



Geliş Tarihi (Received): 19.04.2021


Kabul Tarihi (Accepted): 04.10.2021

**Araştırma Makalesi**

## **Psychosocial Effects Of The Covid-19 Struggle Process On Nurses: A Qualitative Study**

**Covid-19 ile Mücadele Sürecinin Hemşirelerdeki Psikososyal Etkileri: Nitel Çalışma**

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**Alıntı (Cite):** Ertem M, Kurt A. Psychosocial Effects Of The Covid-19 Struggle Process On Nurses: A Qualitative Study. YBH dergisi. 2021;2(2): 52-73.

### Abstract

**Aim:** This study aims to determine the psychosocial effects of pandemia on nurses who cared for patients diagnosed with COVID-19 in Turkey.

**Methods:** This study employed a descriptive qualitative approach. The data was collected via face to face interviews between the October -November 2020 in Turkey. The study sample consisted of 11 nurses who worked in a pandemic hospital during the COVID-19 pandemic. Socio-Demographic Information Form and Semi-Structured Interview Form were utilized for the data collection. The interview data were analyzed thru content analysis.

**Results:** The psychosocial effects among nurses caring for patients diagnosed with COVID-19 were categorized under three main theme such as 'effects of pandemic, coping and support issues. The subthemes were: issues of workplace setting, social and psychological problems, psychosocial and administrative support.

**Conclusion:** The data showed that nurses experienced various psychological distress, social experiences, and needed psychosocial and administrative support during the care of COVID-19 patients. With proper planning by the authorities, it is possible to manage mental health distress risk factors of nurses and ameliorate their mental health status.

**Keywords:** Coping skills; nursing; qualitative research; psychosocial factors; sars-cov-2.

### Özet

**Amaç:** Çalışmanın amacı Türkiye'de COVID-19 tanılı hastalara bakım veren hemşirelerde pandeminin psikososyal etkilerini belirlemektir.

**Yöntem:** Bu çalışmada tanımlayıcı niteliksel bir yaklaşım kullanılmıştır. Veriler, yüzyüze görüşme yöntemiyle Ekim-Kasım 2020 tarihleri arasında toplanmış olup, araştırmanın örneklemini COVID-19 salgını sırasında bir pandemi hastanesinde çalışan 11 hemşire oluşturmaktadır. Verilerin toplanmasında Sosyo-Demografik Bilgi Formu ve Yarı Yapılandırılmış Görüşme Formu kullanılmıştır. Görüşme verilerinin analizi içerik analizi ile değerlendirilmiştir.

**Bulgular:** COVID-19 tanısı alan hastalara bakım veren hemşirelerde psikososyal etkiler üç ana tema (pandemik etkiler, başetme yöntemleri ve destek) olarak kategorize edilmiştir. Alt temalar ise; çalışma ortamına ilişkin sorunlar, sosyal ve psikolojik güçlükler, aktif ve pasif başetme, psikososyal ve idari destek olarak saptanmıştır.

**Sonuç:** Hemşirelerin pandemi sürecinde çeşitli psikolojik sorunlar, sosyal deneyimler yaşadıklarını ve psikososyal ve idari desteğe gereksinim duydukları görülmüştür. Bu doğrultuda belirlenen sorun alanlarına yönelik uygun müdahalelerin planlaması ile hemşirelerin ruhsal hastalık risk faktörlerini yönetmek ve ruhsal sağlık durumlarını iyileştirmek mümkün olacaktır.

**Anahtar Sözcükler:** Başa çıkma yöntemleri; hemşirelik; nitelleyici araştırma; psikososyal faktörler; sars-cov-2.

## Background

Maintaining mental and physical health of employees and protecting them from the harmful effects of social and physiological issues remains to be one of the main objectives of modern science. <sup>(1)</sup> A total separation of work-life from personal life is improbable as there is an interactive relation in-between. <sup>(2)</sup> The higher this mutual interaction takes place, the better the health of the individual, and the higher the success of the institution. <sup>(3)</sup> Physical setting, manner of work and conditions are very important for healthcare personnel working in hospitals. Unfavorable conditions in the working environment harm both individuals and institutions. The problems inevitably will manifest themselves on employees as interpersonal conflicts, decreased performance, and poor job dissatisfaction. <sup>(4,5)</sup> From an institution's stand-point, the in-house conflicts and problems lead to a decrease in work efficiency, economic loss of the institution, increase in occupational accidents, associated possible lawsuits which would inadvertently affect patient care and its quality. <sup>(6,7)</sup>

The health sector is unique in the sense that it differs from other lines of work due to the difficulty of serving individuals with intense stress as well as working under constant exposure to stressful events daily. <sup>(8)</sup> The majority of the stress is bound to factors such as excessive workload, the obligation of providing emotional support, inefficacy of health services, low autonomy, meager wages, role ambiguity, limited promotion, rewarding and development opportunities, lack of self-confidence, and the public image of the profession. <sup>(9-11)</sup> In pandemics, the health system is one of the hardest-hit active institutions. While socio-economic and mental health implications over society are imminent, the mental health of healthcare staff, who have a great deal of social and work responsibilities, is equally at stake.

A study contemplating several healthcare professionals in the city of Wuhan, where the COVID-19 outbreak first registered, reported 71.3% mild, 22.4% moderate, and 6.2% severe mental disorders within the staff immediately after the outbreak. Therein, early access to mental health services for healthcare professionals working in the epidemic has been found beneficial in improving physical health perceptions and alleviating acute mental distress. <sup>(12)</sup> To reduce the mental damage of COVID-19 among healthcare professionals, mental health professionals in Wuhan have set up mental intervention teams to provide a range of mental services including distributing brochures and providing counseling and psychotherapy. <sup>(13)</sup> Various efforts have been made to minimize the pressure on medical employees in China through recruiting more medical staff to control work intensity, carrying into effect strict infection control procedures, ensuring protective equipment, and providing counseling services. <sup>(14)</sup> Similarly, video interviews, stress management, and group programs targeting the exchange of experiences and expression of relevant fears and hopes at the end of a working day have been initiated to offer a mental support for staff in pandemic units. <sup>(15)</sup> In France, where casualties are at epic levels, psychiatric teleconsultation assistance has been provided to assist medical and non-medical hospital staff suffering from the psychological effects of overwork, stress, difficult ethical decisions, witnessing multiple deaths in a day, quarantine, and fear of infecting themselves and their families. <sup>(16)</sup>

Some studies affirmed that the nurses providing care during the pandemic process had faced psychological and social difficulties and experienced intense stress which required psychological assistance. <sup>(17-23)</sup> In this context, determining the psychosocial needs and taking the necessary precautions, and planning preventive psychosocial interventions for nurses who

connect with patients diagnosed with COVID-19 are of important. It is thought that the results of the research will shed light on psychosocial programs related to nurses.

### **Aim**

The aim of this study is to determine the psychosocial effects of pandemia on nurses who cared for patients diagnosed with COVID-19 in Turkey

### **Methods**

#### **Type of Research**

This study was planned as a descriptive qualitative approach.

#### **Population and Sampling of Research**

The sample size in qualitative research is set by the saturation point, which is designated by continuing data collection to the point where the concepts begin reduplicating themselves. <sup>(24,25,26)</sup> Thus, in this study, the maximum diversity sampling method was used and the sample size was determined by carrying on individual in-depth interviews with nurses until the data started to repeat itself. The sample of the study consisted of 11 nurses who worked in a pandemic hospital during the current pandemic.

#### **inclusion criteria**

Inclusion criteria are as follows:

- Working as a nurse in one of the departments: Pandemic Services of the hospital.
- To care for individuals diagnosed COVID-19
- Volunteering to participate for study.

### **Data Collection Tools**

The data was collected via the Socio-Demographic Information Form and Semi-Structured Interview Form.

#### **personal information form**

The form aims to gather Socio-Demographic attributes of the participants such as gender, marital status, age, experience level, and vice versa. This form was prepared by the researcher and each nurse filled out the forms on their own.

#### **semi-structured interview form**

The form is structured by the researcher to evaluate the physical-cognitive and psychological effects perceived by nurses from their families and the environment in the process of combating COVID-19. This form included semi-structured questions prepared for interviews with the participants.

### **Data Collection Process**

Data was collected thru face-to-face half-structured in-depth individual interviews. Interviews were conducted at either the meeting room or the private office of the nurses' service unit with an average duration of 40 minutes. Data were initially classified into emerging themes without fine adjustments. The same researcher conducted the interviews for internal reliability. Interviews were kept consistent throughout the data collection such as the same voice recorder was used, and notes were taken thru the interviewing process.

### **Ethical Consideration**

Before the study, approval was obtained from Bursa City Hospital Clinical Research Ethics Committee of (Decision number: 2020/9-7). And Turkey Ministry of Health General Directorate of Health Services research approval was obtained (2020-09-09T11\_46\_06). The

purpose of the study was communicated to each participant nurse. The study was conducted in full accordance with the ethical standards established in the 1964 Helsinki Declaration and its later amendments, or other, similar ethical guidelines. Verbal and written informed consent of the participants were solicited. All the participants were explicitly informed thru consent forms that they might choose to opt-out from this research study at any stage of the interview(s).

### **Data Analysis**

Consolidated criteria for reporting qualitative research (COREQ) was employed in this study which established guidelines in reporting qualitative research. <sup>(27)</sup> Depth-oriented data collection was exercised throughout the interviews per the purpose of the research. <sup>(28)</sup> Therefore, the additionally 5 interviews performed by nurses and theoretical saturation was reached when 16 interviews had been completed.

The author has carried out the initial analysis of the interview data thru content analysis. Emerging themes were then refined into more uniform subthemes. Subsequently, an independent analyst with qualitative research background had reanalyzed all the materials (codes, raw data, and themes) for external reliability. <sup>(29)</sup> Each interview data was transcribed and briefly analyzed within a week after conducting the interview. Numbers and percentages were used to determine the nurses' sociodemographic data. Individual interviews were written word-by-word. The interview data were analyzed using content analysis by the researchers and an independent analyst with a qualitative research background. The responses that fell into a meaningful category were labeled by a name and code. A separate list of codes was created for the participants. Later, codes obtained from all interviews were cross-examined to identify similarities and differences. Finally, similar codes were grouped to create a specific theme.

Subsequently, proximate themes were reworked into a few as the best fit for the described findings. <sup>(30)</sup>

### **Limitations**

The sample size of this study was limited owing to the characteristics of qualitative research. Therefore, a further study contemplating the health staff experiences and administrators experiences exclusive of nurses is suggested. On the other hand, data collection from multiple centers was not viable due to the nature of the pandemic preservation and controlling mechanism.

### **Results**

The results of this study were presented through two parts. In the first section socio-demographic results and professional characteristics of nurses were presented. In the second part, the themes defined from the results were presented.

#### **Socio-demographic and Professional Characteristic of Nurses**

The sample population was comprised of 11 nurses. The average age of the participants was 37.3 (min: 23–max: 53), of which 7 were women, 3 were single, 7 had children, 6 had a graduate degree. Moreover, participants had an average of 14 years of work experience (min: 1- max:31) of which 8.1 years was clinical work (min: 1- max:19) (Table 1).



**Table 1: Socio-Demographic and Professional Characteristic of Nurses**

Nurses	Age	Gender	Marital Status	Having children	Education Status	Work Experience (Year)	Clinical Work Experience (Month/Year)
N1	53	Female	Married	Yes	High school	29	14
N2	45	Female	Married	Yes	Graduate	19	15
N3	28	Male	Single	No	Graduate	4	3
N4	25	Female	Single	No	Graduate	1	1
N5	41	Female	Married	Yes	High school	18	8
N6	47	Female	Married	Yes	Postgraduate	16	12
N7	51	Female	Married	Yes	High school	31	19
N8	27	Male	Married	Yes	Graduate	5	5
N9	23	Male	Single	No	Graduate	2	1
N10	38	Female	Married	Yes	Graduate	24	9
N11	33	Male	Married	No	Postgraduate	5	3

### **Content Analysis Results Described in Interviews with Nurses About Psychosocial Effects**

According to the analysis, nurses' experiences as well as the nurses' thoughts about the psychosocial effects that they faced were concluded into three themes: effects of pandemic, coping and support issues. The subthemes were: issues of workplace setting, social setting and psychological problems, psychosocial and administrative support. The results related to categories were classified for each theme are showed in Table 2 (Table 2).

**Table 2: Content Analysis Results Described in Interviews with Nurses**

Themes	Sub-theme	Codes	Quotations
Effects of pandemic	Psychological Problems	Anxiety, loneliness, fear, helplessness, burnout, stress, depressive symptoms, the uncertainty of the future, living with constant doubt, aggression, anger, guilt.	"..People want to see healthcare professionals strong, but we were as worried and scared as anyone else. After all, we are not robots."
	Social Problems	Social isolation, stigma, risk of infecting social circle, inability to spare time for social activities due to intense work pace, social exaltation	"...As I regard myself as potential contagion, it strikes me as if they want to avoid me at the moment I try to establish eye contact with people who also knew that I work in a COVID clinic. The signs of guilt were intensifying as I approach more.."
	Issues of Workplace Setting	Cancellation of permits, providing care to patients with covid-19 without prior in-service training, lack of orientation program, insufficient care experience in a pandemic, insufficient care protocols, continuous changes between clinics and intensive care units.	"...It was physically and mentally exhausting that we had to work everyday single day thru out the week and constantly change workplaces or attract support staff from other clinics to COVID clinics."
Coping	Active Coping	Utilizing individual motivation sources, utilizing social resources, social communication, use of technology, hobby, physical exercise.	"..We got closer with our colleagues in the same situation in the Covid-19 pandemic when we were apart from our families. This has provided strength and motivation to endure our job..."
	Passive Coping	Anger attacks, crying jag, increase/decrease in eating, constant desire to sleep,	"There were days when I cried a lot and tried to get away"

	smoking, isolation, lack of communication.	“..I isolated myself in the beginning. I always wanted to be apart.”
Support Issue	Psychosocial Support	Providing psychological and social needs
		“...During this period, I received support from my family and friends. While it was very upsetting for me, my not being able to visit them and keeping my distance was understandable for them. They understood and tolerated my fears”.
	Administrative Support	Providing necessary protective equipment, planning to provide motivation in the workplace, financial support, organizing working hours and conditions, planning protective interventions against violence and stigma, crisis management.
		“..Nurses should be supported and their services should be recognized by their superiors in the workplace. Work schedules should be organized in such a manner that staff get adequate rest and minimized contact with the COVID-19 infected patient..”

## Discussion

The study was designed as qualitative research based on descriptive analysis which aims to articulate the effects of pandemic on nurses during the struggle against Covid-19.

According to nurses, changes in daily work routines and conditions introduced with the outbreak had negatively affected patient care quality. Numerically, an approximate 1.5-2 times increase in workload and normal working hours of nurses was observed in a study. <sup>(19)</sup> While work-in-progress amendments are practical solutions to some problems, they may have also

aggravated working conditions and routines. Concordantly, a study conducted in Turkey revealed that backup nurses assigned to intensive care units in the course of the COVID-19 pandemic had either no proper experience, knowledge, attitude, and skills or vice versa and were assigned to COVID-19 diagnosed patients with no prior orientation. It was also reported that due to the scarce number of experienced nurses in some shifts, the nurses were mostly taking direct patient care responsibility without the attendance of an experienced intensive care nurse. <sup>(20)</sup> Kıraner and Terzi (2020) added that experienced intensive care nurses felt uncomfortable working with a large number of inexperienced nurses who were not oriented to intensive care, as well as extremely anxious about failing to render adequate service to patients. Nurses found themselves directly in the management of an epidemic that they had never experienced before thru which they were susceptible to a high rate of contamination risk via droplet spillage during care interventions. Personal protection equipment (PPE) worn to minimize infection risk has posed many challenges for nurses such as breathing difficulty for extended hours of work, feeling thirsty, speaking and communication difficulty, high precipitation in less than an hour on contrary to some institutions where the nurses experienced access problems to PPEs. Meanwhile, the vast majority of nurses staying at motels, dormitories, etc. suffered from insomnia. <sup>(20)</sup>

In this study, nurses were noted to present an array of emotions such as fear, anxiety, sadness, desperation, helplessness, as well as obsessive-compulsive and depressive symptoms. Findings of other studies show concurrence with our findings. <sup>(17-23)</sup> In a study it was reported that distress, depression, anxiety and sleep matters for healthcare workers with distinctive characteristics in terms of field of expertise, position, and risk exposure level during the Covid-19 pandemic. <sup>(21)</sup> For instance, lack of adequate sleep for the frontline health workers, in

particular, was seen responsible for high burden levels while insufficiency of protective outfit or training had adversely impacted their mental health. Ergo, providing access to apt personal protective equipment and creating work schedules that accommodate adequate sleep for the staff in such scenarios of a prolonged pandemic is highly valuable.

Also, exposure to social stigmatization or the prolonged social quarantine may have induced anxiety and fear for some participants during the pandemic. <sup>(18)</sup> WHO (2020) expressed that the increase in the number of Covid-19 cases required more healthcare personnel involved with the management of the Covid-19 outbreak which introduced many challenges along with it such as stigma and discrimination to healthcare workers at the workplace and among society. <sup>(31)</sup> As the number of cases and mortality rates increase during an outbreak, frontline healthcare workers become more prone to social isolation, stigma, and discrimination as well as a higher risk of psychological problems. <sup>(32)</sup> These psychological problems may hinder the attention and decision-making competencies of the staff that poses troubles for the management of the ongoing crisis and staff's mental well-being. In furtherance, a study it was suggested that stigma had a great deal of impact on staff collaboration. <sup>(33)</sup>

The results of the studies on coronavirus outbreaks are consistent inter se in the sense of observed extreme physical fatigue and distress among nurses owing to lack of protective equipment, excessive work, and above-limits patient caring. <sup>(19,34)</sup> Similar to the findings of Sun et al. (2020) and Lee et al. (2020), our study revealed that nurses, in particular, with elderly and children in the family, raised concerns about their family members. <sup>(19,35)</sup> Interestingly, several studies highlighted factors such as psychological helplessness, estrangement, physical exhaustion, occupational inability, the feeling of a health threat in the presence of pandemic as the surge of emotions such as anxiety, helplessness, and fear. <sup>(14,36,37)</sup> Allegedly, these negative

emotions have been more of a concern when attending the pre-work training in the first week of entering the negative pressure ward for the first time. Thus, setting up psychological interventions such as stress assessment and nurse screening in the early stage of a pandemic, probably right after getting the outbreak prevention duties, renders very useful. These interventions need to be carried in a professional, accommodating, and continuous fashion <sup>(35,38)</sup> to promote emotional release and keep nurses' mental health intact. <sup>(39)</sup> Adopting early support systems <sup>(40)</sup> in conjunction with psychological interventions is recommended such as sufficing protective material supply needs, overseeing the balance of human resource allocation, providing elderly and infant care services as part of the nurses' job incentives, pre-work training, and promoting interpersonal interaction among nurses. <sup>(19)</sup>

This study showed that effective and ineffective coping methods were both exercised by the participating nurses. For instance, nurses for the most part had recourse to defense mechanisms such as avoidance, isolation, self-consciousness for psychological acclimatization. It has been noted that all coping measures under the pandemic circumstances had an augmenting effect on stress and mental health well-being. <sup>(41)</sup> Some participants receiving psychological support from their social circle or families during this outbreak have chosen to express and share their emotions and thoughts about the process and indulged themselves with relaxation methods, music, meditation, tracking, and other means of stress coping hobbies which showed similarities with the findings of studies contemplating nurses in the SARS wards. <sup>(19,34,35)</sup> Coping style, cognitive assessment, and social support are all known to be stress mediators <sup>(19)</sup> whilst social support and psychological adaptation have proven to take as an intermediator role in psychological rehabilitation under pandemic tension. <sup>(42)</sup>

It has been reported that nurses caring for COVID-19 patients are at risk of experiencing post-pandemic various mental problems. <sup>(31,43)</sup> Therefore, nurse-centric professional psychological counseling, and reinforced crisis assistance systems are welcomed <sup>(44,45)</sup> in the prevention of secondary traumas incurred by witnessing death and disease. Captivatingly, the Mental Health Programme for Coronavirus, backed by a coop-effort of universities, non-governmental organizations, and professional associations, was launched as a phone or online psychosocial counseling services aiming to support the mental health of risky individuals affected by the COVID-19 process, with particular emphasis on healthcare professionals. Having appreciated the weight of the Mental Health Programme for Coronavirus, it was later settled that the organization should continue to serve even after the COVID-19 incident was put to bed to mitigate any future disaster and trauma scenarios in Turkey. <sup>(18)</sup>

The research findings dictate that psychological and administrative support were overlooked in the process of the COVID-19 pandemic which showed similarity to what healthcare staff had faced during the MERS-CoV outbreak. <sup>(14)</sup> On the other hand, Sun et al. (2020) emphasized that stressed that having adequately allocated human resources and personal protective equipment to create a welcoming and healthy working atmosphere should be the primary goal of pandemic management. <sup>(19)</sup> For all pandemic emergencies, unparalleled psychosocial and resource requirements are normal. <sup>(46)</sup> In particular, insufficient psychological support is a fundamental risk factor for damaging psychological consequences in all kinds of disasters alike.

<sup>(47)</sup>

## **Conclusion And Suggestions**

Accordingly, the results showed that the nurses were exposed to a sort of psychological distress and social experiences which indicated that psychosocial and administrative support caring patients diagnosed with COVID-19 could be beneficial.

In the light of research findings it is of important to create a package of counseling and training plan for nurses which would encompass a variety of subjects such as risk management, crisis management, effective coping methods, emotional expression, and social support. Besides, it is recommended to review the regulations pertinent to the working environment and conditions so that interventions can be implemented to prevent the emergence of burnout and secondary trauma in nurses.

**Conflict of Interest:** None

**Funding:** None

**Exhibitor Consent:** Received

**Author contributions** Study design: ME, Data collection: AK, ME, Literature search: ME, Drafting manuscript: ME, AK

**Acknowledgement:** The authors thank the nurses who participated in the study.

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