (Stumpf 2008). It is thought that the cases of wrong side surgery, which have become an increasing health

problem in the world, cannot be prevented adequately in hospitals where the principles of side surgery are not followed or where applications are performed incompletely.

When the principles of preventing the risks associated with infection are examined; all of the operating rooms (N = 21) had hand washing instructions, but only 85.7% of them hanged the instruction in a place that can be seen in operating rooms, 76.2% (n = 16) of the medical devices had the instructions for use next to the device, In 90.5% (n = 19) of the device, needle, scalpel and sponge count was made, but only 85.7% (n = 18) had a counting record form, 95.2% (n = 20) of the implants placed on the patient were recorded in the file, but It was determined that 4.8% (n = 1) did not use an implant.

The majority of hospital infections are caused by operating room-related infections, therefore, ensuring the continuous training of operating room staff on the subject and also having an infection control and prevention program of every health institution will prevent infection formation (Elbaş 2001, [www.das.org.tr](http://www.das.org.tr), Access date: 01.12.2020). In this context, the findings were found to be consistent with the literature.

When the burns and fire measures related to surgery are examined; There is a fire safety plan in all operating rooms (N = 21). In addition, 61.9% of the operating rooms did not have fire extinguishing systems, while it was seen that all (N = 21) had fire tubes.

As a result of technological developments, it is possible to say that the risk of burns and fires is quite high in operating theaters where there are many electrical medical devices and they are frequently used; (Dallı 2001). Even if all precautions are taken, the risk continues as a result of a momentary carelessness.

When the determining high-risk patients were examined, it was determined that the patients in the high-risk patient group were known in all operating theaters included in the study and all team members received training on the care of these patients (N = 21).

Patients aged seventy and over, those who undergo emergency surgery, those with chronic diseases, those with infectious diseases, those who are immunocompromised, sedated, unconscious, mentally ill, dialysis patients and pediatric patients can be considered in the high risk patient group (ogun 2008). In this respect, while the findings in the study are consistent with the literature, it is possible to say that the operating room team members, both the elderly and children in the high-risk patient group, pay more attention to these patients due to the nature of the Turkish society.

When the prevent pressure ulcers were examined, it was determined that the patient was given the appropriate surgical position in all operating rooms included in the study, and the compression areas were supported by positioning equipment while positioning (N = 21).

In the formation of pressure sores, the position of the patient and the suitability of positioning equipment, friction and abrasion, excessive humidity of the solutions used in the cleaning of the incision area before surgery, and factors related to the patient are involved (Karadag and Sayin 2002, Ogun 2008).

Although it seems that all precautions are taken to prevent positional complications during the surgical intervention in line with the findings obtained in the study, more comprehensive studies should be carried out on the adequacy of these measures and whether the development of complications is observed.

When the preventing falls were examined, it was observed that all operating theaters included in the study had patient transfer instructions, patient transfer staff were trained in transportation, transfer stretchers had safety locks and stretchers were edge protected (N = 21). With a trained patient transfer team, the use of transfer stretchers with lock systems and edge protection, creating patient transfer instructions and training the newly recruited staff about patient transfer will prevent the patient from being harmed by a fall (Kaymakci 2001, Ogun 2008). In this context, the findings were found to be consistent with the literature.

## CONCLUSIONS

In line with the findings of the study; It can be said that patient safety in The Operating Room of Training and Research Hospitals in İstanbul is partially provided.

According to these results, it can be said that most of the practices / patient safety goals aimed at ensuring patient safety in the operating room are realized in all hospitals, but the practices that are not implemented can threaten patient safety to a considerable extent.

It is recommended not to use room or bed number for the patient identification, It is recommended to apply the principles of side surgery completely, and It is recommended to create and spread a patient safety culture in all health institutions.

It is thought that this study, which was carried out to determine the practices for ensuring patient safety in the operating room, will give a general idea about the current approaches to ensure patient safety in the general operating rooms of training and research hospitals in Istanbul and will form the basis for future studies.

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**THE EFFECT OF TAILORED INTERVENTIONS ON BREAST CANCER SCREENING BEHAVIORS AND HEALTH PERCEPTIONS APPLIED TO WOMEN WITH LOW SOCIOECONOMIC LEVEL**

Aysun Perim Ketenciler<sup>1</sup>

<sup>1</sup>T.C. İstanbul University-Institute of Graduate Studies

**Goal:**

The aim of this study was to investigate the effects of tailored interventions (group training, telephone counseling) to breast cancer screening behaviors and health beliefs among women with low socioeconomic levels.

**Methods:**

The pre-test and post-test control group design was used and the result variables evaluated in the third and the sixth month after the intervention. In the study, two experimental and one-control groups have been formed. The sample was women (Experimental group 1 (n= 41), Experimental group 2 (n= 41) and Control group (n= 41) with low socio-economic levels, ages of 40-69, having no cancer history, having not regular mammography, not regular clinical breast examination (CBE) and not regular breast self examination (BSE). Data was collected with socio-economic status scale, socio-demographic characteristics information form, the breast cancer health belief model scale, the mammography self-efficacy scale, the breast cancer fear scale and the breast cancer fatalism scale. In the study, tailored group education was based on health belief model and given to the first experimental group. A tailored telephone counseling was given to the second experimental group. The control group has been received standard care.

**Findings:**

It has been showed that the tailored group training and the telephone counseling have increased the rates of CBE, BSE, and mammography. Also, in both experimental groups benefits-BSE and mammography, confidence, health motivation beliefs have increased, BSE and mammography barriers beliefs have decreased.

**Results:**

The perceived susceptibility score didn't change significantly. Similarly, in both experimental groups while the mammography self-efficacy beliefs have increased, a significant decrease on the breast cancer fear and fatalism have been determined.

**Keywords:** Breast self-examination, clinical breast examination, health belief model, mammography, tailored interventions

**EFFECTS OF PROGRESSIVE RELAXATION EXERCISES WITH MUSIC  
THERAPY ON SLEEP QUALITY AND PAIN SEVERITY IN HOSPITALIZED  
SURGICAL PATIENTS: A QUASI-EXPERIMENTAL STUDY**

Pınar Duru<sup>1</sup>, Özlem Örsal<sup>1</sup>, Yasemin Şara<sup>2</sup>, Nedime Köşgeroğlu<sup>3</sup>

<sup>1</sup>Eskisehir Osmangazi University, <sup>2</sup>Selcuk University, <sup>3</sup>İstanbul Rumeli University

**Goal:**

This study was conducted to determine the effect of progressive relaxation exercises with music therapy on sleep quality and pain severity of patients hospitalized in the surgical departments of a university hospital.

**Methods:**

This single-blind, pre-test-post-test with control group design quasi-experimental study was carried out between March-May 2019. 31 patients who were hospitalized in surgical departments for at least one week and regularly performed relaxation exercises consisted of experimental group, and 31 patients who were hospitalized for at least one week but did not do relaxation exercises consisted of control group. The post-hoc power of the study was determined to be 0.92. The study data were collected by using "Descriptive Characteristics Form", pain severity of patients was measured using "Visual Analogue Scale", and sleep quality of patients was measured using "Visual Analogue Sleep Scale". In the study, relaxing music for improving sleep quality prepared by the Turkish Psychological Association and progressive relaxation exercises developed by Jacobson (1942) were used. The patients were asked to perform the exercises with music an average of 30 min before sleeping every day for a week. Statistical significance level was taken as  $p < .05$ .

**Findings:**

Pre-test sleep quality of patients in experimental group was lower than control group. A significant increase was observed in the sleep quality of the patients in experimental group for progressive relaxation exercises performed with music. No significant difference was observed in the post-test sleep qualities between patients who did progressive relaxation exercises with music and patients who did not. Pre-test pain severity of patients in experimental group was higher than control group. In our study, progressive relaxation exercises with music showed a decrease in pain severity of the patients in experimental group. However, post-test pain severity of patients who did progressive relaxation exercises with music was higher than patients who did not.

**Results:**

Progressive relaxation exercises with music had an effect on the sleep quality and pain severity of hospitalized patients in surgical departments.

**Keywords:** Music therapy, pain, progressive muscle relaxation, sleep, surgical nursing

## **USING QR CODE TECHNOLOGY TO ENABLE PEER SUPPORT WEBSITE**

Associate Professor Chiung-Jung (Jo) Wu<sup>1</sup>, Michelle Edhie Wahidin<sup>1</sup>

<sup>1</sup>University of the Sunshine Coast

### **Goal:**

This abstract aims to use the newly developed QR code to allow patients to access educational information about acute coronary syndrome and type 2 diabetes. Learning about their conditions increases individual agency and encourages sustainable self-management. In addition, positive experiences surrounding effective condition management enables patients to connect with others with similar experiences/conditions. We aim to build an easily accessible platform to empower patients with knowledge and required skills to problem solve and manage their everyday conditions/challenges.

### **Methods:**

A QR code system has been developed to enable the efficiency and quality in accessing a reliable health website. The website is specifically designed for training ACS patients with type 2 diabetes to share their own experience to other fellow patients.

### **Findings:**

The initial findings show feasibility of the users to access the website through a QR code. Feedback received includes convenience of accessing the health website, learning to become a trainer/supporter and effectively managing their conditions. It shows the potential benefits of adopting an educational platform initiate to health sectors, additionally using an easy QR code system to allow beneficial peer-to-peer interactions.

### **Results:**

Our preliminary results as showed positive affirmations and attract interests from all stakeholders (patients, doctors, nurses, allied health professionals, other non-health professionals). Suggested clinical Implications could be incorporating QR code technology into telehealth consultations and clinical education for patients. Future research in investigating the use of a QR codes in clinical setting in conjunction with the current COVID Safe tracking system is warrant.

**Keywords :** Diabetes, heart, peers, QR code, website



## SEARCHING FOR INFORMATION WITH INTERNET AND MOBILE HEALTH APPLICATIONS FOR HEALTHY WEIGHT GAIN OF PREGNANT WOMEN

Şeyma Hızarcı Emiralioğlu<sup>1</sup>, Zeynep Daşıkın<sup>2</sup>

<sup>1</sup>Izmir Health Sciences University Tepecik Training and Research Hospital

<sup>2</sup>Ege University Nursing Faculty

### ABSTRACT

#### **Goal:**

The aim of this study is to examine the factors required to determine the knowledge seeking and information seeking about gestational weight gain (GWG) with the internet or mobile health (m-Health) application of pregnant women.

#### **Methods:**

This descriptive study was conducted on 420 pregnant women who applied to the gynecology and obstetrics outpatient clinic of a public education and research hospital in Izmir between September 2019 and January 2020. “Individual questionnaire” and “e-Health Literacy Scale (e-HEALTH)” were used to collect data. Pearson's chi-square test and t test were used to analyze the data.

#### **Findings:**

The average age of the pregnant women participating in the research was 27.66±5.53 year, and mean pre-pregnancy body mass index was 25.91±5.77. 55% of pregnant women reported the amount of GWG, 52.8% of the pregnant women who reported were found to have appropriate GWG information in accordance with the Institute of Medicine (IOM) guidelines. It was determined that the pregnant women searched for information on the internet mostly regarding the growth and development of the baby (82.9%) the signs of birth and birth (66.2%) and healthy nutrition during pregnancy (65.7%). The search for information about GWG (45.7%) was low. It was determined that 46.9% of pregnant women used m-Health application related to pregnancy. Pregnant women who reported primigravida, knowledge of GWG, who received adequate counseling from the healthcare personnel and had high e-HEALS level were found high for searching information on the internet. The use of m-Health application was found to be high in pregnant women with higher education level (≥8 years), primigravida and e-HEALS level.

#### **Results:**

Almost all of the pregnant women are looking for information with the internet and approximately half of the m-Health application. Prenatal care should be counseled by healthcare professionals about the risks of excessive GWG and maternal obesity.

**Keywords:** Gestational weight gain; internet; m-health; seeking information, prenatal care

## INTRODUCTION

The prevalence of overweight and obesity has surged worldwide. There is a significant relationship between pregnancy and postpartum period in the development of maternal obesity (Ketterl et al., 2018; Olson et al., 2018; Rong et al., 2015). According to Turkey Demographic and Health Survey (2018), 29% of women are overweight, while 30% are obese.

Institute of Medicine (IOM) recommended gestational weight gain guide for women based on pre-pregnancy body mass index (Table 1) (Deputy et al., 2015; Rasmussen et al., 2009). In recent studies, women were reported to have gestational weight gain (GWG) values that are 39%–73% higher than the 2009 IOM recommendations (Riz et al., 2010; Rode et al., 2012;; Daşıkan 2015).

While the rate of health professionals who state that they provide GWG consultancy is 86% - 100%; The rate of pregnant women who stated that they received GWG counseling is between 30 % and 50 % (Ferrari ve Siega-Riz, 2013; Simas ve ark., 2013; Whitaker, Wilcox, Liu, Blair ve Pate, 2016; Daşıkan 2015) .

**Table 1.** Institute of Medicine (IOM) Guidelines (2009) ( Singleton pregnancy) (Rasmussen et al. 2009)

Pre-Pregnancy BMI Category (Body Mass Index = BMI)	Recommended Total Weight Gain During Pregnancy	
BMI < 18.5 Underweight	12.5 – 18.0 kg	28.0 – 40.0 lbs
BMI 18.5 – 24.9 Normal Weight	11.5 – 16.0 kg	25.0 – 35.0 lbs
BMI 25.0 – 29.9 Overweight	7.0 – 11.5 kg	15.0 – 25.0 lbs
BMI ≥ 30 Obese	5.0 – 9.0 kg	11.0 – 20.0 lbs

$$\text{Body Mass Index (BMI)} = \text{Weight (kg)} / [\text{Height (m)}]^2$$

According to data from 2019 households in Turkey smartphones/mobile phone rate 98.7% and the rate of women using the internet to search for health information is 73.2% (Turkish Statistical Institute, 2019). Internet usage is increasing rapidly in the search for personalized information and consultancy of pregnant women. They search for health information on the internet to verify information provided by healthcare professionals or to learn more. People who use internet for health information and m-Health applications should have e-Health literacy.

## OBJECTIVE

The aim of this study is to search for information about gestational weight gain (GWG) by the internet or mobile health (m-Health) application of pregnant women; and to examine the factors that affect the search for knowledge.

## METHOD

**Research type:** A cross-sectional and descriptive study

**Research place and time:** Izmir Health Sciences University Tepecik Training and Research Hospital Gynecology and Obstetrics outpatient clinic, in Turkey. It was conducted between October-December 2019.

### **Participants**

The number of participants was calculated with the sample formula of known universe (number of pregnant women in one year: 21415) and 420 pregnant women participated in the study.

### **Participant criteria**

Between the ages of 18-45,  
Gestational weeks  $\geq$  27 weeks,  
Having a single pregnancy,  
Can communicate in Turkish,  
At least primary school graduate,  
Having a smart phone and internet access,  
Open to communication  
Volunteer to participate in research.

## INSTRUMENTATION

**Questionnaire Form:** The questionnaire developed by the researchers in line with the literature consists of 30 questions and two parts. In the first part; questions about the participants' socio-demographic, physical (height, weight, etc.) and obstetric characteristics (number of pregnancies, gestational weight gain, prenatal counseling, etc.) were included. In the second part; Internet and m-Health application use during pregnancy and the questions in search of information were included.

**e-Health Literacy Scale (eHEALS) :** eHEALS developed by Norman and Skinner (2006) consists of 2 items not included in the total score on internet use and 8 items measuring internet attitude. Validity and reliability studies in Turkey has been done by Coşkun and Bebiş (2015).

## DATA COLLECTION

The research data were collected face to face in gynecology and maternity hospital outpatient clinics. Pregnant women answered the “individual questionnaire” and the “E-Health Literacy Scale” with their self-reported. Anthropometric measurements (height-weight) of the pregnant women were measured by the researcher. Self-report of the pregnant woman was accepted as the gestational starting weight ( $\leq$  10 weeks weight measurement). Gestational weight gain information of pregnant women was evaluated according to 2009 IOM Guidelines.

### **Statistical analysis:**

Data was analyzed with SPSS Statistics version 23.0 (IBM Corp; Armonk, NY, USA). The compliance of the numerical variables with normal distribution was determined by Kolmogorov-Smirnov test. Pearson chi-square test and t test were used to analyze the data. The significance level  $p < 0.05$  was accepted for all hypotheses.

## Ethical considerations:

Ethical permission was obtained from Izmir Health Sciences University Tepecik Training and Research Hospital Non-Invasive Research Ethics Committee for the research (Approval number: 2019/13-28). Written informed consent was obtained from all women who participated in this study.

## FINDINGS AND DISCUSSION

The average age of the pregnant women participating in the research was  $27.66 \pm 5.53$  year, and mean pre-pregnancy body mass index was  $25.91 \pm 5.77$ . It was determined that the education level of 51.7% of pregnant women was  $\leq 8$  years, the majority of them were low income (36.7%) and medium income (54.3%), and 58.6% were multiparous (Table 2).

55% of pregnant women reported the amount of GWG, 52.8% of the pregnant women who reported were found to have appropriate GWG information in accordance with the Institute of Medicine (IOM) guidelines (Table 3).

It was determined that the pregnant women searched for information on the internet mostly regarding the growth and development of the baby (82.9%) the signs of birth and birth (66.2%) and healthy nutrition during pregnancy (65.7%). The search for information about GWG (45.7%) was low. It was determined that 46.9% of pregnant women used m-Health application related to pregnancy (Table 4)

Pregnant women who reported primigravida, knowledge of GWG, who received adequate counseling form the healthcare personnel and had high e-HEALS level were found high for searching information on the internet ( $p < 0.05$ ). The use of m-Health application was found to be high in pregnant women with higher education level ( $\geq 8$  years), primigravida and e-HEALS level ( $p < 0.05$ ), (Table 5).

**Table 2.** Characteristics of pregnant women demographic, obstetric, pre-pregnancy body mass index

<b>Variables (N=420)</b>	<b>M<math>\pm</math>SD</b>	<b>Min -Max</b>
Pregnancy weeks	34.42 $\pm$ 3.06	27-40
Age (years)	27.66 $\pm$ 5.53	18-43
Pre-Pregnancy BMI (kg/m <sup>2</sup> )	25.91 $\pm$ 5.77	14.6- 49.31
eHEALS Total Score	28.55 $\pm$ 5.91	8-40
<b>Age groups (years)</b>	<b>n</b>	<b>%</b>
18-24	139	33.1
25-29	136	32.4
30 years and above	145	34.5
<b>Education</b>		
$\leq 8$ years and below	217	51,7
$> 8$ years of above	203	48,3
<b>Household income</b>		
Low ( $\leq$ 2020 TL)	154	36.7
Middle (2020 - 4.000 TL)	228	54.3
High (4.000 - 6.000 TL)	38	9.0

<b>Living place</b>		
City	293	69.8
Town/district	127	30.2
<b>Number of pregnancies</b>		
Primigravida	139	33.1
Multigravida	281	66.9
<b>Pre-pregnancy BMI categories (kg/m<sup>2</sup>)</b>		
Underweight (<18.5 )	25	6.0
Normal weight (18.5–24.9)	191	45.4
Overweight (25–29.9)	116	<b>27.6</b>
Obese (≥30 )	88	<b>21.0</b>

**Table 3.** Characteristics of pregnant women gestational weight gain knowledge, GWG knowledge adequacy according to IOM guidelines, GWG Information Resources, Getting information from prenatal health professionals

<b>Variables (N=420)</b>	<b>n</b>	<b>%</b>
<b>Reporting of GWG information</b>		
Reported	233	<b>55.5</b>
Unreported	187	44.5
<b>GWG knowledge according to 2009 IOM guidelines (N=233)</b>		
Inadequate	30	12.9
Adequate	123	52.8
Excessive	80	<b>34.3</b>
<b>GWG Information Resources (n=233)</b>		
Internet Sites	85	36.5
Gynecology and Obstetrics Physician	69	29.6
Family Health Center Health Professionals	66	28.3
Nurse / Midwife	61	26.2
Social media	32	13.7
M-Health Applications	30	12.8
Previous Pregnancy Experience	30	12.8
Magazine / Book / Newspaper	26	11.1
Pregnancy School	24	10.3
Friend / Family / Neighbor	24	10.3
Blog / Forum	9	3.8
<b>Getting information from prenatal health professionals</b>		
Healthy and regular nutrition	323	76.9
Physical activity during pregnancy	262	62.4
Gestational weight gain	228	54.3
<b>Consulting competence of prenatal health professionals</b>		
Very insufficient	45	10.7
Insufficient	56	13.3

Neutral	108	25.7
Sufficient	135	32.1
Very sufficient	76	18.1

**Table 4.** The Reason of Using the Internet Related to Pregnancy and Using M-Health App

<b>Subjects (N=420)</b>	<b>Reporting/ Yes</b>	
	<b>n</b>	<b>%</b>
<b>The Reason of Using the Internet Related to Pregnancy</b>		
Searching for information on pregnancy related websites	389	92.6
Social media pregnant groups (Facebook, Instagram, Twitter etc.)	192	45.7
Verifying information from healthcare professionals	176	41.9
Use of blog / forum to communicate with other pregnant women and get support	67	16.0
Insufficient information from healthcare professionals	104	24.8
<b>Internet Research Subjects During Pregnancy</b>		
Fetal development	348	82.9
Birth and birth process	278	66.2
Healthy and regular nutrition	276	65.7
Physical activity during pregnancy	192	45.7
Gestastional weight gain	192	45.7
Drugs used in pregnancy	230	54.8
Physical and psychological changes during pregnancy	228	54.3
<b>Using Pregnancy Related M-Health App</b>	<b>197</b>	<b>46.9</b>
<b>M-Health Applications content ( N=197)</b>		
Healthy and regular nutrition	160	81.2
Physical activity/exercise during pregnancy	122	61.9
Gestastional weight gain	133	67.5
Screening tests during pregnancy	99	50.3
Baby's growth and development	193	98.0
Breastfeeding and infant feeding	125	63.5

**Table 5.** Factors Affecting GWG-Related Information Search with Internet and Mobile Health Application

Variables (N=420)	Searching for GWG Related Information on the Internet			Use of M-Health Application		
	Yes	No	p	Yes	No	Test
	M±SD	M±SD		M±SD	M±SD	p
The age mean (years)	27.31±5.42	27.95±5.60	.238	26.81±5.29	28.41±5.63	<b>.003<sup>a</sup></b>
Consulting competence of prenatal health professionals	2.52±1.14	2.17±1.26	<b>.004</b>	2.38±1.22	2.29±1.23	.480 <sup>a</sup>
eHEALS Total score	29.67±5.48	27.63±6.11	<b>&lt;.001</b>	29.53±5.64	27.7±6.03	<b>.002<sup>a</sup></b>
Pre-Pregnancy BMI (kg/m <sup>2</sup> )	25,78± 5.90	26,03±5.66	.501	25.68±6.22	26.12±5.35	.442 <sup>a</sup>
GWG /kg	10.25±6.03	10.64±5.93	.655	10.59±6.64	10.34±5.32	.677 <sup>a</sup>
<b>Education</b>						
≤8year	96(44.2)	121(55.8)	.531	86 (39.6)	131(60.4)	<b>.002<sup>b</sup></b>
>8 year	96(47.3)	107(52.7)		111 (54.7)	92 (45.39)	
<b>Number of pregnancies</b>						
Primigravida	74(53.2)	65 (46.8)	<b>.029</b>	83(59.7)	56(40.3)	<b>&lt;.001<sup>b</sup></b>
Multigravida	118(42.0)	163 (58.0)		114(40.6)	67(59.4)	
<b>Reporting of GWG information</b>						
Reported	134(57.5)	99 (42.5)	<b>&lt;.001</b>	119(51.1)	11(48.9)	.056 <sup>b</sup>
Unreported	58(31.0)	129 (69.0 )		78(41.7)	109(58.3)	
<i>M (Mean), SD (standard deviation), Min-Max (Minimum-Maksimum), ), <sup>a</sup>t (t test) , <sup>b</sup> (pearson chi-square test)</i>						

## CONCLUSION AND RECOMMENDATIONS

According to the research results; only one out of four pregnant women has GWG information in accordance with the IOM guidelines. Only one out of every two pregnant women received GWG counseling in prenatal care.

It was determined that 66.8% of the sources from which information about GWG was obtained were information communication e-health technologies. Although most of the pregnant women (92.6%) search for information on pregnancy related websites, approximately half of the pregnant women have a search for information about GWG on the internet.

Counseling by healthcare professionals on IOM guideline GWG recommendations, excessive GWG and risks of maternal obesity. Due to the increase in the widespread use of internet and media based resources, healthcare professionals should direct them to reliable sources. In addition, safe sites should be prepared by healthcare professionals for nutrition, physical activity and GWG.

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**INVESTIGATION OF THE EFFECTIVENESS OF HYGIENE EDUCATION  
PROVIDED BY A PEER EDUCATION MODEL TO A GROUP OF GIRLS IN THE  
ADOLESCENT PERIOD**

Figen Çavuşoğlu<sup>1</sup>, Dilek Çelik Eren<sup>1</sup>  
<sup>1</sup>Ondokuz Mayıs University

**Goal:**

The aim of this study is to examine the effectiveness of hygiene education given to a group of girls in adolescent period with peer education model.

**Methods:**

This research was conducted according to the pretest-posttest experimental model in one group of quasi-experimental research designs. The study included 38 adolescent girls who were educated in a boarding education institution, volunteered to participate in the study, and completed their education. In the study, 4-hour training consisting of 4 sessions on personal hygiene behaviors was given to adolescent girls by their university peers. The training was carried out using audio-visual materials, educational videos and question-answer method. As a pre-test before the training, a questionnaire examining socio-demographic characteristics and a questionnaire about personal hygiene behaviors were applied to adolescent girls. 3 months after the training was completed, the change in personal hygiene behavior was determined with the post-test. Descriptive statistics and McNemar test were used to evaluate the data. Necessary permissions were obtained before starting the research.

**Findings:**

The average age of the girls in the adolescent period within the scope of the study was  $16.47 \pm 1.43$ , 89.5% of the girls had high school education, 68.4% had nuclear family, 47.4% had the longest residence in the district and 81.6% had not been trained in personal hygiene before. It was found that adolescents who received peer education developed positive behaviors in hand hygiene, oral/dental hygiene, body hygiene, hygienic behavior during menstrual period, genital hygiene and foot hygiene. When the use of personal belongings of the adolescents within the scope of the study were examined, it was found that the rate of those who used their clothes, toothbrush, socks, nail clippers, comb, hat, underwear, slippers and towels only increased.

**Results:**

According to the results of this study, it was found that personal hygiene education given to adolescent girls through peer education method positively changed the hygiene habits of the girls.

**Keywords:** Adolescent period, peer education, personal hygiene

**DETERMINING THE VIEWS AND SATISFACTION OF NURSING STUDENTS REGARDING THE E-LEARNING PROCESS DURING THE COVID-19 OUTBREAK PROCESS**

Sibel Küçüköğlü<sup>1</sup>, Adalet Yücel<sup>1</sup>, Fatma Taş Arslan<sup>1</sup>

<sup>1</sup>Selcuk University, Faculty of Nursing, Child Health and Disease Nursing

**Goal:**

It is the purpose of this study to determine the views and satisfaction of students studying in the nursing department during the COVID-19 outbreak regarding the distance education system.

**Methods:**

The study was carried out descriptively with 475 students who received nursing undergraduate education at three universities in Konya between May and August in the early period of the epidemic. “Introductory Information Form”, “Satisfaction Scale Regarding the e-Learning Process” and “Perception Scale for Distance Education” were used to collect the study data. Data collection was carried out with the online survey system.

**Findings:**

The average age of the students participating in the study was  $20.9 \pm 1.59$ , the majority of which were female (88.8%), single (97.7), moderate socio-economic status (79.6%) and non-working (97.7) students. It was observed that half of the students (49.9%) had sufficient opportunity to follow distance education and most of them (78.1%) did not take lessons with distance education before. The top three problems students experience most frequently with the distance education system are; visual and sound problems during lectures (74.5%), incomplete understanding of the lectures (71.2%) due to lack of clinical practice, and problems in listening to lectures and concentrating (68.6%). Students' Satisfaction Scale Regarding the e-Learning Process mean score  $81.17 \pm 26.08$ ; the mean score of the Perception Scale for Distance Education was determined as  $55.32 \pm 10.53$ . In the assessment, the average scores of both scales were affected by the ability to track class, university type, and distance education variables ( $p < 0.05$ ).

**Results:**

As a result of the study, it was observed that the satisfaction levels of the students towards distance education were above average, and their point of view towards distance education was neither positive nor negative. Considering that this study was conducted at the beginning of the epidemic, it is thought that it is necessary to update the work with nursing students who continue the distance education system during the epidemic with larger samples.

**Keywords:** Covid-19, distance education, nursing, satisfaction, view

## ANXIETY LEVEL OF PREGNANT WOMEN BEFORE PREGNANCY TERMINATION FOR FETAL ABNORMALITY

Merve Geylani<sup>1</sup>, Sibel Doğan<sup>2</sup>, Ali Timuçin Atayoğlu<sup>2</sup>  
<sup>1</sup>Istanbul Kent University, <sup>2</sup>Istanbul Medipol University

### **Goal:**

Holistic approaches in health care services consider all aspects of individuality. This research was conducted as a descriptive study to evaluate the anxiety level of pregnant women before the termination of the pregnancy for fetal abnormalities.

### **Methods:**

This descriptive and cross-sectional study comprised pregnant women who were admitted to the prenatal diagnosis and treatment unit before pregnancy termination for a severe fetal abnormality. As the data collection tool, a questionnaire containing the descriptive and obstetric characteristics of the pregnant women, their feelings and thoughts about pregnancy and the State-Trait Anxiety Inventory were used in this research. In the evaluation of the research data, percentage values, arithmetic mean, standard deviation, median, minimum and maximum values were given as descriptive statistics of the data.

### **Findings:**

This study consisted of 83 pregnant women. The findings showed that 49 (59.0%) of pregnant women experienced sadness, and 41 (49.4%) needed psychological support before the termination of pregnancy. The mean State-Trait Anxiety Inventory score of the pregnant women was  $60.7 \pm 11.6$ , and that they experienced high levels of anxiety.

### **Results:**

The findings suggest that pregnant women before the termination of pregnancy for severe fetal abnormalities should be evaluated and supported psychosocially.

**"This article was based on a part of PhD/MSc thesis of the first author."**

**Keywords:** Anxiety, congenital abnormalities, fetus, holistic health, pregnancy

## **NURSING CARE ACCORDING TO VIRGINIA HENDERSON MODEL OF THE PATIENT THAT HAS BEEN TROMBOLYTIC TREATED FOR ACUTE PULMONARY EMBOLIA: A CASE REPORT**

Gizem Açıkgöz<sup>1</sup>, İsmail Selçuk<sup>2</sup>, Esra Sarıbaş<sup>3</sup>

<sup>1</sup>Istanbul Kent University, Faculty of Health Science, Nursing Department, <sup>2</sup>Sultan II. Abdülhamid Han Educational and Research Hospital, Department of Cardiovascular Surgery,

<sup>3</sup>Sultan II. Abdülhamid Han Educational and Research Hospital, Cardiovascular Surgery Intensive Care Unit

### **Goal:**

Acute pulmonary embolism is an emergency clinical situation that occurs as a result of the thrombus reaching the heart with venous circulation. It can range from asymptomatic cases to complex cases that can lead to shock or sudden death. In the light of technological developments in recent years, it has started to take an important place among the treatment methods in catheter-mediated interventional techniques. Most commonly used method is the Ecosonic Endovascular System (EKOS) method. In this study, it is aimed to present the nursing care of the patient, who was followed up in the Cardiovascular Surgery Intensive Care Service with the pre-diagnosis of acute pulmonary embolism, applied to the emergency department with sudden respiratory distress, according to the Virginia Henderson model.

### **Methods:**

In the study, nursing care for the nursing diagnoses determined during the treatment and care of a patient who was followed up due to acute pulmonary embolism in the Cardiovascular Surgery Intensive Care Service of a university hospital in Istanbul was planned, implemented and evaluated in the light of the Virginia Henderson Model. Written informed consent for the presentation of the case was obtained from the patient.

### **Findings:**

The patient was followed up in the Cardiovascular Surgery Intensive Care Service to take ECOS treatment. The patient, who responded to the treatment and care processes at a high level, was followed up for 6 hours in terms of catheter withdrawal and bleeding control after the end of EKOS treatment, and at the end of this period, the patient who did not have any deviation from normal or any complications in his vital signs was transferred to the Cardiovascular Surgery Service.

### **Results:**

As a result of developing technologies, when treatments with high success rates are applied together with appropriate nursing care, patients give very positive results in a short time. In such cases, basing the planned nursing care on nursing theories increases the correct planning and implementation and the quality of care.

**Keywords:** Acute pulmoner embolism, ECOS, intensive care unit, nursing care

## **ECMO THERAPY IN VIRAL PNEUMONY AND NURSING CARE ACCORDING TO THE MODEL OF DAILY LIFE ACTIVITIES: A CASE REPORT**

Gizem Açıkgöz<sup>1</sup>, Bülent Barış Güven<sup>2</sup>, Tuğçe Vardar<sup>3</sup>

<sup>1</sup>Istanbul Kent University, Faculty of Health Science, Nursing Department, <sup>2</sup>Sultan II. Abdülhamid Han Educational and Research Hospital, Department of Anesthesia and Reanimation, <sup>3</sup>Sultan II. Abdülhamid Han Educational and Research Hospital, Cardiovascular Surgery Intensive Care Unit

### **Goal:**

Viral pneumonia is one of the most important infectious diseases causing serious mortality and morbidity. The treatment process in viral pneumonia is planned as symptomatic treatment according to the use of antiviral drugs and the severity of the developing Acute Respiratory Distress Syndrome (ARDS). Extra Corporeal Membrane Oxygenation (ECMO) treatment is used when the oxygenation of the body is insufficient. This study was aimed to present the nursing care of a 54 year old male patient who was applied to the emergency department with complaints of respiratory distress and 38.6 C fever with viral pneumonia findings due to despite oxygen support in the Anesthesia and Reanimasyon Intensive Care Unit (ARICU) and ECMO treatment in the Cardiovascular Surgery Intensive Care Unit (CVSICU) according to the Activities of Daily Living Model.

### **Methods:**

In the study, nursing care for the determined nursing diagnoses of the patient who was followed up for viral pneumonia in the ARICU and received ECMO treatment in CVSICU of a university hospital in Istanbul implemented and evaluated according to the Daily Living Activities Model. Written informed consent for the presentation was obtained from the patient.

### **Findings:**

Patient was followed up in the ARICU unit due to the increase in respiratory distress despite oxygen support. The patient was intubated and put on mechanical ventilation support. The patient whose oxygen level did not reach the desired levels despite high-level ventilator support was started ECMO treatment and was taken in the CVSICU. Thus, it was tried to provide tissue oxygenation that the patient needs. The patient died on the seventh day of his hospitalization due to the inadequate oxygenation and sepsis, despite all the treatment and care applied.

### **Results:**

Viral pneumonias are considered as important health problems that require high-level treatment and care, especially in patients with moderate and severe symptoms. In such cases, basing the planned nursing care on nursing theories increases the correct planning and implementation of care and the quality of care.

**Keywords :** ECMO therapy, intensive care unit., nursing care, viral pneumonia

**NURSING CARE ACCORDING TO THE ROY ADAPTATION MODEL OF THE PATIENT WITH COMPLICATED VALVE REPLACEMENT AND AORTIC GRAFT SURGERY: A CASE REPORT**

Gizem Açıkgöz<sup>1</sup>, Özlem İbrahimoglu<sup>2</sup>, Tuğçe Vardar<sup>3</sup>, Esra Saribaş<sup>3</sup>

<sup>1</sup>Istanbul Kent University Faculty of Health Sciences, Nursing Department, <sup>2</sup>Istanbul Medeniyet University Faculty of Health Sciences, Nursing Department, <sup>3</sup>Sultan II Abdulhamid Han Education and Research Hospital, Cardiovascular Surgery Intensive Care Unit

**Goal:**

Cardiovascular diseases requiring surgical intervention are associated with valves, coronary arteries, and major vessels of the heart. Stenosis or failure of more than one heart valve is often accompanied by an aneurysm that occurs in the ascending aorta or arcus aorta. Especially in patients with persistent hypertension, aneurysms may occur in different parts of the aorta. Cardiac surgery is in the major surgery class with high morbidity and mortality. In complicated cases, the importance of surgical process, treatment, and nursing care gain more importance. This study was aimed to present the nursing care of a 72-year-old male with a diagnosis of mitral valve insufficiency, aortic valve insufficiency, and ascending arcus aortic aneurysm in the Cardiovascular Surgery Intensive Care Unit (CVSICU) according to the Roy Adaptation Model.

**Methods:**

In the study, nursing care for the determined nursing diagnosis of a patient who underwent Mitral Valve Replacement, Aortic Valve Replacement with Bentall procedure, and Hemiarkus replacement in CVSICU of a university hospital in Istanbul, and evaluated according to the Roy Adaptation Model. Written consent was obtained from the patient.

**Findings:**

Following the necessary surgical preparations, the patient was followed-up in the CVSICU with temporary pacing support and intubated by performing Mitral Valve Replacement, Aortic Valve Replacement with Bentall procedure, and Hemiarcus replacement surgeries. The patient was awake at the postoperative fourth hour and was extubated at the eighth hour. He was mobilized on the first postoperative day and was followed up for three days in terms of rhythm monitoring. Since the patient did not have his own rhythm, he was transferred to the Cardiovascular Surgery Service with a temporary pacing device to be monitored in terms of permanent pace implantation.

**Results:**

Postoperative treatment and care processes of patients with high surgical risk are also complicated and require high-level care. In such cases, basing the planned nursing care on nursing theories increases the correct planning and implementation of care and the quality of care.

**Keywords:** Adaptation model, cardiac surgery, intensive care unit, nursing care

**PERCEIVED SOCIAL SUPPORT, SELF-SENSITIVITY AND MENTAL WELL-BEING STATUS OF NURSES DURING COVID 19 PANDEMIA**

Gizem Açıkgöz<sup>1</sup>, Gökçe Çiçek<sup>1</sup>, Cennet Çiriş Yıldız<sup>1</sup>, Güzin Ünlü<sup>1</sup>, Demet Sökün<sup>1</sup>, Merve Geylani<sup>1</sup>, Meryem Erceylan<sup>1</sup>

<sup>1</sup>Istanbul Kent University, Faculty of Health Science, Nursing Department

**Goal:**

COVID-19 infection caused a large number of people to be affected by the disease and many people to die due to its rapid spread and severe clinical course in infected people. The rapid spread of the disease has increased the need for healthcare facilities and required critical nurses to be at the forefront, especially with the role of caregivers in intensive care units. In this process, the nurses involved in the care of COVID-19 patients were extremely tired and exhausted due to uncertainties about the pandemic process, concerns about their own lives and the lives of their family members with whom they were in close contact, long and tiring working conditions and protective measures and even feel subjected to physical and psychological violence. For all these reasons, in this study, the social support, self-sensitivity and mental well-being that nurses perceived during the COVID-19 pandemic process were tried to be revealed.

**Methods:**

This study was conducted with a total of 202 nurses who worked and did not work in related units during the COVID-19 Pandemic process. Descriptive Information Form, Multidimensional Perceived Social Support Scale, Self-Sensitivity Scale and Mental Well-being Scale were used to collect data. Data collection was done through Google Forms.

**Findings:**

It was found that there was a statistically significant and positive relationship and mediating relationship between scales such as the Multidimensional Perceived Social Support Scale, Self-Sensitivity Scale and Mental Well-being Scale. In addition, a statistically significant and positive relationship was found between descriptive characteristics and scale scores.

**Results:**

The results of this research can be used by the manager nurses in planning the support to be provided for the psychological processes of nurses working during the COVID-19 Pandemic process.

**Keywords:** Covid-19, mental well-being, nursing, self awareness, social support



**COVID-19 FEAR OF NURSING STUDENTS REGARDING FACE TO FACE  
EDUCATIONAL ACTIVITIES DURING THE PANDEMIC PROCESS**

Hande Yağcan<sup>1</sup>, Tuğçe Çetin<sup>2</sup>

<sup>1</sup>Dokuz Eylul University Faculty of Nursing <sup>2</sup>Dokuz Eylul University Health Science Institute

**Goal:**

In this research our aim is to examine Covid-19 fear of nursing students regarding face to face educational activities that will begin during pandemic.

**Methods:**

This study was descriptive and cross-sectional type. It was performed with 817 nursing students who continue their education in 2020-21 academic year of a State University Faculty of Nursing. The data collected by using the socio-demographic data collecting form and “The Fear of COVID-19 Scale“. These forms were sent the student’s email addresses.

**Findings:**

This students’ 66.3% were female, 29% senior, 28% has low income, mean age was 20.73±2.05, 7.1% has a chronic disease, 2.5% had covid-19 diagnosis, 54.2% and 33.6% of their parents has a chronic disease and had covid-19 diagnosis, 8.7% had lost their relatives due to covid-19, 26.1% had psychological support need, 65.3% has stayed at home during the pandemic. Their 60.8% will use bus to come their university when face to face education start and 65.5% thought that this will increase covid-19 spread to them. The students’ 60.3% will stay at dormitory, 76.2% not feel safe taking lecture in a crowded classroom, 65.8% feel comfortable in online lectures, 64.7% want to be in hospitals/ family medicine centres for their practice, 58.6% afraid transmission of COVID-19 from hospitals, 47.7% don’t find useful to evaluate by homework or projects during the semester, 46.2% not afraid being in a simulation laboratories. Majority of students offer mix education model, according to their wish they want to choose face to face or online education. The Fear of COVID-19 Scale mean value of them was found 14.54±6.35 (min:6- max:30).

**Results:**

During covid-19 pandemic process, nursing students continued their courses through online education. Students did not found courses effective by online education. Although they had moderate COVID-19 fear, diagnosis and lost their relatives, will use public transport and dormitory to come to university, they prefer practicing in hospitals instead of online lectures and homework.

**Keywords :** Corona virus, covid-19, fear, nursing education

**Publication No : S-068**

## **METAPHOR PERCEPTIONS OF SECOND YEAR NURSING STUDENTS ABOUT INTERNAL MEDICINE NURSING**

Gamze MUZ<sup>1</sup>

<sup>1</sup>Nevşehir Hacı Bektaş Veli University

### **Goal:**

This study was conducted to determine the metaphorical perceptions of second year nursing students towards internal medicine nursing.

### **Methods:**

Phenomenology design, one of the qualitative research methods, was used in the study. The sample consisted of 80 second-year nursing students. Data descriptive questionnaire and internal medicine questioning their perceptions of nursing, "Internal medicine nursing is like ... because ...", "I am willing to provide nursing care to the individual with the dimension of internal medicine nursing because ... .." and "I enjoy working in internal medicine clinics because ... .." collected using metaphor sentences.

### **Findings:**

83.9% of the students are female, 60.7% are the first choice and 66.1% have voluntarily come to the department. At the end of the study, students developed 51 metaphors for the concept of "Internal Medicine Nursing". Metaphors, according to common features; It is grouped under a total of five categories: holistic care, professionalism-autonomy, diversity, benefit and necessity.

### **Results:**

At the end of the study, 51 metaphors and five categories were determined. The resulting metaphors and categories can be used as a resource for developing multidimensional and new perceptions for internal medicine nursing.

**Keywords :** Internal medicine nursing, metaphors, nursing, nursing education

**CURRENT APPROACHES TO PREVENTING NURSE-CAUSED MEDICATION ERRORS: A SYSTEMATIC REVIEW**

Zilan BARAN<sup>1</sup>

<sup>1</sup>Izmir Katip Celebi University

**Goal:**

The aim of this study is to review the existing literature evaluating the causes of nurse-induced medication errors and the effectiveness of current approaches to preventing medication errors and systematically evaluate of the data obtained from the studies.

**Methods:**

The study is a systematic review and was conducted between 05.05.2020-16.05.2020 by scanning the English and Turkish literature. The study has been searched in national and international databases Pubmed”, “EBSCOhost”, “Science Direct”, “Cochrane”, “Google Scholar”, “Google Akademik”, “Ovid”, “Scopus” Pubmed”, “EBSCOhost”, “Science Direct”, “Cochrane”, “Google Scholar”, “Google Akademik”, “Ovid”, “Scopus” with the keywords "nursing", "nursing errors", "medication error", "medicine error", "curent approaches", "study protocol". 21 quantitative studies that were conducted and published between 01.01.2015-05.05.2020 and whose full text can be accessed were included in the study.

**Findings:**

The 21 studies remaining in this systematic review were methodologically analyzed according to the JBI quality evaluation criteria and included 5 descriptive studies, 11 cross-sectional studies, 2 randomized studies and 3 semi-experimental studies that met these criteria. In 13 of the included studies, nurses made mistakes in drug applications, but they did not report any errors, 1 of them did not have enough knowledge in nursing students' drug administration and dose calculations, 2 of them were effective in simulation training designed to prevent drug errors in nursing education, 1 It has been observed that wearing a vest with warning signs reduces inappropriate drug interruptions, application designed to report drug errors in 2 is effective, and barcode scanning and color label system to prevent drug errors in 2 is applicable

**Results:**

As a result of this systematic review, it was observed that the majority of nurses made drug errors and did not report these drug errors. Moreover, even if there are studies to prevent drug errors, it has not been observed to be fully effective unless it is combined with institutional policies.

**Keywords :** Medication errors, nursing, nursing errors, systematic review

## INVESTIGATION OF COMMUNITY PSYCHOLOGICAL RESILIENCE AND NOMOPHOBIA ACCORDING TO SOME VARIABLES IN THE COVID 19 OUTBREAK

Burcu Demir Gökmen<sup>1</sup>, Meryem Fırat<sup>2</sup>, Mine Cengiz<sup>3</sup>,

<sup>1</sup>Agri Ibrahim Cecen University <sup>2</sup>Erzincan Binali Yıldırım University, <sup>3</sup>Atatürk University

### **Goal:**

The fear of being deprived of a smartphone is known as nomophobia. As part of the measures taken in the Covid 19 process, people's social lives were restricted. Because of these and many such restrictions, it is a known fact that the use of mobile devices is mandatory and its use is increasing in maintaining social relationships. The research was conducted to examine nomophobia and psychological robustness in light of the various changes that occur in people's lives during the Covid 19 process.

### **Methods:**

This research was conducted in descriptive type. The research was conducted with 1047 people aged between 20 and 70 who agreed to participate in the study, which could be reached from individuals with a smartphone. August and September 2020 data were collected. Personal Data Form, nomophobia scale and The Brief Resilience Scale (BRS) were used to collect the data. Percentages, mean, standard deviation, t test, one-way variance analysis and correlation analysis were used to evaluate the data.

### **Findings:**

It was determined that %59,3 of the respondents were aged 18-27, 68.2% were female, 65.8% had a bachelor's degree, 75.7% had a core family and 42.4% lived in the metropolitan area. During the Covid-19 process, it was found that 44.9% of participants ' income decreased and 69.5% of their phone use increased compared to before Covid-19 ( $p < 0.05$ ). Among the variables studied, age, change in phone use, and body weight variables were found to be associated with nomophobia, and gender, family type, economic status, body weight, change in phone use, and body weight variables were associated with psychological robustness. It was determined that there was a negative relationship between nomophobia and psychological robustness ( $r = -0.221^{**}$   $p < 0.05$ ).

### **Results:**

The study, it was determined that almost all people changed their frequency of using phones during the Covid-19 process. In addition, it has been found that nomophobia is widespread among individuals and this condition affects psychological robustness. Currently, nomophobia, which has become widespread from a young age, affects individuals from a bio-psycho-social point of view. As part of this topic, research should be increased, measures that should be taken by evaluating the possible situation for the psychological robustness of individuals should be determined.

**Key words:** Covid-19, nomophobia, psychological robustness

**THE EFFECT OF MUSIC THERAPY ON CANCER PAIN MANAGEMENT IN PALLIATIVE CARE PATIENTS: A SYSTEMATIC REVIEW**

Meryem ERCEYLAN<sup>1</sup>, Dilek YILDIRIM<sup>2</sup>

<sup>1</sup>Istanbul Kent University <sup>2</sup>Istanbul Sabahattin Zaim University

**Goal:**

This systematic review was conducted to investigate the studies which evaluate the effect of music therapy on cancer pain management in palliative care patients.

**Methods:**

The studies on cancer pain management, both in English and Turkish, whose full text versions were accessible, were systematically analyzed, the studies without full text were not included. The study was conducted by screening CINAHL EBSCOhost MEDLINE, ScienceDirect, Ovi, ProQuest, Web of Science ULAKBİM National Data Bases. Keywords such as "Cancer Pain", "Cancer Pain Management", "Palliative Care" were used to access the studies. 22 research papers were accessed and 7 of them were found to be compatible with the inclusion criteria of our study. Cochrane was established as the guideline to determine levels of evidence.

**Findings:**

5 studies out of 7 that were analyzed during the systematic review were randomized controlled trial; while, one was experimental study, and the other was meta-analysis. When all the study results were analyzed, it was shown that music therapy was effective in reducing the pain. It is informed that music, which has no adverse effect, even in a 20-30 minutes long session, is effective in reducing pain according to the studies that investigate the effects of music in reducing cancer pain.

**Results:**

When the effect of music therapy interventions on the physical and psychological recovery of patients who receive palliative care treatment was investigated, it was concluded that music therapy interventions are highly effective in reducing pain, and no adverse effect was found during the study.

**Keywords :** Cancer pain, cancer pain management, music therapy, palliative care

**THE EFFECT OF YAKSON OR GENTLE HUMAN TOUCH TRAINING GIVEN TO MOTHERS WITH PRETERM BABIES ON ATTACHMENT LEVEL AND THE RESPONSES OF THE BABY: A RANDOMISED STUDY**

Seyda CAN<sup>1</sup>, Hatice KAYA<sup>2</sup>

<sup>1</sup>Yalova University, Faculty of Health Sciences <sup>2</sup>Istanbul University, Cerrahpaşa Florence Nightingale Faculty of Nursing

**Goal:**

Touch is one of the most important factors in starting a healthy interaction between the mother and the baby and to support the growth of the baby. Yakson and gentle human touch methods are the most effective therapeutic tactile stimulants that have stress-reducing effect on preterm newborns and can be applied safely to preterm newborns. The study was carried to determine the effect of yakson or gentle human touch methods applied by the mothers to their preterm newborns on mother's attachment level and baby's response.

**Methods:**

The study was carried out as a randomized controlled experimental research. Population of the study is babies who were hospitalized at the neonatal intensive care unit of a State Hospital at Turkey between August 2016 and August 2017 and the mothers of the babies. As a result of the sample calculation a total of 90 mothers and babies; 30 for Yakson group, 30 for gentle human touch group, 30 for control group were included in the study. Data was collected with "Information Form", "Maternal Attachment Inventory," "Anderson Behavioral State Scoring System," and "Observation Forms."

**Findings:**

It was determined that yakson or gentle human touch methods applied by the mothers on their babies increased mother-baby attachment, decreased babies' wake and uneasiness states, stabilized their vital signs, contributed to babies' weight gain and reduced hospital stay durations. Yakson and gentle human touch methods ensured that preterm babies transitioned to sleep state significantly faster, they stay calm for longer, and their wakefulness and restlessness states are reduced.

**Results:**

According to the findings of this study, it can be seen that Yakson and GHT methods are safe interventions that can be used to increase maternal attachment of mothers and physical health of preterm infants. It is also important to carry out more comprehensive studies that will enable these approaches to be implemented and reveal the effects of touch methods.

This article was based on a part of PhD/MSc thesis of the first author.

**Keywords :** Gentle human touch, maternal attachment, preterm bab, yakson

**EXAMINING THE EXPERIENCES OF SCHOOL CHILDREN WITH TYPE 1  
DIABETES BY DRAWING METHOD: PROJECTIVE RESEARCH**

Serkan UÇAR<sup>1</sup>, Gülzade UYSAL<sup>2</sup>

<sup>1</sup>Istanbul University Medical School Hospital <sup>2</sup>Istanbul Okan University, Faculty of Health Sciences, Nursing Department

**Goal:**

This study was conducted for type 1 diabetes children between the ages of 6-12 years to understand their experiences related to their diseases by using the projective drawing as a tool in a phenomenological way.

**Methods:**

The data is obtained by an A4 sized paper which has been given to the sample as well as an information form. The data has been collected face to face sessions in which the sample was commenting on their own drawings. The data has been evaluated by creating main and sub-themes with regards to the information.

**Findings:**

Their experiences towards type 1 diabetes disease are categorized by 4 main themes: “accepting the disease”, “the disease management”, “discomforts caused by the disease”, “social isolation”. It’s been observed that when the children of the sample have been watched under “The accepting the disease” main theme, the subcategories were mainly consisting of “consciousness toward the disease” (n:10) and “learning to live with the disease” (n:10). In the main theme of “The disease management” category, planning the use of insulin (n:8), measuring blood glucose (n:6), healthy and regular diet (n:4), sports/exercise (n:2) recorded as the major sub-themes. In the main theme of “Discomforts caused by the disease” category, inconvenience of the injections (n:3), defect of vision in the fingertips (n:2), fear of seeing blood (n:1), loss of sensation in the fingertips (n:1), feeling of tremors (n:1) has been observed as the sub-themes. Regarding children’s experiences, the theme of social isolation has come forward as a category with its own name and noted a sense of social exclusion (n:3).

**Results:**

In conclusion, it has been noted that the majority of the children's positive perceptions have been observed such as accepting the disease and the disease management. On the other hand, “discomforts caused by the disease” and “social isolation due to the effects of the disease” can be seen as the negative effects of what this disease brings.

**Keywords :** Children, perception of disease, projective drawing, type 1 diabetes

## WHAT IS THE RELATIONSHIP BETWEEN NURSES' CONSCIENTIOUS INTELLIGENCE LEVELS AND CARE BEHAVIORS?: A CROSS-SECTIONAL STUDY

Sadiye Ozcan<sup>1</sup>

<sup>1</sup>Yalova University Faculty of Health Sciences

### Goal:

Nurses are the main protectors of goodness, honesty and morality in patient care. Nurses need to constantly seek their conscience to continuously maintain patient care with the highest possible quality. In this research, we aimed to determine the relationship between conscientious intelligence levels and caring behaviours of nurses and to determine the factors affecting the conscientious intelligence levels and caring behaviours.

### Methods:

This research was designed as a descriptive, cross-sectional and relational study. We included 314 nurses working at three hospitals in eastern Turkey. The data were collected by the researcher at a time when the nurses were available and when a time they had no working. Written and oral informed consents were obtained from all participants. The data were collected through the application of the “Personal Information Form”, “Conscientious Intelligence Scale” (CIS) and “Caring Behaviours Scale” (CBS) which the nurses were asked to complete.

### Findings:

The mean age of nurses was  $30.29 \pm 7.55$  (min: 19; max: 58) years. Further, 67% nurses loved nursing profession, 63.1% did not see nursing only as a job to make money and 79% knew the nursing oath. A moderate significant positive correlation was observed between conscientious intelligence levels and caring behaviours of nurses ( $r = 0.403$ ,  $p < 0.01$ ). Years of nursing, sex and liking the nursing profession were associated with conscientious intelligence levels and caring behaviours. There was a negative correlation between keeping the nursing oath and the CIS scores. There was a significant difference in the “responsibility to the creator” subdimension of the CIS between nurses who willingly chose the nursing profession and those who did not ( $p < 0.05$ ).

### Results:

Conscientious intelligence levels of those engaged in the nursing profession should be investigated. Nurses with problems at the level of conscientious intelligence should be followed closely. Topics such as conscientious intelligence and listening to your conscience while providing care should be included in in-service training programmes provided to nurses.

**Keywords :** Caring behaviours, conscientious intelligence, considering nursing only as a monetary gain, keeping the nursing oath, quality of care



## THE EFFECTS OF ENTREPRENEURSHIP AND INNOVATION COURSE ON NURSING STUDENTS' INDIVIDUAL INNOVATION LEVELS

Ayşe Cal<sup>1</sup>

<sup>1</sup>Ankara Medipol University, School of Health Sciences Department of Nursing

### Goal:

This study was conducted to find out the effects of entrepreneurship and innovation course added in nursing curriculum on nursing students' individual innovation levels.

### Methods:

This study was conducted with a single group by using pretest-posttest semi experimental model. The sample of the study consisted of 105 students receiving entrepreneurship and innovation course in the nursing department of a health sciences faculty of a university in Black Sea region during 2017-2018 academic year spring term. The data were collected by using information form and "Individual Innovation Scale" in the first course as pretest and at the end of the semester as posttest. SPSS 22 program was used in data analysis by using descriptive analysis, paired samples t-test and correlation test.

### Findings:

Average age of the students was  $22.09 \pm 1.99$  (min=20, max=37), 72.4% were female, 71.4% had previously received a course about innovation. Innovation levels of students was  $64.76 \pm 6.68$  (min=48, max=81) before entrepreneurship and innovation course and  $67.55 \pm 6.82$  (min=52, max=85) after entrepreneurship and innovation course and a positive high association was found between the measurements ( $r=0.50$ ,  $p<0.001$ ). It was also found at the end of the course that students' perceptions of individual creativity, perceptions of competence in problem solving, thinking that innovative perspective is important in terms of nursing profession and thinking that entrepreneurship and innovation course is necessary in undergraduate education increased significantly.

### Results:

It was found that entrepreneurship and innovation course increased students' individual innovation levels significantly. In line with the results of the study, adding the entrepreneurship and innovation course to the nursing undergraduate curriculum as an elective course can be made more widespread. In addition, activities such as "developing innovative ideas" can be added in small groups in course teaching goals and innovation and entrepreneurship can be supported in students.

**Keywords :** Creativity, entrepreneurship, Innovation, innovative nursing, nursing

## HOW DO PATIENTS HOSPITALIZED IN THE OBSTETRICS AND GYNECOLOGY WARD PERCEIVE NURSING CARE? MIXED METHODS RESEARCH

Sadiye Ozcan<sup>1</sup>

<sup>1</sup>Yalova University Faculty of Health Science

### **Goal:**

Patient satisfaction constitutes one of the basic steps of quality of nursing services. Patient satisfaction is based on the level of service provided to meet the expectations of the patient and the patient's perception of the service provided. The attitude of a nurse affects the healing process of the patient. In this study, how the patients hospitalized in the obstetrics and gynecology ward perceived the care given to them by the nurses and their satisfaction with the care were investigated.

### **Methods:**

The data of this mixed methods research were collected between April 1, 2019 and May 1, 2019 from 120 patients hospitalized in the obstetrics and gynecology ward of a hospital located in eastern Turkey using the Scale of Patient Perception of Hospital Experience with Nursing (PPHEN). In addition, 13 patients were interviewed within the aforementioned period using the in-depth interview technique. The interviews were audio-recorded on a tape recorder. For the analysis of the data, the audio-recordings were transcribed on the computer and the themes were created.

### **Findings:**

The mean age of the patients participating in the study was  $31.68 \pm 9.51$  years. Of the participants, 86.7% stated that they were satisfied with the care given by the nurses. The mean score they obtained from the PPHEN was  $67.02 \pm 10.08$ . Patients who were not satisfied with the care given by the nurses and their behavior ( $t = 5.047$ ;  $p = 0.000$ ) obtained lower mean scores from the PPHEN. After the interviews were conducted in the study, three main themes were created: performing an intervention without the consent of the patient, inadequate informing of the patient and being a nurse from the patient's perspective.

### **Results:**

It was determined that the patients hospitalized in the obstetrics and gynecology service were generally satisfied with the care provided by the nurses. It was determined that the most important thing affecting the patients' satisfaction was the provision of adequate information to the patient.

**Keywords :** Mixed methods research, nursing care, obstetrics and gynecology service, patient's perception of care

**MOOD CHARACTERISTICS OF HEALTH SECTOR AND COMMUNITY SERVICES EMPLOYEES DURING THE COVID-19 PANDEMIC**

Esma Kabasakal<sup>1</sup>, Funda Özpulat<sup>2</sup>, Ayşegül Akca<sup>1</sup>, L. Hilal Özcebe<sup>3</sup>  
<sup>1</sup>Ankara Yıldırım Beyazıt University <sup>2</sup>Selçuk University <sup>3</sup>Hacettepe University

**Goal:**

The COVID-19 pandemic has impacted employees' health as it did in various fields. The mood characteristics of employees have been affected by the risk of infection and other factors related to the new arrangements during the pandemic. This study was carried out to evaluate the mood of health sector and service sector employees who were actively working during the pandemic period.

**Methods:**

This is a descriptive study. A total of 735 people consisting of 426 health sector employees and 309 service sector employees, constituted the study sample. In this study, the data were collected by using the personal information form and Positive and Negative Mood Questions.

**Findings:**

The results revealed that there were differences between the sectors in terms of gender and educational background ( $p<0.01$ ). Compared to service sector employees, health sector employees felt more worn out, frustrated, tired, exhausted, and discouraged. Health sector employees had negative mood characteristics at higher rates, more than half of the women were determined to feel worn out, and men had felt more positive about their thoughts.

**Results:**

In a conclusion health and service sector employees are at risk emotionally as well as infection risk due to COVID-19. Effective mental health interventions that are oriented to the health sector and service sector employees are needed for the effective management of the pandemic, sustainability of health services, and maintenance of the qualified workforce after the pandemic.

**Keywords :** Covid-19, mood, occupational health, health sector employee, service sector employee, positive emotion, negative emotion

## **INTRODUCTION**

COVID-19 disease caused by the SARS-CoV-2 virus has initiated a new process for many professions and businesses worldwide (ILO, 2020; Bajrami et al., 2020). Long-term home stay and quarantine implementations during the pandemic process have affected people's daily routines, work schedules and their lifestyle habits (Dogas et al., 2020). Layoffs in various sectors have been reported (Bajrami et al., 2020), payroll deductions have occurred in people who have been continuing their jobs, people have continued to work with reduced social benefits and job insecurity (ILO, 2020). In terms of health sector employees, in addition to psychosocial risk factors, situations such as new COVID-19 experience, shifts, emergency management, lack of personnel and daily difficulties have posed great risks to mental health (Buselli et al., 2020; Pappa et al., 2020). At the same time the consequences that negatively affect the physical and psychological well-being and mood state of people such as anxiety and insomnia due to reasons such as the restrictions applied during the epidemic process changing daily life habits, the process being full of unknowns, fear of disease, boredom, lack of support, too much misleading information have been able to arise (Dogas et al., 2020; Shakespeare-Finch et al., 2020; Pérez-Fuentes et al., 2020; Pappa et al., 2020 ; ILO, 2020).

Psychological reactions seen in employees may include low mood, low motivation, fatigue, anxiety, depression, over- fatigue and suicidal thoughts (ILO, 2020). Stress negatively affects the overall quality of life of health professionals by reducing their physical and emotional well-being and productivity in the workplace (Koinis et al., 2015; Sahni, 2020). In the study conducted by Sahni (2020) with service sector employees, it is stated that the stress level of the participants during the COVID-19 period is between medium and high and the decrease in social interaction with people during the epidemic period is considered by employees as alarming. During the epidemic period, the mood fluctuations of healthcare employees, migrant workers, law enforcement and people working in contact with the public are among the groups at risk in terms of mental health like emotional exhaustion (Giorgi et al., 2020). During the COVID-19 period, employees feel anxiety and fear about issues such the health of themselves and those around them, financial situation, and job safety. Mood assessment of employees during the epidemic period is necessary to determine the emotional needs of employee health in the process and to plan sustainable practices in the post-epidemic period (Hamouche, 2020). This research is of quality of revealing the effects of the pandemic process on the mood characteristics of various service sector employees and contributing to the literature in preventing measures for employee' mental health.

## **METHOD**

### **Research Design and Participants**

The present study is a descriptive type of research. No sample selection was made in the study, and snowball sampling was used while online survey links were sent to people who agreed to participate in the study.

#### Criteria for Inclusion in the Study

- Continuing business life actively during the COVID-19 process,
- Taking part in aid groups such as Loyalty Support Group ", " Turkish Red Crescent ",
- Working in jobs that are likely to encounter society,
- Persons outside the health sector working in non-public sector jobs,
- Being working actively in health institutions.

## Criteria for Exclusion in the Study

- Not working actively during the COVID-19 process,
- Flexible working style, home office working, part time working
- Being an office clerk working in public institutions other than health institutions,
- To have left because of unpaid leave or to be on the process of unpaid leave.

## Sample Group

The study's sample group consisted of 735 people and included health sector employees (n = 426) and service sector employees (n = 309). The participants included nurses, midwives, health officers, physicians, technicians, emergency medical technicians and paramedics, medical secretaries/officers/patient admission employees, and others (managers, hospital cleaning staff, etc.). The participants from the service sector were categorized into four groups according to their working styles: (1) Office-workplace workers (workers, engineers, technicians, mechanics, etc.); (2) workers providing home services (cargo employees, water delivery staff, bread delivery staff, etc.); (3) community volunteer workers (Vefa Support Group volunteers and Turkish Red Crescent volunteers); and (4) workers providing services for community at their workplaces (general store staff, green grocers, butchers, grocers, checkers, cleaners, and stand attendants at bakeries and general stores, etc.)

**Data Collection Tools:** Within the scope of this project, personal information form, Depression Anxiety Stress Scales-21 (DASS-21), Fear of COVID-19 Scale (FCV-19S), Positive and Negative Mood Questions were applied to participants as data collection forms. In this paper, personal information form and findings regarding Positive and Negative Mood questions are presented. -*Personal Information Form:* In the first part of the questionnaire form; age, gender and educational status of service and health sector employees were included. - *Positive and Negative Mood Questions:* In the second part of the questionnaire form; 12 negative and 3 positive mood characteristics were included, and the participants were asked to mark the option they thought was the most suitable for them by categorizing them as “never / very little, moderately, quite much/ extremely much”.

**Data Collection and Analysis:** The process of data collection in the study began on 05.15.2020, employed the online survey created using Google Forms, and was terminated on 06.01.2020 until the first normalization attempt in Turkey. The data obtained from the study were evaluated on the computer using the Statistical Package for Social Sciences (SPSS) software program (version 22.0). Number and percentage distributions were presented as descriptive statistics. The Fisher's Exact Test was used in the evaluation of nonparametric variables.

**Ethics:** Ethical approval from Ethics Commission of Yıldırım Beyazıt University in Ankara (84892257-604.01.02-E.15646) and necessary permits from the Ministry of Health have been obtained through online application. In the explanation part of the online survey, the necessary information for the participants was provided. Participation in the study was voluntary.

## FINDINGS

The ages of the participants vary between 18 and 64 and the arithmetic average of the ages is  $30.68 \pm 9.49$  for those working in the service sector and  $28.03 \pm 7.26$  for those working in the health sector. 73.8% of the service sector is male, 81.2% of the health sector is female, and there is a gender difference between the sectors ( $p < 0.001$ ). Similarly, educational status varies between sectors and it is seen that 31.7% of the service sector is high school graduates, and 50.2% of the health sector is undergraduate (Table 1).

**Table 1. Sociodemographic Characteristics of Participants**

	Service Sector		Health Sector		Total		x <sup>2</sup>	p
	n	%	n	%	n	%		
<b>Gender</b>								
Female	81	26.2	346	81.2	427	58.1	222.594	<b>.000*</b>
Male	228	73.8	80	18.8	308	41.9		
<b>Education status</b>								
Secondary School Graduate and Below	56	18.1	3	.7	59	8.0	155.255	<b>.000</b>
High School Graduate	98	31.7	75	17.6	173	23.5		
Vocational School Graduate	41	13.3	50	11.7	91	12.4		
Undergraduate Student	39	12.6	24	5.6	63	8.6		
Undergraduate Degree	53	17.2	214	50.2	267	36.3		
Postgraduate School (still continuing)	10	3.2	27	6.4	37	5.0		
Master degree	10	3.2	29	6.9	39	5.3		
Doctorate degree	2	0.7	4	0.9	6	0.9		
<b>Total</b>	309	100.0	426	100.0	735	100.0		

\*Fisher's Exact Test

The comparison of the sectors in which the participants work, and their mood characteristics are indicated in Table 2. While 30.4% of the service sector employees indicate that they got very/extremely exhausted, this rate is doubled in health sector employees (63.6%), health sector employees feel that they got exhausted much more/too much. It is observed that 29.8% of the service sector employees and 60.6% of the health sector employees feel very/extremely tired. While 34.3% of the service sector employees' states that are very / extremely tired, this rate increases almost twice (60.8%) for the health sector employees, and the health sector employees feel themselves much more tired. Similarly, while 24.9% of the service sector employees indicate that they are very / extremely exhausted, this rate is doubled (51.4%) among the health sector employees, and the health sector employees feel themselves much more exhausted. 22% of the service sector employees and 48.6% of the health sector employees feel very / excessively tired. In addition, it is observed that health sector employees in other areas have higher rates of negative mood characteristics, 42.3% of health sector employees feel themselves very / extremely skeptical, and 45.3% are very / extremely alert.

**Table 2.** The distribution of mood status by the participants' working place

MOOD	SERVICE SECTOR		HEALTH SECTOR		TOTAL		p
	n	%	n	%	n	%	
<b><u>NEGATIVE</u></b>							
<b>Angry</b>							
None / Little	168	54.4	193	45.3	361	49.1	<b>.019</b>
Middle	101	32.7	150	35.2	251	34.2	
Very / Extremely	40	12.9	83	19.5	123	16.7	
<b>Worn out</b>							
None / Little	130	42.1	68	16.0	198	26.9	<b>.000</b>
Middle	85	27.5	87	20.4	172	23.4	
Very / Extremely	94	30.4	271	63.6	365	49.7	

<b>Grumpy</b>							
None / Little	165	53.4	173	40.6	338	46.0	<b>.000</b>
Middle	94	30.4	137	32.2	231	31.4	
Very / Extremely	50	16.2	116	27.2	166	22.6	
<b>Fed up</b>							
None / Little	118	38.2	84	19.7	202	27.5	<b>.000</b>
Middle	99	32.0	84	19.7	183	24.9	
Very / Extremely	92	29.8	258	60.6	350	47.6	
<b>Hopeless</b>							
None / Little	166	53.7	159	37.3	325	44.2	<b>.000</b>
Middle	77	24.9	116	27.3	193	26.3	
Very / Extremely	66	21.4	151	35.4	217	29.5	
<b>Tired</b>							
None / Little	107	34.6	70	16.4	177	24.0	<b>.000</b>
Middle	96	31.1	97	22.8	193	26.3	
Very / Extremely	106	34.3	259	60.8	365	49.7	
<b>Exhausted</b>							
None / Little	159	51.5	115	27.0	274	37.3	<b>.000</b>
Middle	73	23.6	92	21.6	165	22.4	
Very / Extremely	77	24.9	219	51.4	296	40.3	
<b>Gloomy</b>							
None / Little	161	52.1	163	38.3	324	44.1	<b>.000</b>
Middle	87	28.2	103	24.1	190	25.8	
Very / Extremely	61	19.7	160	37.6	221	30.1	
<b>Haggard</b>							
None / Little	155	50.2	126	29.6	281	38.2	<b>.000</b>
Middle	86	27.8	93	21.8	179	24.4	
Very / Extremely	68	22.0	207	48.6	275	37.4	

**Table 2.** The distribution of mood status by the participants' working place (Continue)

<b>MOOD</b>	<b>SERVICE SECTOR</b>		<b>HEALTH SECTOR</b>		<b>TOTAL</b>		<b>p</b>
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	
<b>Weak-spirited</b>							
None / Little	221	71.5	257	60.3	478	65.0	<b>.004</b>
Middle	53	17.2	88	20.7	141	19.2	
Very / Extremely	35	11.3	81	19.0	116	15.8	
<b>Skeptical</b>							
None / Little	170	55.0	140	32.9	310	42.2	<b>.000</b>
Middle	67	21.7	106	24.8	173	23.5	
Very / Extremely	72	23.3	180	42.3	252	34.3	
<b>Vigilant</b>							

None / Little	134	43.4	103	24.2	237	32.2	<b>.000</b>
Middle	86	27.8	130	30.5	216	29.4	
Very / Extremely	89	28.8	193	45.3	282	38.4	
<b><u>POSITIVE</u></b>							
<b>Lively</b>							
None / Little	145	46.9	254	59.6	399	54.3	<b>.000</b>
Middle	94	30.4	128	30.0	222	30.2	
Very / Extremely	70	22.7	44	10.3	114	15.5	
<b>Energetic</b>							
None / Little	147	47.6	256	60.1	403	54.8	<b>.000</b>
Middle	95	30.7	126	29.6	221	30.1	
Very / Extremely	67	21.7	44	10.3	111	15.1	
<b>Fresh</b>							
None / Little	143	46.3	269	63.1	412	56.1	<b>.000</b>
Middle	102	33.0	114	26.8	216	29.4	
Very / Extremely	64	20.7	43	10.1	107	14.5	
<b>Total</b>	<b>309</b>	<b>100.0</b>	<b>426</b>	<b>100.0</b>	<b>735</b>	<b>100.0</b>	

The comparison of the gender and mood characteristics of the participants is indicated in Table 3. While more than half of the women (60%) feel worn out, this rate drops to 35.4% for the male participants. 57.8% of women, 38.3% of men feel themselves very / extremely tired. Similarly, 48.5% of the female participants state themselves as very / extremely exhausted. 41.2% of them are observed to behave acted very / excessively skeptical. When the positive mood characteristics are examined; it was determined that women agreed with positive expressions at lower rates and men expressed their opinions with more positive expressions. 58.3% of the women feel themselves not / a little full of life, 60.4% of them feel not / very vigorous, 20.8% of the men feel very / excessively full of life and 20.1% of them feel very / extremely energetic.

**Table 3.** Comparison of Participants' Mood Characteristics by Gender

MOOD	FEMALE		MALE		TOTAL		p
	n	%	n	%	n	%	
<b><u>NEGATIVE</u></b>							
<b>Angry</b>							
None / Little	204	47.8	157	51.0	361	49.1	<b>.691</b>
Middle	150	35.1	101	32.8	251	34.1	
Very / Extremely	73	17.1	50	16.2	123	16.7	
<b>Worn out</b>							
None / Little	83	19.4	115	37.3	198	26.9	<b>.000</b>
Middle	88	20.6	84	27.3	172	23.4	
Very / Extremely	256	60.0	109	35.4	365	49.7	
<b>Grumpy</b>							
None / Little	183	42.9	155	50.3	338	46.0	<b>.016</b>
Middle	132	30.9	99	32.1	231	31.4	



Very / Extremely	112	26.2	54	17.5	166	22.6	
<b>Fed up</b>							
None / Little	98	23.0	104	33.8	202	27.5	<b>.000</b>
Middle	95	22.2	88	28.5	183	24.9	
Very / Extremely	234	54.8	116	37.7	350	47.6	
<b>Hopeless</b>							
None / Little	168	39.3	157	51.0	325	44.2	<b>.004</b>
Middle	116	27.2	77	25.0	193	26.3	
Very / Extremely	143	33.5	74	24.0	217	29.5	
<b>Tired</b>							
None / Little	77	18.1	100	32.5	177	24.0	<b>.000</b>
Middle	103	24.1	90	29.2	193	26.3	
Very / Extremely	247	57.8	118	38.3	365	49.7	
<b>Exhausted</b>							
None / Little	128	30.0	146	47.4	274	37.3	<b>.000</b>
Middle	92	21.5	73	23.7	165	22.4	
Very / Extremely	207	48.5	89	28.9	296	40.3	
<b>Gloomy</b>							
None / Little	170	39.8	154	50.0	324	44.1	<b>.001</b>
Middle	106	24.8	84	27.3	190	25.8	
Very / Extremely	151	35.4	70	22.7	221	30.1	
<b>Haggard</b>							
None / Little	139	32.6	142	46.1	281	38.2	<b>.000</b>
Middle	97	22.7	82	26.6	179	24.4	
Very / Extremely	191	44.7	84	27.3	275	37.4	

**Table 3.** Comparison of Participants' Mood Characteristics by Gender (Continue)

MOOD	FEMALE		MALE		TOTAL		p
	n	%	n	%	n	%	
<b>Weak-spirited</b>							
None / Little	259	60.7	219	71.1	478	65.0	<b>.014</b>
Middle	92	21.5	49	15.9	141	19.2	
Very / Extremely	76	17.8	40	13.0	116	15.8	
<b>Skeptical</b>							
None / Little	150	35.1	160	51.9	310	42.2	<b>.000</b>
Middle	101	23.7	72	23.4	173	23.5	
Very / Extremely	176	41.2	76	24.7	252	34.3	
<b>Vigilant</b>							
None / Little	111	26.0	126	40.9	237	32.2	<b>.000</b>
Middle	133	31.1	83	26.9	216	29.4	
Very / Extremely	183	42.9	99	32.1	282	38.4	

<b>POSITIVE</b>							
<b>Lively</b>							
None / Little	249	58.3	150	48.7	399	54.3	<b>.002</b>
Middle	128	30.0	94	30.5	222	30.2	
Very / Extremely	50	11.7	64	20.8	114	15.5	
<b>Energetic</b>							
None / Little	249	58.3	154	50.0	403	54.8	<b>.004</b>
Middle	129	30.2	92	29.9	221	30.1	
Very / Extremely	49	11.5	62	20.1	111	15.1	
<b>Fresh</b>							
None / Little	258	60.4	154	50.0	412	56.1	<b>.012</b>
Middle	117	27.4	99	32.1	216	29.4	
Very / Extremely	52	12.2	55	17.9	107	14.5	
<b>Total</b>	427	100.0	308	100.0	735	100.0	

## DISCUSSION

It is stated that the COVID-19 pandemic process has significant effects on mental health in the whole society and negative emotional characteristics are observed at a higher rate (Pérez-Fuentes et al., 2020). In this process, healthcare professionals are a professional group working at the front stage. During an epidemic, healthcare employees are exposed to high levels of psychological and physical stress, even if preventive and protective measures are sufficient. Fear of infection and infect family members, high mortality rate, sadness due to the loss of patients and colleagues, long-term separation from the family in some cases, changes in work practices and procedures, the need to provide more emotional support to patients alone, physical fatigue due to prolonged use of protective devices, insufficient supplies and equipment, difficulties of adaptation, and not meeting psychological needs have an effect on exhaustion, frustration, helplessness, stress, anxiety, depression and over- fatigue (Shakespeare-Finch et al., 2020; Buselli et al., 2020 ; Mo et al., 2020; Trougakos et al., 2020; Giorgi et al., 2020).

Psychiatric disorders are associated with prolonged sick leave and productivity loss from the workplace. More importance is attached to the mental health of healthcare employees in terms of medical errors and poor performance that indirectly affecting patients' health (Kim et al., 2018). In the study conducted by Kim et al (2018), it was reported that there was more mood disorders among health sector workers (1.82%) compared to people working in other fields (1.57%), while it was found that psychiatric problems were more common in women in both groups. When the studies carried on healthcare professionals are examined; responses given to feeling emotionally exhausted (41.1%) (Luceño-Moreno et al., 2020); stating that they experienced 1.5 times more anxiety, stress, and insomnia than those working in other departments (Alshekaili et al., 2020); that over- fatigue scores of nurses working in risky places was higher (Chen et al., 2020); that at least one in five healthcare professionals reported symptoms of depression and anxiety are available in the literature (Pappa et al., 2020). Tu et al. (2020) point out that the mood of nurses working in active places to combat the epidemic during the COVID-19 period is not optimistic. In this study, the negative emotions reported by healthcare employees during the pandemic period are higher than other sector employees, similar to the literature. In this study, 30.4% of the service sector employees feel that they feel very / extremely worn-out, 29.8% are rather much / extremely exasperated, 34.3% are very / extremely tired, 24.9% feel rather much / extremely fatigued and there is a considerable increase

in negative moods, coming into question. During the COVID-19 period, service sector employees stated that they experienced negative emotions due to changes in workload, working hours, changes in working characteristics and stress, and that practices such as developing crisis management skills, doing sports at home and family activities were positive and supportive factors (Sahni, 2020). Although specific studies specific to these sectors are limited, in a study conducted by Kumar et al. (2020) with migrant workers during the pandemic period, it was reported that more than half of the participants experienced a noteworthy increase in feelings such as loneliness, anxiety, irritability, and fear of death.

There are various factors that affect mood state in working life. These include characteristics such as sleep, concentration, workplace communication, and perceived productivity (Mark et al., 2016). During the pandemic period, it was observed that the mood state expressions of the members of the society such as tension, depression, anger and fatigue were significantly higher, while the scores in terms of being vigorous were reported to be below average (Terry et al.2020). In the study conducted by Shakespeare-Finch et al. (2020), it was reported that the society experienced five times more anxiety, nervousness and restlessness compared to the epidemic period. In a study conducted by Pérez-Fuentes et al. (2020) in Spain with the general population, it was determined that the perception of illness was positively related to negative mood such as sadness and depression, and negatively related to positive mood such as joy, and the perception of threat to disease transmission reinforces the negative mood. In a study conducted with the general population in Australia, it is stated that the psychological distress of individuals with mood disorders increased during the COVID-19 period and that the resulting problems are associated with negative lifestyle changes (Van Rheenen et al., 2020). In this context, it is possible that individuals working in the service sector work more overtime and under the risk of disease transmission and spreading disease compared to the pre-COVID period, to affect their negative mood levels. In this context, the research findings show that the negative emotions seen in service sector employees are well-matched with the literature.

In this study, it was determined that more than half of the women felt worn-out and rather much / extremely tired, and one third of the men felt worn-out. When the positive mood features were examined, it was found that men expressed their thoughts with more positive expressions. It was found that more than half of the women felt no / very little full of life and energetic, while one fifth of the men felt quite much / extremely full of live and energetic. It is reported in the studies conducted in the literature that female nurse employees have significantly higher mental health needs (Buselli et al., 2020); they feel more burn-out (Luceño-Moreno et al.2020; Chen et al., 2020). In general, it is known that women have higher negative mood scores such as tension, depression, and fatigue in working life (Terry et al., 2020; Morfeld et al. 2007). In this study, it suggests that there is a continuing need for policies to empower women in health care workers in the occupational sense, as healthcare workers are predominantly women among the participants.

## **CONCLUSION AND RECOMMENDATIONS**

In a conclusion health and service sector employees are at risk emotionally as well as infection risk due to COVID-19. Effective mental health interventions that are oriented to the health and service sector workers are needed for the effective management of the pandemic, sustainability of health services, and maintenance of the qualified workforce after the pandemic.

**Acknowledgement:** Thanks to the people who participated in the study and to Ankara Yıldırım Beyazıt University for their financial contributions.

**Funding Statement:** This research was supported by Ankara Yıldırım Beyazıt University Projects Office.

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**Publication No : S-078**

## **COVID-19 CAUSES FEAR AMONG THE ACTIVE WORKERS DURING THE COVID-19 PANDEMIC**

Esma Kabasakal<sup>1</sup>, Funda Özpulat<sup>2</sup>, Ayşegül Akca<sup>1</sup>, L. Hilal Özcebe<sup>3</sup>  
<sup>1</sup>Ankara Yıldırım Beyazıt University <sup>2</sup>Selçuk University <sup>3</sup>Hacettepe University

### **Goal:**

To find out the fear of COVID-19 among the active workers during the COVID-19 pandemic

### **Methods:**

In this descriptive study, 426 healthcare workers and 309 workers in the service sectors were interviewed through internet. Sociodemographic characteristics of the participants and Fear of COVID-19 Scale (FCV-19S) were included in the questionnaire.

### **Findings:**

The median Fear Score were found as  $17.73 \pm 6.99$  in healthcare workers and  $14.95 \pm 6.83$  in service industry workers ( $p > 0.05$ ). The workers who felt to have COVID-19 symptoms had higher scores of fear scale in the healthcare workers than service industry workers.

### **Results:**

As a conclusion, all active workers need more support in fear management; but health care workers need special psychological support from the management of the health institutions.

**Keywords :** Covid-19, fear, healthcare workers, service industry workers

## HOW DO NURSING STUDENTS LEARN PSYCHOMOTOR SKILLS: A QUALITATIVE STUDY

Ela Yilmaz Coskun<sup>1</sup>, Saadet Meriç<sup>1</sup>, Melike Kara<sup>1</sup>, Özlem Özer<sup>1</sup>  
<sup>1</sup>Tekirdag Namik Kemal University

### **Goal:**

Nursing students; It is to experience many concerns in clinical practice. One of the reasons for this is the feeling of forgetting what they have learned on the healthy / sick individual and doing harm. It is reported in the literature that there is a decrease in the competencies that nursing students should gain at the end of graduation.

### **Methods:**

This study was carried out based on the question of how students acquire psychomotor skills and how they make them permanent. In this qualitative research based on descriptive analysis, 13 nursing students who were internships within the scope of Tekirdağ Namik Kemal University School of Health, Fundamentals of Nursing course were interviewed between February and March 2020. The study was initiated by obtaining ethics committee approval and volunteer consent. The researcher, who was involved in data collection throughout the interview, placed a magazine on his face, allowing the students to answer the questions as they wanted. During the interview, a questionnaire consisting of seven open-ended, unbiased and general questions prepared in the light of the literature was used. The data were documented using a voice recorder.

### **Findings:**

In the study, four main themes were determined as "Psychomotor skill", "Skills development resources", "My first experience", and "Repetitive learning-practice". As a result of the study, it was revealed that nursing students needed the repetition of their psychomotor skills and they saw clinical practice as the most effective learning method at this point. The reason why students felt competent in psychomotor skills was thought to be due to the application of the internship model. However, the students are aware that this competence will increase with experience.

### **Results:**

Educators should pay attention to these points in the teaching of these skills, which are seen as simple but are very important in forming the whole in nursing education.

**Keywords :** Education, nursing, psychomotor skills

## **POSTER PRESENTATION**

**Publication No : P-001**

### **KNOWLEDGE AND BEHAVIOUR OF HEALTHCARE PROFESSIONALS ABOUT THE BENEFITS AND HARMS OF SUNLIGHT**

Fidan DURMAGEL<sup>1</sup>, Hasibe KADIOĞLU<sup>1</sup>  
<sup>1</sup>Marmara University, Department of Public Health Nursing

#### **Goal:**

The aim of this study is to determine the knowledge and behaviors of a group of healthcare professionals about using and avoiding the sun. In this study, it is also aimed to adapt the "Sun exposure and sun protection index" to Turkish.

#### **Methods:**

It is a descriptive and methodological research. The population of the study consists of healthcare professionals in two state hospitals in Istanbul. The study was conducted with 312 healthcare professionals. The data were collected between December 18, 2019 - January 31, 2020 using a socio-demographic questionnaire developed by the researcher and the Sun Exposure and Protection Index (SEPI) Scale. Confirmatory and explanatory factor analysis was used for the construct validity of the scale. The reliability of the scale, item analysis and internal consistency were evaluated.

#### **Findings:**

73.6% were women, 43% were nurses, and 51.2% were on duty of the healthcare professionals participating in the study. It was found that 51.5% of the participants had a history of sunburn, and 59.20% had sunspot. It was found that 70.7% of the healthcare workers could not benefit from the sun during the useful hours of the sun due to working hours and only 23.2% of them had normal levels of vitamin D. As a result of the confirmatory factor analysis, it was found that the original form of the scale was not confirmed. As a result of the explanatory factor analysis made after removing two items from the scale, it was found that the Turkish scale consisted of 4 factors. The Cronbach Alpha value of the Turkish scale was 0.70

#### **Results:**

It was observed that healthcare professionals had sufficient knowledge of sun exposure and protection, but this was not reflected in behavior. Sun exposure and sun protection index were found valid and reliable. Retesting in different population groups and larger sample is recommended.

**Keywords :** Sun exposure, sun protection, sun rays



## **THE EFFECT OF HOPELESSNESS LEVEL ON SELF-CARE AGENCY IN HEMODIALYSIS PATIENTS**

Cihat DEMİREL<sup>1</sup>, Nermin KILIC<sup>2</sup>, Serap PARLAR KILIÇ<sup>3</sup>, Mehmet Emin YILDIRIM<sup>4</sup>  
<sup>1</sup>Muş Alparslan University, Varto Vocational School, Department of Medical Services and Techniques <sup>2</sup>Bingol University Faculty of Health Sciences, Nursing Department <sup>3</sup>İnönü University Faculty of Nursing, Department of Internal Medicine Nursing. <sup>4</sup>Fırat University, Medical Faculty, Child Intensive Care Science

### **Goal:**

Chronic kidney failure (CKF), which is a common health problem all over the world, causes significant loss of workforce and various complications, and can affect almost all age groups. Besides Hemodialysis treatment, which is one of the most frequently used treatment methods in the treatment of patients with chronic kidney failure, has a positive significant effect on the normal life, it results in intense physical, psychological, social and economic problems. In this treatment method, significant changes can occur in the patient's life and the she/he can continue her/his life dependent on the machine, institution and healthcare personnel with many restrictions. In this restricted lifestyle, patients' compliance to treatment and self-care agency can be negatively affected. The most common psychological problems in these patients are regarded as anxiety, depression, uncertainty about future, limitation of social life, thought of losing independence, role changes, sadness and hopelessness. As a result of these psychological problems, self-care agency is also negatively affected. For this reason, besides hemodialysis treatment, determining the goals that can overcome the psychological problems and providing the necessary support for this, is an important factor among the patients' relations with social life. The purpose of this study is to examine the effect of hopelessness level on self-care agency in hemodialysis patients.

### **Methods:**

This study was carried out with 69 voluntarily participated patients, who meet the criteria of the aim of this study, in the hemodialysis unit of a university hospital in Turkey between March to May 2020. Patient Information Form with Beck Hopelessness Scale, Self-Care Agency Scale (Self-Care Agency Evaluation Form in Chronic Dialysis Patients) were used to collect data.

### **Findings:**

While the mean score of the patients in the Beck Hopelessness Scale was  $9.91 \pm 5.26$ , it was  $28.84 \pm 5.60$  in the Self-Care Agency Scale. Besides this, a negative relationship was found between hopelessness level and self-care agency ( $r = -0.328$ ,  $p < 0.01$ ).

### **Results:**

The results of the current study indicated that negative and bilateral relationship between hopelessness level and self-care agency in hemodialysis patients were found. Also, as the hopelessness level of the patients increased, their self-care agency decreased; and vice versa.

**Keywords :** Hopelessness, patient on hemodialysis, self-care agency

## **DETERMINING OF PROBLEM SOLVING SKILLS OF DIALYSIS NURSES**

Zehra AYDIN<sup>1</sup>

<sup>1</sup>Istinye University Health Science Faculty

### **Goal:**

Peritoneal Dialysis nurse is the person who assume the role of educators in teaching for peritoneal dialysis. One of the most important features that nurses be able to provide quality care, prevent of complications and improve quality of life is a problem solving skills. The aim of this study is to identify the self appraisal of problem solving ability of pd nurses.

### **Methods:**

A total of 47 dialysis nurse (35 hemodialysis and 12 peritoneal dialysis nurse) were participated in the study. "Personal Information Form" and "Problem Solving Inventory" (PSI) scales used to obtain the data. The study was approved by local ethic committee. Statistical analysis of made using SPSS software. Comparison between groups made via Mann-Whitney U test. Variables compared using One-way analysis of variance.

### **Findings:**

Average age of nurses  $35.07 \pm 5.18$ , 83.5% were married, 72.5% had a child, 41.8% graduated with an associate's degree, 35.2% worked in primary health services, and 37.4% had been working in the profession for 16-20 years. It was determined 71.4% of participants had been working as pd nurses for 5-10 years. Problem-solving confidence (PSC), subscale score average was found to be  $22.1 \pm 5.0$ . We found that there was no difference on problem-solving skills between the HD and PD nurses. However, in subgroup analysis it was determined that the pd nurses who have longer nursing experience have better AA scores.

### **Results:**

According to the results of this study, peritoneal dialysis nurses will be able to reduce the complication rates by proposing effective solutions by using "problem-solving steps" in complications such as 'Peritonitis and Dialysis Inadequacy' encountered in peritoneal dialysis with 'Prospective Based Training' model.

**Keywords :** Dialysis, dialysis nurse, problem solving

**AN ASSESSMENT ON SLEEP DISORDERS ACCOMPANYING MENTAL PROBLEMS AND ATTEMPTS TO PREVENT**

Merve BAT TONKUS<sup>1</sup>, Aysenur COSKUN<sup>1</sup>

<sup>1</sup>Istanbul Yeni Yüzyıl University, Faculty of Health Sciences, Nursing Department

**Goal:**

There is a mutual interaction between sleep and mental illnesses. Sleep disorders cause mental illnesses and mental illnesses cause sleep disorders. When the duration and quality of sleep deteriorate, cognitive abilities decrease and the risk of many psychiatric diseases increases. With the diagnosis of impaired sleep patterns as a result of mental problems experienced by patients in psychiatry clinics, nursing care is provided to patients. Nursing interventions aim to maintain a regular sleep-wake cycle and are planned in this way. In this study was aimed to evaluate the relationship between mental problems and sleep disorders in the light of the literature, and the attempts towards this relationship.

**Methods:**

It is characterized by impairments in various areas of functionality such as mental problems, personal care, social relations, communication with family and environment, professional life, and leisure activities. Sleep disorders can be seen as a symptom of another physical or mental illness or as a disease on its own.

**Findings:**

In the literature is stated that sleep disorders are more common in individuals with persons with mental disorders. For example, in bipolar disorder, insomnia, which is one of the sleep disorders, is more common in manic episode, and hypersomnia in depressive episode. Wong et al. (2017) stated that as a result of behavioral treatment including stimulus control, sleep hygiene, and relaxation training, individuals had a decrease in insomnia complaints. In a study conducted by Uğurlu et al. (2013), an increase was observed in the sleep quality of psychiatric patients after sleep training. Nurses try to protect and improve patients' health with their responsibilities such as following the sleep quality of patients and providing training on sleep hygiene.

**Results:**

As a result, studies reveal the importance of healthcare professionals to make attempts to increase the sleep quality of psychiatric patients. In this direction;

- The number of studies on mental problems and sleep disorders should be increased,
- Nurses should ensure that the patients go to bed and wake up at the same time every day in the hospital environment, ensure that patients participate in group activities during the day to prevent daytime sleepiness, and implement initiatives such as reducing caffeine consumption.

**Keywords :** Mental illnesses, nursing care, sleep disorders

**Publication No : P-005**

## **EXAMINATION OF MOBBING AND BURNOUT LEVELS IN OPERATING ROOM NURSES**

Funda Akyol Aydın<sup>1</sup>, Neriman Akyolcu<sup>2</sup>

<sup>1</sup>Istanbul University, Istanbul Medical Faculty Hospital, <sup>2</sup>Istinye University, Faculty of Health Sciences, Department of Nursing

### **Goal:**

The aim of this study is to determine the mobbing against the nurses who works in operating room and who have an important role in hospitals, their reactions to mobbing that they have to faced and the level of their exhaustion.

### **Methods:**

The individuals who took part in this study are composed of 112 nurses who works in Istanbul University Hospitals. The datas of this study were collected by using "Demographic Features Inquiries", "Mobbing Scale" and "Exhaustion Scale" between January-2017 and March-2018. The datas are analysed with SPSS programme.

### **Findings:**

The nurses expressed that their decisions and recommendations were criticised and denied while their efforts during work was seen as worthless and unimportant and also they thought that they were humiliated by mobbing that they have to be faced when there are other people around them. % 42,85 of nurses were faced mobbing (mean score > 1) at work. When they thought about the bad behaviours against themselves and the mobbing that they had to face; they felt unhappy, lost their devotion to work, felt stressed and tired and also they had headaches. It was seen that the nurses who faced mobbing tried to work harder so that they would not be criticised. The frequency of facing mobbing like behaviours of the nurses who are high school graduates were (2.00±1.08), who have 16-20 years work experience were (1.36±1.11), who attends operations were (1.04±0.80), who works in sterilization units were (1.31±1.32), who are not happy with the unit that they work at were (1.52±0.76), who have problems with their colleagues were (1.31±0.86). The mean of the total exhaustion score were found higher for the nurses who are not happy with the unit that they work at, who have economical problems and who have problems with their colleagues. When we analysed the mean of total exhaustion scores, we found out that % 23.2 of the nurses were not exhausted, % 11.6 were severely exhausted and needed an immediate help about this situation.

### **Results:**

The results of this study showed that the frequency of facing mobbing of the nurses is positively correlated and statistically meaningful with their exhaustion levels.

**Keywords :** Burnout, mobbing, nursing research

**Publication No : P-006**

**DETERMINING THE KNOWLEDGE AND HEALTH BELIEFS OF MOTHERS  
WITH HOSPITALIZED CHILDREN ABOUT RATIONAL DRUG USE IN  
CHILDREN**

Tuğçe Kolukısa<sup>1</sup>, Özlem Öztürk Şahin<sup>2</sup>

<sup>1</sup>Department of Nursing, Institute of Health Sciences, Bolu Abant İzzet Baysal University,

<sup>2</sup>Pediatrics Nursing, Department of Nursing, Faculty of Health Sciences, Karabük University

**Goal:**

This study was carried out to determine the knowledge and health belief status of mothers, who had hospitalized children, regarding rational drug use in children.

**Methods:**

This is a descriptive and cross-sectional study. The study was conducted between 15 July and 15 October 2018 at the Karabük University Education and Research Hospital with 260 mothers. Participant Information Form and Drug Use Health Beliefs Scale were used as the data collection tools.

**Findings:**

It is determined that only 10.8% of mothers have knowledge about rational drug use. The mothers' Drug Use Health Beliefs Scale total mean score was 150.91±15.13. 93.5% of the mothers used antipyretics, whereby only 17.7% of them used antipyretics recommended by a doctor. The mothers who read drug leaflets had higher scale mean score than those who did not, in which the difference was statistically significant ( $p=0.024<0.05$ ).

**Results:**

The mothers had insufficient knowledge of rational drug use, but the health beliefs related prescription drug use were high among them. However, the mothers used antipyretic, analgesic, antibiotic and cough drugs in their children without consulting a doctor, whereby the majority of them used particularly antipyretics without doctor's recommendation.

**Keywords :** Drug use health beliefs scale, mothers, rational drug use

**Publication No : P-007**

## **THE RELATIONSHIP BETWEEN NURSING STUDENTS 'SELF-EFFICACY AND VOCATIONAL MOTIVATION**

Zeliha Cengiz<sup>1</sup>, Züleyha Gürdap<sup>1</sup>, Ela Karaca<sup>1</sup>, Merve Acun<sup>1</sup>

<sup>1</sup>Inonu University, Faculty of Nursing

### **Goal:**

This study was conducted to determine the self-efficacy levels of nursing students and their vocational motivation and to reveal the relationship between self-efficacy and vocational motivation.

### **Methods:**

A descriptive study was conducted online with undergraduate nursing students (n = 406) of a university in the 2019-2020 academic year. Data were collected using the Introductory Information Form, the General Self-Efficacy Scale, and the Scale of Motivation Sources and Problems (SSSS). Descriptive statistics, independent groups t test, Oneway ANOVA, and correlation tests were used in the evaluation of the data.

### **Findings:**

Of the students participating in the study, 255 (62.8%) were female, 151 (37.2%) were male, and the mean age was  $20.38 \pm 1.83$ . 15 and their vocational motivation mean score was determined as  $84.93 \pm 11.94$  (intrinsic motivation sub-dimension  $39.12 \pm 6.70$ , external motivation sub-dimension  $20.13 \pm 3.79$ , negative motivation sub-dimension  $25.67 \pm 6.02$ ). There was a significant positive correlation between the total score averages of the self-efficacy scale and the total score averages of the motivation scale and all its sub-dimensions. While gender did not affect self-efficacy and vocational motivation, the total scores of self-efficacy and motivation and negative motivation sub-dimension scores of senior students were significantly higher ( $p < 0.05$ ).

### **Results:**

The self-efficacy mean scores of the nursing students were found to be medium and the motivation mean scores were found to be high. It was found that nursing students with a high level of self-efficacy had higher levels of motivation. Both self-efficacy and motivation levels of fourth-grade students were higher than in other grades. Considering that it will be easier for students with high self-efficacy and motivation to achieve success and contribute positively to career life when faced with negativity; Motivation levels should be increased by focusing on practices that will make students aware of their competencies.

**Keywords :** Nursing student, self-sufficiency, vocational motivation

**Publication No : P-008**

## **KNOELEDGE LEVEL OF NURSES ABOUT FLEBITE INVESTIGATION OF THE EFFECT OF PERIPHERAL INTRAVENOUS CATHETER CHANGE**

Nurcan Uysal<sup>1</sup>, Neşe İbil<sup>2</sup>

<sup>1</sup>Uskudar University, Faculty of Health Sciences, Department of Nursing, <sup>2</sup>Istanbul Yeni Yuzyil University Gaziosmanpasa Hospital

### **Goal:**

This study was applied descriptively and cross-sectionally to determine the effect of nurses' knowledge of phlebitis on the decision of peripheral intravenous catheter exchange.

### **Methods:**

The research was carried out between August-October 2019 an university hospital in Istanbul. The sample of the study consisted of 56 nurses working in internal and surgical clinics and volunteering to participate in the study. A total of 151 patients who were hospitalized in these clinics and who met the follow-up criteria and who had a peripheral intravenous catheter inserted were included in the study. The data of the study was collected with Demographic Information Form Peripheral Intravenous Catheter Applications, Peripheral Intravenous Catheter and Phlebitis Information Form and Peripheral Intravenous Catheter Observation Form and Visual Infusion Phlebitis Scale . In the first stage of the two-stage study; demographic characteristics of nurses, peripheral catheter applications in clinic and knowledge about phlebitis were determined. In the second stage, the patients who were cared for by the nurses included in the study were followed up. Patients who were hospitalized in internal medicine and surgical clinics and fulfilled the study criteria were observed by the researcher for phlebitis twice a day for 4 days. Peripheral catheter replacement time, which nurse had changed and why it was changed were recorded in the follow-up form.

### **Findings:**

While 55.4% of the nurses included in the study had sufficient knowledge level, 44.6% of the nurses were found to be inadequate. While 45.2% of the nurses who had sufficient knowledge level were found to have appropriate PIC change according to Visual Infusion Phlebitis Scale score, this rate was obtained as 54.8% for those who did not make peripheral intravenous catheter change appropriately. No statistically significant difference was found between the nurses who had sufficient knowledge of phlebitis and nurses whose knowledge level was not sufficient to perform peripheral intravenous catheter changes at the right time.

### **Results:**

It was determined that nurses' knowledge of phlebitis was not effective in making peripheral intravenous catheter change decision. For this reason, peripheral intravenous catheter guidelines used in institutions should be kept up to date according to evidence-based guidelines.

**Keywords :** Nursing, peripheral intravenous catheter, phlebitis.

**Publication No : P-009**

## **HEALTH SCREENING FOR ADULTS IN RURAL AREAS: A QUALITATIVE STUDY ON NURSING STUDENTS' EXPERIENCES**

Ayşegül ILGAZ<sup>1</sup>, Sebahat GÖZÜM<sup>1</sup>

<sup>1</sup>Akdeniz University

### **Goal:**

Health screenings are important for nursing students to understand the life styles of individuals living in rural areas, to know and apply the attempts to prevent diseases or to improve health. It is necessary to determine the experiences of the students who carry out health screening in rural areas, to reveal the experiences gained in health screening practices, to reveal the experiences, perceptions and the meanings of the students regarding health screening and rural areas. In this study, it was aimed to determine the experiences of nursing students who conducted health screening for adults in rural areas.

### **Methods:**

In this descriptive qualitative study, six rural areas were visited and health screenings were carried out with 120 senior year nursing students in November 2019. nursing students applied health screening of individuals aged 40 and over living in rural areas. This study was conducted with 34 nursing students over the age of 18, among 120 students participating in health screening. These students with purposeful sampling method (N=34) filled out the structured questionnaire online. At the end of the health screenings, the research data obtained from the reports sent online by the students were analyzed with qualitative methods to evaluate what they learned/experienced. Themes and sub-themes were evaluated by two experts, and Cohen's kappa coefficient was found to be 0.93 which means perfect agreement for internal consistency.

### **Findings:**

The following themes were obtained from the experiences of nursing students after rural health screenings: The emotions of the students, the emotions of the adult individuals according to the students, the positive nursing characteristics, the advantages and disadvantages of health screening in rural areas, the contribution of working with health professionals and the feedback of educators and researchers.

### **Results:**

The contents obtained from the experiences of the students in rural areas were useful for rural health professionals, nursing educators, and students. Taking these experiences into consideration, it is recommended to carry out health practices, plan and strengthen nursing education to adress the problems and diffuculties of rural population.

**Keywords :** Health screening, nursing student, rural area



**Publication No : P-010**

**DUE TO CORONAVIRUS (COVID-19) CHANGES IN MATERNITY ROLES OF NURSES: QUALITATIVE STUDY ABSTRACT**

Melike YAVAŞ ÇELİK<sup>1</sup>

<sup>1</sup>Kilis 7 Aralık University, Yusuf Serefoglu Faculty of Health Sciences Department of Nursing

**Goal:**

The study was conducted to examine the effect of the changing routines of nurses whose working conditions were changed due to the Covid-19 outbreak and who intensely on the role of the mother.

**Methods:**

The type of research is qualitative and the study is based on the descriptions of the interviews with the participants. Interviews were made with the nurses on the phone.

**Findings:**

According to the findings obtained in the study, it was determined that the nurses left home during this process or were unable to take care of their children due to intensive working conditions and needed psychological support. With this study, the difficulties faced by nurses and their children were conveyed in case of inadequacy in the role of parents, where supreme soldiers of the war experienced with this disease, which everyone fears. As a mother, nurses cannot cook for their children, cannot play with their children, and most importantly, cannot take care of their children. Some nurses even have difficulty finding someone to take care of their children. Nurses cannot communicate with children. Due to this lack of communication, some nurses have had behavioral problems in their children.

Nurses experience feelings of sadness, unhappiness, anxiety and fear due to not being able to fulfill their motherhood roles. Nurses experience anxiety for themselves, their children and their families, and cannot cope with the situations caused by these concerns. In addition, it was determined that nurses needed psychological support and their plans to plan for the future were impaired. The nurses' expectations from the future are that the covid-19 outbreak ends and they want to reach their children.

**Results:**

It was concluded that nurses and their families were negatively affected by the Covid-19 process due to the changing working conditions and an intense working pace, and the parental roles of nurses were insufficient in this process.

**Keywords :** Child, motherhood, roles

**Publication No : P-011**

## **THE IMPACT OF HEALTHCARE WORKERS' EXPOSURE TO MOBBING BEHAVIOR ON ATTITUDES TOWARDS VIOLENCE AT WORK**

Emel KAYA<sup>1</sup>, Ebru BAŞKAYA<sup>2</sup>, Kamuran CERİT<sup>3</sup>, Merve KIZILIRMAK TATU<sup>4</sup>  
<sup>1</sup>Çankırı Karatekin University, <sup>2</sup>Uşak University, <sup>3</sup>Süleyman Demirel University, <sup>4</sup>Gazi University

### **Goal:**

This study was conducted as a descriptive study to determine the effect of mobbing behaviors of health workers at work on attitudes towards violence.

### **Methods:**

The study included 75 health care workers who are working in the five different public hospitals. Data were collected between March and April 2016. A three-section questionnaire was used in the data collection. In the first section was contained the demographic characteristics of the participants. Other sections were "Workplace Psychologically Violent Behaviors (WPVB)" scale developed by Yıldırım and Yıldırım (2007) and "Adolescents' Attitudes Scale Toward Violence Scale (AASTVS)" developed by Çetin (2011).

### **Findings:**

82,7% of the participants in the research had one or more encountered workplace mobbing behavior from one or multiple times in the last 12 months. The most encountered mobbing behaviors of participants, respectively; attack on professional status (79%), attack on personality (76%), individual's isolation from work (64%) and direct attack (27%) were found. It is determined to be satisfied with the work of the participants medium level (2.58±1,1). In addition, when the participants have problems in their departments, they stated that they receive support from 50.7% of the first-level manager and 46.7% of co-workers to solve.

### **Results:**

In this research, it is determined to participants are exposed to workplace psychological violence situations between attitudes towards violence were positive and moderately strong relationship ( $r = 0.447$ ;  $p < 0.000$ ) and the exposure to mobbing behavior an impact of 20% on attitudes towards violence.

**Keywords :** Health personnel, mobbing, psychological violence

**Publication No : P-012**

## **GENITAL CARE AND SEXUALITY**

Ebru CİRBAN EKREM<sup>1</sup>

<sup>1</sup>Bartın University, Faculty of Health Sciences

### **Goal:**

To determine the relationship between genital epilation and genital care applications and sexuality and / or sexual life.

### **Methods:**

This review was published in October 2020 from Google Scholar, Science Direct, Clinical Key, Pub Med, Cochrane Library databases “laser hair removal, genital hair removal, genital hygiene, genital care, sexuality, sex life, sexual health, reproductive health, laser hair removal, genital hair removal, genital hygiene, genital care, sexuality, sexual life, sexual health, reproductive health”. The universe of the review consisted of 5083 articles reached as a result of scanning. The inclusion criteria of the study are articles on genital epilation and care, in descriptive and cross-sectional type, published in the last decade (2010-2020), in Turkish or English written language, and accessible in full text. 5 studies that met the inclusion criteria were included in the sample. The data of the research were formed by the findings of these studies.

### **Findings:**

The research examined America, Brazil, Turkey and the United Kingdom. The sample size of the studies varied between 152 and 2453. The average age of the women in the studies was  $30 \pm 10$  and had a university level education. Women stated that they used epilation to look more beautiful and well-groomed. It was found that women generally epilate once a month. It was observed that wax and shaving were frequently used among epilation methods. Data could be obtained from only one study on the use of genital care products.

### **Results:**

As a result of the studies, it was determined that although there are many genital epilation methods, women prefer to use wax and razor blades frequently. In the studies examined, there was not enough data on the relationship between genital epilation and genital care preferences of women and sexuality. New and comprehensive studies on this subject are recommended.

**Keywords :** Genital care, genital hair removal, sexuality

**FOOD INSECURITY AND AFFECTING FACTORS IN HOUSEHOLDS WITH CHILDREN DURING THE COVID-19 PANDEMIC: A CROSS-SECTIONAL STUDY**

Gizem Deniz Bulucu Büyüksoy<sup>1</sup>, Aslıhan Çatıker<sup>2</sup>, Kamuran ÖZDİL<sup>3</sup>

<sup>1</sup>Kırşehir Ahi Evran University <sup>2</sup>Ordu University <sup>3</sup>Nevşehir Hacı Bektaş Veli University

**Goal:**

COVID-19 pandemic has deepened problems in many different areas. Decreased social mobility, increased unemployment, difficult access to food, and erosion of already fragile livelihoods due to curfews are possible socioeconomic consequences of the pandemic (United Nations,2020; Loopstra, 2020). In addition to the global crisis it has created, the pandemic has also caused some unprecedented humanitarian challenges, such as unemployment, increased insecurity, and increased poverty and food insecurity (International Labour Organization, 2020; Mishra and Rampal, 2020). This study aims to examine the incidence of food insecurity and affecting factors in households with children in different provinces of Turkey during the COVID-19 pandemic.

**Methods:**

This is a cross-sectional study. The participants were recruited by the snowball, also called the chain referral, sampling method, and the data were collected via a link sent to their smart mobile phones through their social media accounts. This study included 211 households in different cities with at least one child.

**Findings:**

The study revealed that 21.8% households had food insecurity that was not at the hunger threshold, 10.9% had food insecurity with moderate hunger, and 7.6% had food insecurity with severe hunger. The monthly income of 80.6% of the households was below the poverty line, at least one person in every two households was unemployed, and monthly income decreased in more than half of the households during the pandemic. Food insecurity increased 2.3 times when the households comprised workers or self-employed individuals (OR = 2.529, p = 0.002), increased 3 times when the monthly income of the households decreased (OR = 3.131, p = 0.000), and increased 2 times when total monthly income of the household fell below poverty line during the pandemic (OR = 2.001, p = 0.049).

**Results:**

In this study, we determined that nearly half the households have food insecurity and that the pandemic poses a risk in terms of food security. We recommend that public health studies should be planned to ensure accessibility to healthy foods.

**Keywords :** Covid-19, food insecurity, food supply, pandemics, socioeconomic factors

**A NEW COURSE IN NURSING EDUCATION: DRAMA**

Sultan Esra Sayar<sup>1</sup>, Cantürk Çapık<sup>2</sup>

<sup>1</sup>Atatürk University, Faculty of Health Sciences <sup>2</sup>Atatürk University, Department of Nursing

**Goal:**

Hence, this article aims to evaluate the use of drama in nursing education.

**Methods:**

In today's world characterized by ever-changing knowledge, nursing education should also be designed in accordance with the era. Clinical practice skills in nursing education focus on providing the competencies necessary for students to serve in the hospital. However, since clinical reasoning and critical thinking skills are considered a premise of nursing practice, pedagogical methods need to be intensified.

**Findings:**

Nursing educators have to use teaching techniques that will attract students' attention and motivate them. Drama, one of these techniques, is a common feature of all civilizations. Creative drama has long been used as an educational tool.

**Results:**

The use of drama in education allows educators to convey their own experiences and provides a humane environment that promotes empathic understanding, especially between the patient and the nurse.

**Keywords :** Drama, nursing, nursing education

## COVID-19 INFECTION AND FOUR ETHICAL DILEMMAS IN PREGNANCY

Begüm Arık<sup>1</sup>, Hediye Özkan Arslan<sup>2</sup>

<sup>1</sup>Yeditepe University, Faculty of Health Sciences, Department of Nursing <sup>2</sup>Yeditepe University, Faculty of Health Sciences, Department of Nursing

### **Goal:**

In this review, it is aimed to emphasize the advocacy role of nurses and midwives, who are at the forefront of the fight against COVID-19, by realizing 4 different ethical dilemmas before and after birth.

### **Ethical Problems:**

**Social Isolation:** It causes fear, panic, lack of security, uncertainty, deprivation of daily routines, changes in relationships with their partner, family and friends. With the increasing responsibilities of isolation and the increase in family members' efforts to meet their needs, pregnant women are at a much more mental risk.

**Termination of Pregnancy:**The population planning laws give the right of abortion on request until the end of the 10th week of pregnant women, but the lack of information about the legal regulations in extraordinary events causes discussion.

**Mode of birth and Support Systems:** In the guidelines on COVID-19 and pregnancy, there are differences of opinion regarding the delivery method being cesarean or vaginal delivery during the pandemic process. While one of the views on the mode of birth evaluates the cesarean or vaginal delivery method according to the condition of the pregnant, some sources argue that the cesarean section will be safer during the pandemic.

**Frequency of Antenatal Care:** It was underlined that the frequency of antenatal follow-up should be reduced as much as possible due to the increased risk of contagion in crowded environments such as hospitals in the COVID-19 pandemic. He stated that pregnant women who have or are suspected of having COVID-19 infection should plan their antenatal control until the end of the isolation.

### **Results:**

During the epidemic, it is necessary to freely decide whether to have children and to have the right to terminate the pregnancy in sterile environments. The pregnant woman was separated from her family members, could not get qualified health services, her positive perspective decreased and she could not sufficiently experience pregnancy pride. The effects of these ethical dilemmas will have negative effects on the pregnant woman.

**Keywords :** Covid-19, ethical dilemmas, pregnancy

## **INTRODUCTION**

According to the World Health Organization data today (02-12-2020), the total number of reported cases worldwide is 63,144,362 and the number of deaths is 1,469,237 (WHO, 2020). The current number of cases in our country is (02-12-2020) 506,966 and the number of deaths is 13,936. The number of women and men infected with COVID-19 is given in the daily reports of the Ministry of Health, and the number of pregnant women is not specified. There is limited scientific evidence about the risk status of pregnant women (Ministry of Health,2020).

The Coronavirus infection affecting the whole world continues to affect pregnant women and new mothers psychologically, socially, culturally, and economically. This report reviews 4 ethical dilemmas brought about by the coronavirus pandemic; “Social Isolation, Termination of Pregnancy / Abortion Rights, Birth Support Systems and Prenatal Care Frequency”. I hope that nurses and midwives who work in the front lines in the fight against COVID-19 realize the ethical dilemmas experienced by pregnant women during and after childbirth and contribute to their role as advocates, which is one of their main duties.

### **The Ethical Problem of Social Isolation**

Social isolation is a concept that refers to partial or complete contact with others or with wider communities, and deprivation of interaction (Leigh-Hunt et al., 2017). In order to slow the spread of the COVID-19 epidemic, firstly the Chinese Government officials and then the World Health Organization made some statements on this subject and the measures expected to be taken in this direction were implemented by the countries (WHO, 2020). Following the emergence of the disease, social isolation and quarantine measures were increasingly used, as the disease was understood to be viral and contagious. From time to time, the measure was decreased and increased. Turkey for the first time between the dates of 10-13 March 2020 applied a curfew and weekend street at a later date has been tried to reduce the spread rate applying curfew in certain periods.

Like all of society, pregnant women were isolated at home during these quarantine processes. Pregnant women in social isolation experience fear, panic, lack of security, uncertainty, deprivation of daily routines and changes in their social relationships (Mızrak B., Can M. 2020). Leaving work life, being separated from family members, not being able to go to healthcare institutions safely, deterioration in personal relationships with spouses (sexual relations, etc.), increased anxiety and stress, as well as decreased positive perspective. Being unable to experience the joys of pregnancy and the difficulties with shopping caused a decrease in the happiness of becoming a mother.

### **Termination of Pregnancy / Abortion and Ethical Dilemma in COVID-19 Infection**

According to the Declaration of Reproductive and Sexual Rights, the right to live was accepted as the primary right, after which twelve rights related to reproductive and sexual life were determined and accepted all over the world. One of these rights is “Deciding to Have a Child, Termination of an Unwanted Pregnancy”.

According to the 6th article of the population planning law numbered 2827, the consent of the pregnant woman, the consent of the spouse for the married, the consent of the guardian with the consent of the minor for those who are under 18 years of age, the consent of the minor and the guardian and the consent of the magistrate are required for those under guardianship. Again, according to article 5 of the same law, it is stated that the uterus is evacuated upon request until

the end of the 10th week of pregnancy unless there is a medical problem in terms of the mother's health (Ministry of Health, 2010).

During the COVID-19 pandemic, which has been declared as a state of emergency, pregnant women who experience intense fear, anxiety and stress may not want to be pregnant or want to bring a child into the world. However, there is no regulation for this.

### **Prenatal Care Frequency**

Prenatal care is defined as the follow-up of the pregnant woman by a trained healthcare personnel, with the necessary examinations and recommendations, at regular intervals during pregnancy, in terms of the health and life of both the expectant mother and the baby to be born (Özkan H., 2020). Emphasizing on the necessity of restricting prenatal follow-ups in 19 pandemics, 6 follow-up; One visit until the 16th week, 18-25. The second week between 28-31. Third between weeks, 32-38. He stated that the fourth visit between the weeks, the fifth visit at the 38th week and the sixth visit at the 40th week would be sufficient (RCOG, 2020). Turkish Gynecology and Obstetrics Association underlined that the frequency of antenatal follow-up should be reduced as much as possible due to the increased risk of contagion in harsh environments such as hospitals. He stated that pregnant women who have contracted or suspected COVID-19 infection should also plan their antenatal control until the end of the isolation (TJOD, 2020). In addition to these suggestions, it is stated in the literature that prenatal visits can be made with online interviews, with a limited number (Albert et al, (2020); Bajpai D. and Shah S. (2020).

Limiting the duration and quality of prenatal appointments protects healthcare professionals and pregnant women from the risk of COVID-19 infection. However, it is not possible to think that these prenatal examinations reach their main purpose holistically. A detailed risk assessment and timely intervention appropriate to the risk are essential for the health of the mother and fetus. At the same time, establishing a trusting relationship with the family preparing for birth is achieved during these appointments. Nurses and midwives should take part in directing the pregnant woman to appropriate resources when necessary. This is not possible with only physical examinations that are brief and not held on a regular basis. Then are we safe from the risk of COVID-19 infection but risking the well-being of the mother and fetus?

### **Childbirth Support Systems**

Guidelines on COVID-19 and pregnancy, which were reached in the literature review, suggest that the mode of delivery during the pandemic is cesarean or vaginal delivery. There was a general consensus that the mode of delivery should not be affected by maternal COVID-19 unless emergency delivery is required due to the mother's respiratory status (RANZCOG 2020; Queensland 2020; Western 2020). While one of the views on the type of delivery evaluates the cesarean or vaginal delivery method according to the condition of the pregnant, some sources argue that the cesarean section will be safer during the COVID-19 outbreak. When we look at the Malaysian guideline, it suggests that infected or suspected women should be offered cesarean section until more information about the safety of vaginal delivery is available (Malaysia 2020).

Uninterrupted support should be provided during and after birth. People who provide this support may be nurses, midwives, doula, family members, especially their spouse or friends (Meghan A Bohren et al 2017). When we look at the practices in the literature during the



COVID-19 epidemic, it is seen that the number of visitors of women who gave birth in the hospital is limited. The guidelines on visitor restriction state that a visitor must be present. A woman who has just become a mother during birth cannot share her happiness and cannot get the support she needs from her family and friends. In addition, these guidelines also prevent young children from visiting their mothers in hospital to minimize the risk of infection (RANZCOG 2020; Queensland 2020; South Australia 2020; New Zealand 2020; Australian Capital 2020; Department of Health 2020). If a new baby joining the family is not adopted by his brother or sister, it will be a harbinger of difficulties in family balances.

## CONCLUSION

Nurses and midwives play an important role in the ethical dilemmas I have mentioned. I can make the following suggestions to improve these dilemmas;

- During this pandemic, it is necessary to have to right to freely decide whether to have a child or not, as well as the right to terminate pregnancy legally in a sterile environment, regardless of the gestation week
- Nurses and midwives can guide and encourage online communication during the birth by referring to online communication resources in order to share the happiness of a woman who has just become a mother. Nurses and midwives should adopt the role of patient advocates in obtaining the necessary permission within the framework of protecting privacy during birth.
- Support programs can be planned online and via social media to meet the psychological and social needs of pregnant women in social isolation.

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**THE STUDY OF THE RELATIONSHIP BETWEEN THE NURSES PERSONALITY TRAITS AND FEELINGS OF COMPASSION AND BURNOUT**

Burcu DEDEOĞLU DEMİR<sup>1</sup>,

<sup>1</sup>Istanbul Arel University, School of Healty Sciences, Department of Nursing

**Goal:**

The study aims to analyze the relationships between the personality traits and feelings of compassion and burnout of the nurses.

**Methods:**

The study, which was planned to be descriptive and correlational, was carried out with clinician nurses working in a private hospital in Sakarya. The universe of the study consists of the nurses working between January – March 2020, and the sample group involves 155 nurses who voluntarily accepted to participate in study, were in the hospital on the date which the study was conducted, and who filled the questionnaire form completely and precisely. The data of the study were collected via a questionnaire form consisting four parts: “Personal Information Form”, “Maslach Burnout Inventory”, “Compassion Scale”, and “Personality Traits Scale” which were prepared by the researcher in line with the literature.

**Findings:**

20.6% (n=32) of the nurses participating in the study were male, and 79.4% (n:123) of them were female. 7.7% (n = 12) in the 25-29 age group, 16.8% (n = 26) in the 30-34 age group, and 34.2% (n = 53) 35 years or older. When professional experiences of the participants were analyzed it was found that 16.1% (n = 25) experienced less than 1 year, 28.4% (n = 44) experienced 1-5 years, 23.9% (n = 37) 5-10 years, % 31.6 of them (n = 49) were found to have experience of 10 years or more. Statistically significant relationship was found between the variables of the feeling of compassion and personality traits. This relationship was detected to be a positive and weak relationship. There is also a positive and very weak relationship between the variables of compassion and the burnout.

**Results:**

A statistically significant effect was found on the variables of compassion and burnout. However, it was also seen that there was no statistically significant effect of the nurses' compassion on their personality traits. It is recommended for future researchers to increase the sample size and analyze the relationship between variables.

**Keywords :** Burnout, feeling of compassion, nursing, personality traits

**DETERMINING THE NEEDS OF MOTHERS FOR PROTECTION AND  
SUSTAINING HEALTH OF ADOLESCENTS (11-18 YEARS) IN THE COVID-19  
OUTBREAK**

Eysan Hanzade Umac<sup>1</sup>

<sup>1</sup>Koç University

**Goal:**

During the COVID-19 outbreak, some nationwide measures were taken to slow down and stop the spread of the virus. This study was conducted to determine how adolescents' health behaviors were affected by the outbreak process and what kind of needs the outbreak process caused in mothers.

**Methods:**

The data were collected using the Qualtrics online data collection tool between 8-31 May 2020. The "Mother-Child Information Form" including questions on the characteristics of mothers and adolescents and the "Questionnaire for Determining Adolescents' Behaviors for Protecting and Sustaining the Health and the Needs of Mothers" were used to collect the research data. Pearson Chi-Square ( $\chi^2$ ) was used for the statistical analysis of the data.

**Findings:**

The mean age of 161 mothers participating in the study was  $42.6 \pm 6.7$ , and 65.8% of adolescents were in the 14-18 age group. The mothers indicated that while 36.6% of adolescents increased their consumption of junk food, 35.6% of them increased their food consumption, 70.2% of them were physically less active, and 76.4% of them slept late during the COVID-19 outbreak. Mothers needed information on the protection and sustaining health of their children during the outbreak.

**Results:**

As a result of the study, based on the statements of mothers, it was determined that adolescents' health behaviors were negatively affected by the outbreak and that the outbreak caused mothers to have a need for information on the protection and sustaining health of their adolescent children.

**Keywords:** Adolescents, COVID-19, health behaviors, mothers

## **INTRODUCTION**

Epidemic diseases are rare but destructive crises that can physically, socially, and psychologically affect the lives of many children and families. Their destructiveness originates from their effects on society, their unpredictability, deaths and many problems caused by them (Sprang & Silman, 2013). On December 2019 in Wuhan city of China, novel types of coronaviruses that cause disease in humans were observed and the disease was named as Covid-19 (Dong et al., 2020; Krass et al., 2020).

Protective measures such as the closure of schools, community isolation and quarantine are applied in cases of pandemic (Sprang & Silman, 2013). The isolation and quarantine measures applied to suppress the pandemic may affect the behaviors of family members, who make up the society, to protect and sustain their health (Viner et al., 2020). In particular, school-age children and adolescents constitute one of the groups who had changes in their daily life due to the pandemic process. Although the deaths during the outbreak, the rate of transmission, and the decreases in the number of cases were positively affected by the measures taken to slow down the spread of the virus during the outbreak, the experts think that the measures taken against the outbreak may have negative effects on the physical and psychosocial health of children and adolescents (Golberstein et al., 2020; Jiao et al., 2020; Rundle, et al., 2020; Viner et al., 2020).

Adolescence is an opportunity for the acquisition of healthy lifestyle behaviors and the protection of individuals from risky health behaviors. The level of adolescent health can be increased by providing this age group, that is open to innovation, change and development, with the acquisition of positive health behaviors with health improvement methods (Ross et al., 2020; Chen MY et al., 2001; Spear & Kulbok, 2001). Health behaviors are the behaviors with sustainability that we exhibit to stay healthy, protect from diseases and not to get sick. Some of these health behaviors are nutrition, physical activity, sleep, interpersonal relations, and stress management (Sümen & Öncel, 2017; Bülbül et al., 2010). Although the evidence of the Covid-19 outbreak for adolescents is still at an early stage, previous experience suggests that the times of crisis and social unrest may leave children and adolescents vulnerable (UNICEF, 2020). Parents are the closest and most influential people who can help the child with emotional and physical problems with a correct approach (Perrin et al., 2016; Sprang & Silman, 2013; Shahhosseini et al., 2012). Adolescents can overcome the distressing process and be protected emotionally and physiologically by being appropriately supported by healthcare professionals, their families and educators during the pandemic (Pettoello-Mantovani et al., 2019; UNICEF, 2020). It is important to determine what kind of information parents needs in this process and how affects adolescents behaviours during Covid-19 outbreak for planning interventions. Interacting with mothers is one of the primary steps to be taken in this regard for the protection and sustaining health of adolescents, who have faced an unexpected condition due to the pandemic.

## **OBJECTIVE**

This study was conducted to determine how adolescents' health behaviors were affected by the outbreak process and what kind of needs the outbreak process caused in mothers.

## **METHODS**

### **Sample and procedure**

One hundred and sixty-one mothers who were literate and older than 18 years and had at least one child in adolescence participated in the study. This study was approved by the Koç University Ethics Committee in Istanbul. Informed consent was retrieved before the participant to survey. Cross-sectional data were collected between 8-31 May 2020. The data were collected by reaching the participants through WhatsApp, personal phone and e-mail and sending the link of the online questionnaire prepared in Qualtrics.

### **Measures**

#### **Mother-Child Information Form**

It was prepared by the researcher using the literature (Kaytez et al., 2015; Spear & Kulbok, 2001). It is a form that includes the characteristics related to mother and child. It includes questions about the mother's age, marital status and income status, and the child's age and gender characteristics, that are among the sociodemographic characteristics.

#### **The Questionnaire for Determining Adolescents' Behaviors for Protecting and Sustaining the Health and the Needs of Mothers**

It was prepared by the researcher using the literature (Brooks et al., 2020; Chen P., et al., 2020). This questionnaire includes questions on mothers' evaluation of adolescents' behaviors for protecting and sustaining the health during the outbreak and the determination of mothers' needs in the management of this process.

### **Data Analyses**

All analyses were performed using the SPSS (Statistical Package for Social Sciences) 25.0 statistical package program. Numbers and percentages were used to show the distribution of descriptive data. Pearson's Chi-Square ( $\chi^2$ ) significance test was performed to analyze the differences in the adolescent's age and gender characteristics according to health behaviors. The level of significance was considered as 0.05 for statistical significance.

## **RESULTS**

The sociodemographic characteristics of mothers and adolescents are presented in Table 1. The mean age of the mothers who participated in the study was  $42.6 \pm 6.7$ . While 87% of the mothers in the study were married, 62.1% of them had a middle-income status and 50.9% of them took a job break or were not working at all during the outbreak.

65.8% of adolescents were in the 14-18 age group and 52.8% of them were female. 90.1% of adolescents did not have any chronic disease and 70.8% of them had a normal body mass index (Table 1).

**Table 1.** Distribution of Mothers and Adolescents according to their Descriptive Characteristics

<b>Descriptive Characteristics of Mothers</b>	<b>Sample value (N=161)</b>
<b>Age (Years, Mean <math>\pm</math> SD)</b>	<b>42.56 <math>\pm</math>6.7</b>
<b>Marital status</b>	
<b>Married (n %)</b>	140 (87)
<b>Single (n %)</b>	21 (13)
<b>Perceived Income Status</b>	
<b>Low (n %)</b>	29 (18)
<b>Middle (n %)</b>	100 (62.1)
<b>High (n %)</b>	32 (19.9)
<b>Employment status during the COVID-19 process</b>	
<b>Employed (n %)</b>	79 (49.2)
<b>Unemployed (n %)</b>	82 (50.9)
<b>Descriptive Characteristics of Children</b>	
<b>Age</b>	
<b>11-13 (n %)</b>	55 (34.2)
<b>14-18 (n %)</b>	106 (65)
<b>Gender</b>	
<b>Female (n %)</b>	85 (52.7)
<b>Male (n %)</b>	76 (42.7)
<b>Chronic Disease Status</b>	
<b>No (n %)</b>	145 (90.1)
<b>Asthma (n %)</b>	8 (5)
<b>Hearth Disease (n %)</b>	2 (1.2)
<b>Diabet (n %)</b>	5 (3.1)
<b>Muscle Disease(n%)</b>	1 (0.6)
<b>BMI</b>	
<b>Thin (n %)</b>	17 (10.6)
<b>Normal (n %)</b>	114 (70.8)
<b>Overweight (n %)</b>	21 (13)
<b>Fat/obese (n %)</b>	9 (5.6)

### **Health Behaviors of Adolescents during the Covid-19 Outbreak**

Some of the mothers indicated that there was an increase in the consumption of junk food (36.6%) and food consumption (35.6%) of their adolescent children during the outbreak. Mothers also stated that adolescents were less physically active (74.8%) and slept late (76.4%), their behaviors changed into angry/aggressive (29.2%) and anxious (23.6%) behaviors, and there was a decrease in communication with their friends (45.3%) during this period. Adolescents' main activity preferences during the time spent at home included studying (62.7%), playing computer/tablet (63.4%) and using mobile phones (60.9%). It was found that the great majority of adolescents had a daily screen time of 2 hours and more (Mean=4.90, SD=2.81) (Table 2).

**Table 2.** Distribution of Adolescents' Behaviors for Protecting and Sustaining the Health during the Covid-19 Outbreak

<b>Practices for Protecting and Sustaining the Health</b>	<b>Sample value (N=161)</b>
<b>Nutrition*</b>	
More food consumption (n %)	57 (35.6)
Decrease in appetite (n %)	14 (8.7)
Eating late (n %)	32 (19.9)
Increase in the number of snacks (n %)	28 (17.4)
Consumption of junk food (n %)	59 (36.6)
<b>Physical activity*</b>	
Increase in activity (n %)	6 (4.1)
Decrease in activity (n %)	119 (74.8)
Exercise regularly (n %)	10 (6.2)
Unchanged (n %)	26 (14.2)
<b>Sleep*</b>	
Sleeps late (n %)	123 (76.4)
Sleeps less (n %)	7 (4.3)
Sleeps a lot (n %)	29 (18)
Difficulty in falling asleep (n %)	19 (11.8)
Having frequent nightmares (n%)	2 (1.2)
Unchanged (n%)	27 (16.8)
<b>Coping with Stress*</b>	
<b>Behavioral changes in adolescents during the Covid-19 Outbreak</b>	
No (n %)	81 (50.3)
Introverted	13 (8.1)
Overdependence on mother/father (n %)	18 (11.2)
Anxious	38 (23.6)
Agressive/Nervousness	47 (29.2)
Sleepy	17 (11.8)
Stomachache/ headache (n %)	8 (5)
Constant fear of disease (n %)	12 (7.5)
<b>Interpersonal Relations</b>	
Communicate more (n %)	19 (12.5)
Communicates less (n%)	74 (45.3)
Unchanged (n%)	68 (42.2)
<b>Entertainment/Activity</b>	
<b>Daily Screen Time</b>	
0-2 hours/day (n %)	35 (21.7)
More than 2 (n%)	126 (78.3)

\*Mothers were able to choose more than one.

The changes in nutrition, physical activity, sleep patterns, interpersonal relation behaviors of adolescents and the age and gender characteristics of adolescents were analyzed, and also, no significant difference was found between these health behaviors and the age and gender characteristics of adolescents. A statistically significant difference was found only between the behavioral change observed in adolescents and the age group ( $\chi^2 = 3.962$ ,  $p=0.047$ ) (Table 3)



**Table 3.** Analysis of Sociodemographic Characteristics and Health Behaviors of Adolescent

Health Behavior	Gender (N=161)		$\chi^2$	p value	Age (N = 161)		$\chi^2$	p value
	Female	Male			11-13	14-18		
<b>Change in diet</b>								
Yes	64	4	2.791	0.09	41	71	0.979	0.323
No	43	50			14	35		
<b>Change in physical activity</b>								
Yes	75	61	3.349	0.123	48	88	0.798	0.767
No	9	16			8	17		
<b>Change in sleep patterns</b>								
Yes	71	63	0.012	0.914	46	88	0.921	0.10
No	14	13			9	18		
<b>Change in communication with friends</b>								
Yes	45	48	1.717	0.190	29	64	0.869	0.351
No	40	28			26	42		
<b>Behavioral change</b>								
Yes	41	38	0.50	0.823	21	58	3.962	<b>0.047*</b>
No	44	38			34	48		

\*Significant pairwise differences at  $p < .05$ .

### Mothers' Needs during the Covid-19 Outbreak

It was determined that the outbreak caused mothers to have a need for information on the protection and sustaining health of their adolescent children. The main issues for which information was needed were the effective use of time (36%), physical activity (28.6%) and coping with stress (26.7%) (Table 4).

**Table 4.** Distribution of Mothers' Needs Regarding the Management of the Covid-19 Outbreak

Mothers' Needs	Sample value (N=161)
Need for support to protect and sustain the health of their children	112 (69.6)
Issue with Information Needs*	
Adequate and balanced nutrition (n %)	29 (18)
Regular and adequate sleep (n %)	37 (23)
Physical activity/sports/exercise (n %)	46 (28.6)
Coping with stress (n %)	43 (26.7)
Effective use of time (n %)	58 (36)
Disease and protection from disease (n %)	22 (13.7)
Hygiene practices (n %)	16 (9.9)

\*Mothers were able to choose more than one.

## DISCUSSION

### Health Behaviors of Adolescents during the Covid-19 Outbreak

Adequate and balanced nutrition has a significant role in biologically healthy growth and development, increase in cognitive capacity, increase in school success, and gaining resistance to diseases in adolescence. Nutritional behavior can be evaluated together with physical activity behavior in the literature (Sanchez et al., 2007). In our study, it was found that there was an increase in nutrition and junk food consumption of adolescents and also there was a decrease in their physical activity behaviors during the outbreak (Table 2). In the literature, in the study conducted by Pietrobelli et al. (2020) with children and adolescents between the ages of 6-18 years who were affected by the Covid-19 pandemic, it was reported that individuals' consumption of junk food increased and that there was an increase of  $1.15 \pm 1.56$  in the number of meals during the isolation process. In the same study, it was reported that there was a decrease of  $2.30 \pm 4.60$  hours per week in physical activity behaviors of the participants (Pietrobelli et al., 2020). In the study conducted by Rundle et al. (2020), it is emphasized that the Covid-19 pandemic will increase weight gain in children (Rundle et al., 2020). In the study conducted by Xiang et al. (2020) with children and adolescents who were affected by the Covid-19 pandemic, it was reported that there was a decrease in physical activity behaviors of 65.6% of children and adolescents during the pandemic (Xiang et al., 2020). The results of our study on nutritional and physical activity behaviors of adolescents during the Covid-19 outbreak are consistent with the literature. The fact that the school provides order in the lives of adolescents and has a positive effect on physical activity and diet may have increased adolescents' tendency to unbalanced dietary habits due to the prolonged time spent at home. It is considered that the restriction of adolescents' physical activity/exercise behaviors by the measures taken to slow down the spread of the virus during the pandemic (closure of schools and home isolation), adolescents' lack of exercise habits at home or their preference for activities that do not require consuming physical energy, and the cases where the home environment cannot be suitable for doing exercise may be the reasons for the decrease in physical activities of adolescents during the pandemic.

According to the statements of the mothers, it was found that most of the adolescents were exposed to more than 2 hours of screen time per day (mean=4.90, SD=2.81) and exhibited late sleeping behaviors during the outbreak (Table 2). When the literature was reviewed, in the study of Pietrobelli et al. (2020), it was reported that the screen time of children and adolescents was an average  $7.61 \pm 2.13$  h/day during the Covid-19 outbreak (Pietrobelli et al., 2020). In the study conducted by Xiang et al. (2020) with children and adolescents in the COVID-19 outbreak, it was found that participants' screen time increased during the outbreak (Xiang et al., 2020). Nowadays, it can be said that the accessibility of technology for almost everyone and the widespread use of mobile phones and computers among adolescents were influential on the results.

It is known that the periods of crisis and unrest lead to changes in individuals' ability to cope with stress and in their interpersonal relations. In our study, it was indicated by the mothers that aggressive/angry and anxious behavioral changes were observed in adolescents and that nearly half of the adolescents had a decrease in communication with their friends during the outbreak (Table 2). In the literature, in the study conducted by Jiao et al. (2020) to scan emotional and behavioral changes of children and adolescents affected by the Covid-19 outbreak in China, it was observed that approximately 27% and 32% of the children and adolescents had anxious and aggressive behavior changes, respectively. In the same study, it was emphasized that while overdependence on parents was the most common behavioral change, the measures taken

against the outbreak would decrease children and adolescents' communication with their friends (Jiao et al., 2020). In our study, children's behavior of overdependence on parents was found to be 11.2%. It was considered that the difference observed in the behavior overdependence on parents could be related to the age group range of the individuals included in the study. In the study conducted by Chen et al. (2020) with the adolescents affected by the outbreak, anxiety was reported in 18.9% of adolescents (Chen, F., et al., 2020). Our study is similar to the studies in the literature, which are still limited in number. There is a need for further studies in this regard to better understand the behavioral changes of adolescents. The behavioral changes observed in adolescents may be caused by the various stress reactions of young individuals who are faced with an unexpected event and have to stay at home for so long for the first time.

It was found that the health behaviors of adolescents during the Covid-19 outbreak did not change according to the gender characteristics of the adolescent (Table 3). In the literature, there are studies reporting that adolescent health behaviors vary by gender (Zhou et al., 2020; He et al., 2004). The results on gender in our study differ from the literature. The fact that the restriction of physical activity of adolescents during the outbreak and their lack of contact with their friends and disrupted routines due to inability to go to school led to similar changes for individuals of both sexes was considered as the reason for this difference.

A statistically significant difference was found between the behavioral changes observed during the outbreak and the age period ( $p < 0.05$ ) (Table 3). According to the results, the frequency of behavioral changes observed in the 14-18 age group was higher compared to the 11-13 age group during the outbreak (Table 3). In their study, Chen et al. (2020) examined adolescent depression and anxiety behaviors during the outbreak, and the frequency of depression and anxiety behaviors observed in the 13-15 age group (incidence of depression 21.15%, incidence of anxiety 23.50%) was found to be higher compared to the 9-12 years age group (incidence of depression 9.68%, incidence of anxiety 20.32%) (Chen, F., et al., 2020). In the study conducted by Zhou et al. (2020) with the adolescents between the ages of 12-18, it was found that the incidence of depressive behavior and anxiety increased as the age of adolescents increased (Zhou et al., 2020). More common psychological changes with age in adolescents in the literature are similar to our study's results on behavioral changes. In our study, the fact that emotional changes increased and became more pronounced with increasing age in adolescence was considered as the reason for the significant behavioral change of the 14-18 age group.

### **Discussion of Mothers' Needs during the Covid-19 Outbreak**

Covid-19 is a disease that has been experienced for the first time and the effects and treatment of which have not been clarified yet. Its uncertainty may lead to various needs in society. The fact that a novel type of coronavirus caused the COVID-19 pandemic we are struggling with and the information on the pandemic is not yet fully clear may explain mothers' need for information. It was considered that the increase in daily screen time, lack of physical activity and behavioral changes in the health behaviors observed in children were influential on the selection of issues on which mothers needed information.

### **CONCLUSION**

The results suggest that the outbreak process requires the development of programs to protect and sustain health of adolescents. Today's generation of young people is larger than ever before. Promoting in adolescents health provides opportunity to build a bright future for themselves, their families and for entire countries (World Health Organization, 2019).

## Recommendations

It is recommended to inform families about physical activity exercises they can do at home with their children, to make adjustments for sleep patterns affected by the closure of schools and increased screen time, for parents to establish routine sleep hours with their children and to perform pre-sleep activities (reading a book, etc.), that behavioral changes in adolescents should be followed closely, that online consulting services should be provided, and that education brochures should be developed. To experts are recommended to conduct studies with larger samples.

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**ABOUT SEXUALLY TRANSMITTED DISEASES KNOWLEDGE LEVEL OF  
UNIVERSITY STUDENTS IN TURKEY: A SYSTEMATIC REVIEW**

Fatma Yıldırım<sup>1</sup>, Nülüfer Erbil<sup>1</sup>  
<sup>1</sup>Ordu University

**Goal:**

This study was conducted to systematically examine studies on the knowledge levels of undergraduate university students about sexually transmitted diseases (STD).

**Methods:**

This systematic review was conducted by examining the Turkish articles published between 10.11.2019-15.12.2019 between 2014-2018 to reach related articles: “sexually transmitted disease, young people and university students” keywords were searched and published in Google Scholar, Ulakbim, Türk Medline and Dergi Park search engines. As a result of the screening, 4263 articles were reached and 12 articles were received with the inclusion criteria.

**Findings:**

As a result of the examination it was found that the students in the health department generally received information about STDs beforehand. The majority of those who had previously received information about STDs. The majority of those who had previous knowledge were found to have sufficient knowledge of STD. The knowledge level of the students in the health department was found to be moderate or sufficient. Among the students, AIDS was the most known STD.

**Results:**

Most of the students had insufficient knowledge about STDs. In general, students with moderate and sufficient level of knowledge consisted of students in the health department.

**Keywords:** Sexually transmitted diseases, university students, young people

## **PRENATAL CARE MODELS: GROUP CARE MODEL AGAINST THE TRADITIONAL CARE MODEL**

Emine Temizkan Sekizler<sup>1</sup>, Zeynep Daşıkın<sup>2</sup>

<sup>1</sup>Eastern Mediterranean University, Faculty of Health Sciences, <sup>2</sup>Ege University, Nursing Faculty

### **ABSTRACT**

#### **Goal:**

The purpose of this review is to examine the group prenatal care model versus the traditional individual care model in line with the literature.

#### **Methods:**

The purpose of prenatal care (PC) is to reduce maternal, fetal and neonatal mortality and morbidity by providing early diagnosis and treatment of health problems that occur during pregnancy. Women-centered and high quality PC is extremely important in reducing adverse pregnancy and neonatal outcomes. In order to improve maternal and fetal health outcomes and to increase the quality of care provided, a group PC model was developed as an alternative model to the traditional individual PC model.

#### **Findings:**

Traditional PC Model; It is based on one-on-one interviews made by a pregnant woman with prenatal healthcare professionals and is carried out in short, one-way interviews that are gradually reduced. Healthcare professionals convey the physical risk assessment of the pregnant woman and clinical and personal care information to the woman within the appointment period.

Group PC, in the same age range, groups of 8-12 people, with 2 hours interviews every 2-4 weeks; It is a model that aims at personal empowerment with ten-session curricula focusing on nutrition, exercise, social support, health-related self-awareness and relaxation techniques. Group PC is reported to improve obstetric outcomes such as preterm labor, low birth weight, and breastfeeding compared to conventional PC.

The group PC model offers important opportunities in terms of reaching more pregnant women, pregnancy education and social support. It is reported that bringing together individuals with similar needs increases the appropriate time and efficiency for training and reduces repetition. Evidence shows that pregnant women who received group PC model training had better prenatal knowledge, were more ready for delivery, were more satisfied with prenatal care and were associated with health outcomes.

#### **Results:**

As a result, the group PC model is considered as an opportunity to provide care to pregnant women in populations that cannot reach PC.

**Keywords :** Groups, maternal health, model, prenatal care (PC), traditional

## **INTRODUCTION**

Complications in the perinatal period are the leading cause of mortality and morbidity among women of reproductive age in developing countries. As a multidimensional indicator of development, maternal mortality is closely related to the quality of reproductive health service delivery (Sağlık Bakanlığı Doğum Öncesi Bakım Rehberi, 2018). Approximately 287,000 women die each year and 2.6 million stillbirths occur worldwide due to complications related to pregnancy and childbirth (UNFPA, 2014). 5th of the Millennium Development Goals; the main indicator of maternal health improvement is the reduction of maternal mortality (Sağlık Bakanlığı Doğum Öncesi Bakım Rehberi, 2018).

### **Prenatal Care**

Prenatal care (PC), is one of the basic preventive health services in the protection and development of mother and baby health, and it is defined as regular examination of mother and fetus during pregnancy, monitoring by trained health personnel and making necessary suggestions in protecting and improving mother / baby health (Çatak et al., 2014; Kıssal and Kartal, 2019). The purpose of prenatal care is to protect and improve the health of mother and baby, and to reduce maternal, fetal and neonatal mortality and morbidity by providing early diagnosis and treatment of health problems that occur before or during pregnancy (Kıssal and Kartal, 2019). The World Health Organization (WHO) points out that nursing services play a key role in reducing maternal mortality and for safe pregnancy and delivery (UNFPA, 2014; Kurtoğlu and Yılmaz, 2018).

Prenatal care includes the evaluation of; screening family history, environmental toxic agents, nutrition and physical activity, vitamin A, vitamin D, zinc and sodium in risky groups, anemia in risk groups, folic acid supplementation, asymptomatic bacteriuria according to risk status, chronic diseases, risk factor focused gestational diabetes mellitus, phenylketonuria screening, smoking, alcohol and substance use, HIV, syphilis and tuberculosis screening in risky groups, early ultrasound monitoring to determine gestational week, multiple pregnancies and fetal anomaly, vaccines such as; tetanus, diphtheria, acellular pertussis, partner violence, domestic violence, depression, anxiety and disorders which seen during pregnancy (WHO, 2016).

Prenatal care is an important part of maternal health, but use and quality of prenatal care services is low in low and middle income countries (WHO, 2006; TNSA, 2018). Evidence from high-income countries shows that group prenatal care (GPC) models can improve this quality. High quality PC optimizes maternal and neonatal health outcomes. PC, is not only a care opportunity for pregnant women, it is also associated with increased use of maternity and postnatal health care services. In this sense, female-centered and high-quality PC is extremely important in reducing negative pregnancy and neonatal outcomes (Sharma et al., 2018).

### **Prenatal Care Models**

Traditional prenatal care (TPC) model, is a one-way model that a pregnant woman receives health service from a prenatal health provider and is carried out with short interviews which increasingly shorter intervals. GPC model paradigm appeared on the question of "Is it possible to provide a better service with women in the same age group for longer time together?", in order to improve maternal and fetal outcomes with multi-faceted service delivery between healthcare providers and pregnant women (Mazzoni and Carter, 2017). GPC was first born in the 1980s under the name of "Teen Club", as a self-care and support group for adolescent pregnant women. Then, "CenteringPregnancy" was born, which was created by Sharon Schindler Rising in 1990 and it is the best known GPB form in the United States now. The



program includes three main components: evaluation, training and support (Mazzoni and Carter, 2017).

GPC service has appeared as an alternative service delivery model to TPC service (Sharma et al., 2018). GPC has been found to be associated with better participation, care satisfaction and health outcomes for pregnant women and newborns. TPC service is based on one-on-one visits between a healthcare provider and the pregnant woman and it focuses primarily on physical risk assessment to ensure optimal health. During the appointment period, the healthcare professional provides clinical and personal care information to the woman (Sharma et al., 2018). Pregnants who receive GPC are in the same age group and they almost get all prenatal care with group. The groups consist of 8-12 pregnant women, also a prenatal healthcare provider (obstetrician, family doctor, midwife or nurse, practitioner), or other healthcare staff (medical assistant, social worker, health educator, dietician or psychologist) who support health services and every 2-4 weeks 2 hours meetings are planned (Mazzoni and Carter, 2017). The program focuses on weight gain, nutrition, exercise, breastfeeding, social support, health-related self-awareness and relaxation techniques (Carter et al., 2016). Pregnant women meet as a group and measure and record their own weight and blood pressure. The healthcare service provider evaluates each pregnant individually and if necessary, there is an individual counseling room. After the individual evaluations are completed, empowered personality has aimed with interactive activities that apply adult learning principles in a ten session curriculum (Mazzoni and Carter, 2017).

ACOG recommends GPC. It is reported that bringing together individuals with similar needs increases productivity and available time for education and decreases repetition. Evidence suggests that pregnant women who receive group education have better prenatal knowledge, they are more ready for delivery and more satisfied with prenatal care. Also they start breastfeeding immediately (ACOG, 2018). GPC has associated with better participation, satisfaction with care and health outcomes for pregnant women and newborns (Sharma et al., 2018). However, it is reported that the most important barrier to implementing this model is cost (ACOG, 2018).

Pregnant women who received GPC reported more satisfaction, experienced less preterm birth and fetal death, had longer pregnancies, gived birth to higher birth weight babies, the rate of newborns entering intensive care was lower, had a positive breastfeeding behavior and health behaviors developed. Also, it has been reported that pregnant lose more weight in the postpartum period, use more advanced postpartum family planning, and have less postpartum depression (Picklesimer et al., 2012; Tanner-Smith et al., 2013; Ickovics et al., 2007; Carter et al., 2016; Crockett et al. 2016; Mazzoni and Carter, 2017; Benediktsson et al., 2013; Magriples et al., 2015; Trotman et al., 2015). In a study conducted on pregnant women with gestational diabetes, it was reported that the prenatal health outcomes of pregnant women who received GPC were better (Schellinger et al., 2016). In Gagnon and Sandall's (2007) study, the effects of GPC education on birth, parenting and both could not be identified but it was determined that individualized prenatal training to avoid recurrent cesarean delivery did not increase the rate of vaginal delivery after cesarean section (Gagnon and Sandall, 2007).

In a systematic review and meta-analysis study comparing GPC with TPC by Carter et al. (2016), there was no difference in terms of preterm labor in both, GPC was associated with less low birth weight admission to neonatal intensive care and found no difference in starting breastfeeding except for randomized controlled studies (Carter et al., 2016).

In different studies which comparing GPC and TPC, there was no difference was found in terms of maternal-fetal and neonatal outcomes (Carter et al., 2016; Shakespeare, Waite and Gast, 2010).

In the systematic review about GPC in high-risky pregnant women, it has been reported that it is beneficial for high-risky pregnant women in some groups but high-quality well-controlled studies on this subject are insufficient (Byerley and Haas, 2017). In addition, it is stated that there is no evidence that GPC is harmful (ACOG, 2018).

## RESULT

GPC offers significant opportunities for patient education and social support. GPC is effective in positive obstetric outcomes such as high pregnancy satisfaction, less prevalence of preterm labor and low birth weight newborns, development of positive behavior in terms of breastfeeding and social support, and there is no evidence of its harm. Therefore, GPC can be recommended as an alternative to TPC. In this context, nurses have important responsibilities in eliminating the obstacles such as cost and enabling PC to reach more pregnant women.

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**Publication No : P-020**

## **A STUDY ON DEVELOPING FIRST AID KNOWLEDGE AND SKILLS OF TEACHERS: THE CASE OF KADIKOY DISTRICT**

Özlem Akarsu<sup>1</sup>, Aynur Aytekin Özdemir<sup>1</sup>, Zelal Çakın<sup>2</sup>, Rojzerin Tay<sup>1</sup>

<sup>1</sup>Istanbul Medeniyet University Faculty of Health Sciences, Department of Pediatric Nursing

<sup>2</sup>Acıbadem Hospital

### **Goal:**

The study was conducted in a pre-test and post-test quasi-experimental design in order to evaluate the effectiveness of the first aid training program given to teachers.

### **Methods:**

The study was carried out at Kadikoy Public Education Center in the 2018-2019 academic year, on December 19-20, 2019. Teachers working in primary and secondary schools affiliated to the Istanbul Kadikoy District National Education Directorate formed the universe. The sample consists of 76 teachers working in these schools, volunteering to participate in the study, at least one teacher from each school. The data were collected with a data collection form consisting of questions to determine the demographic characteristics and first aid knowledge levels of teachers. The teachers were given a total of 16 hours of first aid training by the researchers. In the study, data collection forms were applied to teachers before starting first aid training (pre-test) and after the training (post-test) was completed.

### **Findings:**

When the first aid knowledge score averages of the teachers are examined; mean score of first aid entry knowledge ( $2.05 \pm 0.76$ ;  $2.52 \pm 0.55$ ), basic life support ( $4.81 \pm 2.53$ ;  $9.18 \pm 0.79$ ), airway obstruction ( $2.02 \pm 1.36$ ;  $4.76 \pm 0.42$ ), bleeding ( $7.36 \pm 4.14$ ;  $14.25 \pm 0.92$ ), epileptic attack ( $4.67 \pm 3.07$ ;  $8.73 \pm 0.82$ ), hypoglycemia ( $1.98 \pm 1.20$ ;  $2.97 \pm 1.16$ ), asthma attack ( $5.31 \pm 3.25$ ;  $8.55 \pm 0.64$ ), high fever ( $3.43 \pm 1.82$ ;  $5.19 \pm 1.11$ ), fracture luxation ( $4.60 \pm 2.39$ ;  $6.81 \pm 0.42$ ) mean scores were found to be significantly higher in the post-test than the pre-test ( $p = 0.000$ ).

### **Results:**

It has been determined that basic first aid training given to teachers increases the first aid knowledge level of teachers. It was suggested that teachers working in educational institutions at all levels gain basic knowledge and skills regarding first aid. Furthermore, the continuity of teachers' education should be ensured. The school health nurse should be employed in each school.

**Keywords:** First aid education, school health, school health nursing, teacher

## INVESTIGATION OF THE RELATIONSHIP BETWEEN PREMENSTRUAL SYNDROME AND TYPE D PERSONALITY AMONG UNIVERSITY STUDENTS

Nülüfer Erbil<sup>1</sup>, Hatice Nur Nefes<sup>2</sup>, Nurfidan Varlık<sup>2</sup>, Nuran Nur Türkeli<sup>2</sup>

<sup>1</sup>Department of Nursing, Faculty of Health Sciences, Ordu University <sup>2</sup>Department of Nursing, Institute of Health Sciences, Ordu University

### Goal:

The aim of this study was to examine the relationship between premenstrual syndrome and Type D (distressed) personality among female university students.

### Methods:

The sample of this descriptive and correlational study included 240 female students studying at the nursing department of a university. The data were collected using the personal information form, the Premenstrual Syndrome Scale (PMSS) and the Type D Personality Scale in November 2019. Descriptive statistical methods, Pearson's correlation analysis and linear regression analysis were used in the analysis of the data.

### Findings:

The mean age of the female students was 20.37±1.46. The prevalence of premenstrual syndrome among female students was 60.4%. According to the scores obtained from the subscales of PMSS, it was found the students suffered from 68.8% had depressive feelings, 66.3% fatigue, 60.8% irritability, 65% pain, 75% appetite changes, 56.3% sleep changes, edema 58.3% and anxiety 35%. Type D personality scale "social inhibition" subscale mean score was 18.97±8.63, and the "negative affectivity" subscale mean score was 17.80±8.99. There were statistically significant positive correlations between Type D personality "negative affectivity" subscale score and total PMSS ( $r=.443$ ) and its subscales scores including depressive feelings ( $r=.423$ ), anxiety ( $r=.435$ ), fatigue ( $r=.353$ ), irritability ( $r=.392$ ), depressive thoughts ( $r=.422$ ), pain ( $r=.193$ ), appetite changes ( $r=.165$ ), sleep change ( $r=.257$ ), edema ( $r=.184$ ), ( $p < 0.05$ ). Also, there were statistically significant positive correlations between total PMSS ( $r=.172$ ) and its subscales scores including anxiety ( $r=.160$ ), fatigue ( $r=.179$ ), irritability ( $r=.131$ ), depressive thoughts ( $r=.233$ ). Negative affectivity was a significant predictor of premenstrual syndrome ( $p < 0.001$ ).

### Results:

As a result of, a correlation was found between having Type D personality and premenstrual syndrome in university students. Negative affectivity was a significant predictor of premenstrual syndrome. D-type personality traits can lead to increased severity of premenstrual syndrome and decreased quality of life. Therefore, recognizing the personality type of students with premenstrual syndrome and providing psychological support may contribute to a decrease in the severity of premenstrual symptoms and a good quality of life.

**Keywords :** Nursing, premenstrual syndrome, type d personality, university student

## **BEING THE CHILD OF A PARENT WITH A MENTAL PROBLEM**

Bahar AKSOY<sup>1</sup>, İlknur KAHRİMAN<sup>2</sup>

<sup>1</sup>Gümüşhane University, Child Health and Disease Nursing Department <sup>2</sup>Karadeniz  
Technical University, Child Health and Disease Nursing Department

### **Goal:**

Mental health is the ability of a person to be at peace with herself/himself, with the people around her and the society, and to make the necessary effort to ensure constant balance, order and harmony. Mental problems are a condition characterized by varying degrees of inconsistency, inappropriateness and inadequacy in thoughts and behaviors.

### **Methods:**

This study was conducted to draw attention to the effects of having mental problems in parents on children.

### **Findings:**

According to the World Health Organization; the prevalence and frequency of mental health problems and individuals with problems is increasing day by day. Worldwide, 15-23% of children live with a parent with mental health problems. Having a parent with mental health problems has many negative effects on child health. These negativities can be listed as the genetic effect of the parents' psychiatric illness, chaotic home environment, financial difficulties such as unemployment, homelessness, incompatibilities between spouses, poor communication between family members, parent-child disputes, social isolation and stigma. It is known that children who grow up in this environment are more socially backward than their healthy peers, their physical health is more impaired, the prevalence of psychiatric diseases is higher, and more behavioral, developmental and emotional problems are seen in the long term due to the effects of these negativities. Being the child of a parent with a mental problem brings about a very difficult life. Nevertheless, pediatric nurses have played an important role in raising awareness of what children with mentally ill parents experience.

### **Results:**

Nurses should approach family-centered towards the needs of the family as a whole rather than interventions directed at parents. Nurses should develop educational programs on topics such as supporting parents 'parenting, improving the child's problem-focused coping skills and providing information about the parents' disease appropriate for their age and development level, strengthening self-esteem, and preventing feelings of exclusion.

**Keywords :** Child, mental disorder, parents, parents with mental problems

**Publication No : P-023**

## **CHILDREN IN NEED OF PROTECTION**

**Bahar AKSOY<sup>1</sup>, İlknur KAHRİMAN<sup>2</sup>**

<sup>1</sup>Gümüşhane University, Child Health and Disease Nursing Department <sup>2</sup>Karadeniz Technical University, Child Health and Disease Nursing Department

### **Goal:**

Every child is in need of protection from the moment of birth until the age of 18. The child in need of protection is not fully developed in terms of social, physical, spiritual and moral aspects due to the inadequacy and disruption in basic care, upbringing, denial and supervision. According to the Child Protection Law; Children whose physical, mental, moral, social and emotional development and personal safety are in danger, who are neglected or abused or who are victims of crime are in need of protection.

### **Methods:**

This study was conducted to draw attention to vulnerable children in the community, in need of protection.

### **Findings:**

Problems related to the family are the main reasons why children are put under protection; family breakups, parents' alcohol and substance abuse, domestic violence, and sexual and physical abuse. It is essential to provide the necessary care for the social integration and effective participation of children in need of protection and care. Since each child is taken under protection for special and different reasons, special care methods are offered to the child according to these characteristics and differences. Children in need of protection in Turkey are cared for by “Institution care service models” and “Service models that enable them to live with their own family or a different family”. Institutional Care Service Models; Children's homes site consists of child support centers, child protection first response and evaluation unit and children's homes coordination center. The role of nurses in the protective and preventive activities of children in Institutional Care Service Models is quite large.

### **Results:**

Ensuring that these children develop safe attachment relationships in infancy, gaining basic life skills, monitoring and identifying developmental periods, taking a multidisciplinary approach, providing behaviors related to the period and bringing them into society are among the responsibilities of nurses.

**Keywords :** Children in need of protection, nurse, service models

## INTRODUCTION

Since children form the future of a country, extreme care must be taken in their upbringing and education. The child in need of protection, in a certain period of time, according to the standards of that society; It includes the conditions of preventing the child from being a healthy adult in terms of social, physical, spiritual and moral aspects due to the inadequacy and disruption in the basic care, upbringing, denial and supervision of the child (Şenocak, 2005). Because every child is in need of protection, starting from the moment of birth right and full, from the moment of birth to the adult, regardless of their individual characteristics such as parental or homeless, wealthy or unhealthy, guilty or innocent, having or not having any deficiency. The reason for this is that the child is not fully developed physically, spiritually and mentally (Şenocak, 2005). Yörükoğlu (1997) defines children in need of protection, which he describes as orphans, as "children who are deprived of their most natural right to live with their parents for various reasons, whom everyone feels sorry for but nobody fully claims" (Yörükoğlu, 1997). Akyüz (2000) stated the concept of need for protection as "the physical, mental and intellectual security of a child is endangered as a result of not receiving the care and care required by law" (Akyüz, 2000).

In Turkish law, the concept of child in need of protection has been defined in the "Civil Law, Social Services and Child Protection Law Child Protection Law". The concept of child in need of protection according to the Civil Law, "children whose physical and mental development are in danger or who are left morally abandoned" are in need of protection. (Türk Medeni Kanunu, 2001). In addition, according to the Civil Law, "the child whose stay in the family disturbs the peace of the family so that they are not expected to bear it" is defined as a child in need of protection. (Türk Medeni Kanunu, 2001). According to the Child Protection Law, the child in need of protection; A child whose physical, mental, moral, social and emotional development and personal safety is in danger, who is neglected or abused, or who is a victim of crime, is considered to be a child in need of protection (Çocuk Koruma Kanunu, 2005). Child in need of protection under the Social Services and Child Protection Institution Law; "Their physical, spiritual and moral development or personal security is in danger; without mother or father, mother or father or both of them unknown, abandoned by mother or father or both, neglected by mother or father; the child who is left vulnerable to all kinds of social dangers and bad habits such as prostitution, begging, drinking alcoholic drinks or using drugs, and who is dragged into the loose (Uluğtekin, 1996).

In the United Nations Convention on the Rights of the Child, the concept of children in need of protection is not specified, but in which cases protective measures will be taken for children. These situations include physical or mental assault, violence or abuse, negligent or negligent treatment, all kinds of abuse and ill-treatment, including rape, while in the presence of the child's parents or only one of them, their legal guardian or guardian, or any person taking care of them (Birleşmiş Milletler, 1989).

### **Children in Need of Protection According to the Law of Social Services and Child Protection Agency**

The Social Services and Child Protection Agency Law requires two types of conditions, general and specific, for a child to be in need of protection. General condition; endangering the physical, spiritual and moral development or personal safety of the child (Sosyal Hizmetler Kanunu, 1983; Akyüz, 2000).



## **Physical Development**

The danger of physical development is that the physical structure and external vision of the child are in danger. For example; the physical development of the child is endangered in cases such as working under severe conditions, not being well fed, not being properly clothed and sheltered, and being punished excessively. Because in these cases, the child may show developmental disorders and may not be resistant to various diseases. (Akyüz, 2000).

## **Mental Development**

Endangering the mental development of the child means that the child suffers from psychological and emotional shocks and depressions or that there is such a danger. The emotional development of children who are constantly humiliated, despised, pushed and pushed may be compromised and their mental health may deteriorate (Akyüz, 2000).

## **Moral Development**

The child's moral development is endangered in situations such as encouragement to prostitution, begging or theft, tendency to use alcoholic drinks or drugs, develop a habit of escaping from home or school, constantly lying and becoming unwilling to work (Akyüz, 2000).

Special conditions; children without a mother or father or mother or father, children whose parents are unknown or both, children abandoned by their parents or both, and children who are neglected and pushed into bad habits by their parents (Akyüz, 1986).

## **Children with or without a Mother and Father**

Children in this group are those who were born from persons who married in accordance with the conditions required by the Civil Code, but who lost their parents or both by death or disappearance. Children in this situation are in need of protection if their physical, spiritual and moral development is in danger because they are deprived of the protection of their parents or one of them. (Akyüz, 2000).

## **Children whose Parents or Both Are Unknown**

These are children who were born in marriage or after the dissolution of marriage, or who were born out of marriage, but despite all research, their parents or one of them could not be identified. They are children who are abandoned by their parents to places such as mosques and municipalities, who are secretly left in front of doors, in deserted streets and similar places, or who are left to institutions by their parents, but whose parents cannot be identified as a result of the loss of their records (Akyüz, 2000).

## **Children Abandoned by Parents or Both**

Children in this group are children who, for various reasons and factors, have been abandoned on the side of their parents because they have not deliberately done the tasks that the law has imposed on them or are unable to perform these tasks (Akyüz, 2000).

## **Children Neglected by Their Parents and Pushed into Bad Habits**

Children in this group are the children who face the risk of being dragged into prostitution, begging, using alcoholic drinks and drugs and all kinds of social dangers due to the care imposed by the law on the parents and the negligence they show in their duties to see and supervise, supervise and supervise the child. Children who are given to others for benefits are

also included in this group (İnan, 1968). Social Services Law 21nd item of the and the 7nd item of the regulation on the determination, examination, taking and abolition of protection orders and 6nd item of the regulation on the implementation of protective and supportive cautionary decisions made in accordance with the child protection law and the person who is obliged to notify children in need of protection and institutions:

- a) Local Administrative Authorities,
- b) Health Institutions and Organizations,
- c) Village Headmen
- d) General Law Enforcement Force,
- e) Municipal Police Officers stated in the form.

These individuals and organizations are in charge of immediately notifying the children in need of protection to the Provincial Directorates or, if available, to the social service centers in the district (Korunmaya Muhtaç Çocukların Tespiti, İnceleme Korunma Kararlarının Alınması ve Kaldırılmasına İlişkin Yönetmelik, 1983).

### **Care Models for Children in Need of Protection**

It is essential to provide the necessary care for the social integration and effective participation of children in need of protection and care. Since each child is taken under protection for special and different reasons, special care models for the child are offered according to these characteristics and differences (Yılmaz, 2006; Çiftçi, 2009; Yazıcı, 2012; Yazıcı, 2014). Care models consist of institutional care service and service models that enable living with a self-family or a different family.

#### **Institutional Care Service Models**

Institutional care service model; It is the service provided temporarily or permanently by the official institutions of the state according to the conditions of the child in cases where the child is desperate (Özdemir vd., 2008; Tuncer ve Erdoğan, 2018). These models;

- Children's Houses Site
- Child Support Centers
- Child Protection First Response and Evaluation Unit
- Child Affiliated to Children's Houses Coordination Center (Çiftçi, 2009; Yazıcı, 2012; Yazıcı, 2014).

#### **Service Models Enabling Living With Self-Family or A Different Family**

- Being Cared for and Protected with the Family without Protection
- Adoption
- Foster family
- Nursery and Day Care Homes
- Social Economic Support (Çiftçi, 2009; Yazıcı, 2012; Yazıcı, 2014; Tuncer ve Erdoğan, 2018).

### **Children in Need of Protection and Nursing Initiatives**

The mission and responsibilities of the nurse are defined in the 37nd item of the seventh chapter of the Child Support Centers Regulation of the Ministry of Family and Social Policies.

- To ensure that they develop secure attachment relationships in infancy through primary nursing practices,
- To encourage the child to acquire basic life skills,

- By introducing the Foster Family Model to the society, to contribute to the prevention of child abuse, to overcome the economic barriers of the family, to contribute to the establishment of interdisciplinary unity in the creation of a safe family environment with the help of the nurse's consultant and advocate roles,
- To take precautions by recognizing beforehand the exclusion and labeling that may occur in children,
- Identifying risky families / parents / children, such as adolescent parents, neglectful-abused children, parents with substance and alcohol addiction, parents with mental problems, single-parent families,
- Creating and following up the vaccination program and detecting and applying incomplete vaccines,
- Ensuring cooperation between institutions,
- Organizing social activities, sports organizations, cultural activities,
- To take a multidisciplinary approach by determining the developmental stages and to ensure that the behaviors of the period are displayed,
- Monitoring growth and providing necessary supplements,
- Identifying health problems and providing the necessary care,
- To help the coping methods in the detection of chronic diseases to normalize the education and life of the child based on the developmental period,
- Keeping track of school course achievements and providing the necessary assistance in detecting negative situations,
- Teaching methods of sexual protection and planning training on this subject, applying,
- Eliminating the lack of knowledge of the society about foster family and adoption and creating awareness by organizing the necessary training and social activities in this regard,
- The reason for leaving the home of children with families should be carefully investigated, examined and interpreted, and their colleagues and relevant institutions should be informed about the necessary measures (Çocuk Destek Merkezleri Yönetmeliği, 2015).

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## **MENOPAUSAL PERIOD AND QUALITY OF LIFE IN TURKEY: A SYSTEMATIC REVIEW**

Mevlde Alpaslan Arar<sup>1</sup>, Nlfer Erbil <sup>2</sup>

<sup>1</sup>Department of Gynecology and Obstetrics Nursing, Ordu University, Institute of Health Sciences <sup>2</sup>Department of Gynecologic and Obstetrics Nursing, Faculty of Health Sciences, Ordu University

### **Goal:**

The aim of this study was to identify studies for women in menopause quality of life in Turkey, and to identify the factors affecting the quality of life in women in menopause.

### **Methods:**

This study, which is a systematic review, was conducted between November-December 2019 by scanning Turkish and English indexes. In our study, using the keyword "menopause and quality of life", "menopause and quality of life", search engines were searched from "Google Scholar", Pubmed, Scopus and Turkish Medline. The study group has reached a total of 5977 articles published in the 2014-2018 years in Turkey and 8 articles were appropriate inclusion criteria.

### **Results:**

In descriptive and cross-sectional studies examined, it was found that the quality of life of women in the menopausal period was moderate or low. In an experimental study examined, it was found that pilates exercises applied to women in the post-menopausal period increased their quality of life and improved their psychological status. It has been found that socio-demographic characteristics of women, their perceptions of menopause, their attitudes towards menopause, the way they enter menopause, the frequency and severity of menopausal symptoms affect the quality of life.

### **Conclusion:**

It has been determined that the menopausal period negatively affects the quality of life of most women, but the education and counseling services provided for menopause positively affect the quality of life of women in the menopausal period.

**Keywords:** Menopause and quality of life

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Asst. Prof. Cennet ÇİRİŞ YILDIZ  
Istanbul Kent University, Faculty of Health Science, Nursing Department

Res. Asst. Güzin ÜNLÜ  
Istanbul Kent University, Faculty of Health Science, Nursing Department

Ms Heidi LORD  
Research and Education Building, St George Hospital

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