

Effects of the COVID-19 Pandemic on the Health of Nursing Staff: Qualitative Research

Ana Luiza Ferreira Aydogdu¹

¹ Istanbul Health and Technology University, Faculty of Health Sciences, Department of Nursing, Istanbul, Turkey

ABSTRACT

Purpose: To explore the effects of the COVID-19 pandemic on the physical, psychological, social, and spiritual health of nursing team members and to identify the coping measures adopted by them.

Methods: This is a descriptive study with a qualitative approach. The study involved 42 Brazilian nursing professionals. Data were collected between June and July 2022 and analyzed through content analysis.

Results: Three themes identified: (I) Effects of the pandemic on the health of nursing professionals, (II) Major difficulties faced by nursing professionals during the pandemic, and (III) Protection measures adopted by nursing professionals during the pandemic. Also, eleven sub-themes emerged. Participants stated that the COVID-19 pandemic affected their physical, psychological/mental, social, and spiritual health. The lack of material and human resources, increased demand and professional devaluation, social distancing, facing death, insufficient information and the lack of social commitment were cited as the main problems faced by the participants. Nursing professionals resorted to different measures to protect their health.

Conclusion: The health of nursing professionals was significantly impacted during the COVID-19 pandemic. It was determined that nursing professionals and health institutions need to be better prepared to face crises. Continuing education should be developed to train nursing staff for future outbreaks better. Health administrators and nurse managers play key roles in safeguarding the physical and psychosocial health of nursing staff by ensuring adequate and high-quality personal protective equipment, offering occupational health training, and establishing psychosocial support programs.

Keywords: COVID-19, qualitative research, nurse administrators, nursing staff, occupational health, pandemics.

ÖZET

Amaç: Araştırmanın amaçları, COVID-19 pandemisinin hemşirelik ekibi üyelerinin fiziksel, psikolojik, sosyal ve ruhsal sağlıkları üzerindeki etkilerini belirlemek ve benimsedikleri başa çıkma önlemlerini ortaya çıkarmaktır.

Yöntem: Bu, nitel bir yaklaşımla yapılan tanımlayıcı bir çalışmadır. Çalışma, 42 Brezilyalı hemşirelik profesyoneli içerir. Veriler Haziran-Temmuz 2022 tarihleri arasında toplanmış ve içerik analizi yöntemi kullanılarak analiz edilmiştir.

Bulgular: Üç tema ortaya çıktı: (I) Pandeminin hemşirelik profesyonellerinin sağlığı üzerindeki etkileri, (II) Pandemi sırasında hemşirelik profesyonellerinin karşılaştığı ana zorluklar ve (III) Pandemi sırasında hemşirelik profesyonelleri tarafından benimsenen başa çıkma yöntemleri. Ayrıca on bir alt tema belirlenmiştir. Katılımcılar, COVID-19 pandemisinin fiziksel, psikolojik/zihinsel, sosyal ve ruhsal sağlıklarını nasıl etkilediğini bildirdi. Donanım ve insan kaynağı eksikliği, artan talep ve profesyonel devalüasyon, sosyal mesafe, ölümlerle karşı karşıya kalma, yetersiz bilgi ve sosyal taahhüt eksikliği, katılımcıların karşılaştığı başlıca sorunlar olarak belirtilmiştir. Hemşirelik profesyonelleri sağlıklarını korumak için farklı yöntemlere başvurmuşlardır.

Sonuç: Hemşirelik profesyonellerinin sağlığı, COVID-19 salgını sırasında büyük ölçüde etkilenmiştir. Hemşirelik profesyonellerinin ve sağlık kurumlarının krizlere karşı daha hazırlıklı olmaları gerektiği belirlenmiştir. Hemşirelik profesyonelleri gelecekteki salgınlar için daha iyi yetiştirmek için sürekli eğitim geliştirilmelidir. Sağlık yöneticilerinin ve yönetici hemşirelerin, yeterli ve kaliteli kişisel koruyucu donanım sağlayarak, iş sağlığı konusunda eğitim vererek ve psikososyal destek programları geliştirerek hemşirelerin fiziksel ve psikososyal sağlığını korumada kilit rollere sahip oldukları unutulmamalıdır.

Anahtar Kelimeler: COVID-19, nitel araştırmalar, yönetici hemşireler, hemşirelik profesyonelleri, iş sağlığı, pandemi.

Ana Luiza Ferreira AYDOGDU
0000-0002-0411-0886

Correspondence: Ana Luiza Ferreira Aydogdu
Sütlüce Mah., İmrahor Cd. No: 82, 34275
Beyoğlu, İstanbul, Turkey
Phone: +90 535 637 07 03
E-mail: ana.luiza@istun.edu.tr

Received: 13.09.2023

Accepted: 26.09.2024

The routine of the world population changed at the end of December 2019 with the emergence of the Coronavirus of Severe Acute Respiratory Syndrome 2 (SARS-CoV-2) (1), popularly known simply as coronavirus. The Coronavirus Disease 2019 (COVID-19) became a pandemic a few months after its emergence (1), posing a threat not only to the health sector but also to the economy of several countries. It is a fact that the entire world was severely affected by the COVID-19 pandemic, but health professionals were, and continue to be, the most threatened by this disease (2), which even today, more than three years after its emergence, continues to cause the death of many people around the world (3).

Health professionals, especially nursing team members, continue to be affected by the pandemic in several dimensions. The fear of contracting the virus and contaminating others, the difficulty of carrying out their functions due to constantly using Personal Protective Equipment (PPE), or even the lack of them, the prejudice, ignorance, and violence of society accusing healthcare workers of spreading the virus, the feeling of powerlessness in the face of terminally ill patients, and the sadness when witnessing the death of co-workers are some of the challenges brought by COVID-19 to the daily lives of nursing professionals (4). In addition, the workload of nursing professionals has increased (2) due to a large number of infected patients and the lack of staff for various reasons such as sick leave, old age, or even death.

Brazil was one of the countries hardest affected by the COVID-19 pandemic. By August 2022, 34,096,935 cases of the disease and 680,786 deaths had been confirmed; thus, the country occupies the third position in the number of cases worldwide (3). Among Brazilian health professionals, nursing team members, such as technicians, assistants, and nurses, were respectively the most affected by the disease (5). Studies conducted in Brazil identified a very high number of health professionals infected with SARS-CoV-2 when compared to surveys conducted in other countries (6).

Even in non-pandemic periods, the work environment of nursing staff presents several risk factors for workers' health (2), as it is a favorable place for the development of infections, stress, anxiety, and depression, among others. Thus, the health of nursing professionals, which is routinely under threat, was even more affected by the chaotic scenario of the pandemic. The physical health of nursing professionals was affected by the presence of the virus, the use of PPE (7) and also the lack of such equipment

(8), and the violence of society (9). Psychological health was threatened by fear, anxiety, and stress, which in some cases triggered diseases such as depression and burnout (2,7,8). Social health was threatened by the economic crisis (2), discrimination (9), and social distancing (2). In addition, spiritual health was also affected by the uncertainties and fears surrounding the pandemic period (10). It is essential to highlight that to provide quality care to individuals and the community, nursing professionals must be healthy.

Nursing professionals have resorted to various measures to alleviate the problems brought about by the COVID-19 pandemic, such as support from family members and colleagues (11), in-service training, counseling programs (12), research on the topic (11) and religious resilience (13). The pandemic came to show once again that nursing professionals must be prepared for emergencies and crises, which can arise at any time in the health area. Understanding the importance of the topic, the present study aimed to explore the effects of the COVID-19 pandemic on the physical, psychological, social, and spiritual health of nursing team members and to identify the coping measures adopted by them.

Materials and Methods

Design

This is a descriptive study with a qualitative approach. This type of design was chosen because it explores participants' perspectives, thus allowing detailed information about their experiences (14). The study was based on the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist (15).

Participants

The population under study consisted of nursing staff (nurse assistants, nursing technicians, and nurses) working in different regions of Brazil. Social media applications were used to send individual instant messages inviting individuals who identified themselves as nursing professionals in their profiles to participate in the study. The messages included general information about the study and the researcher, the Informed Consent Form (ICF), and the data collection tool. In order to reach more participants who met the study's inclusion criteria, the snowball technique was also used (14), so nursing professionals who agreed to participate in the study indicated other possible participants.

The study was developed through the written responses of 42 participants to questions related to their experiences during the COVID-19 pandemic. Members of the nursing team who had worked in Brazil for at least three years and who had signed the ICF, thus accepting participation in the study, were included. Nursing professionals not working in Brazil during the pandemic were not included.

Data Collection

The researcher is a female RN with a Ph.D. and works as an Assistant Professor. Her cultural background is similar to that of the participants of this study. The researcher took a course on qualitative research methods and has experience with qualitative studies.

Unlike most qualitative research in which data are collected through face-to-face interviews or focus groups, in this study, online Google Forms were used. The use of online and telephone approaches is becoming more common for the development of qualitative research, and Google Forms makes it possible to reach participants in different geographical regions easily and quickly (16), which was fundamental for the present study. Additionally, it facilitates the capture of spontaneous written responses, which are not influenced by the dynamics between the interviewer and interviewee. Data were collected between June and July 2022.

The data collection tool was composed of two parts; the first questions referred to the participants' sociodemographic characteristics, such as age, gender, marital status, position at work, working unit, and years of working experience, among others. The second part of the tool was composed of questions related to the COVID-19 pandemic, formulated based on the scanned literature (2,7,8,10). Examples of questions: (I) Have you been diagnosed with COVID-19? (II) Have you worked directly with COVID-19 patients? (III) What were the effects of the COVID-19 pandemic on your health? (IV) What are the most significant difficulties you face/faced during the COVID-19 pandemic? (V) What measures do you use/have used to protect your health (physical/mental/social/spiritual) during the COVID-19 pandemic? In addition, there was a space for a free comment on the subject at the end of the data collection tool.

The data collection instrument was pilot-tested with nursing professionals who evaluated the research instrument positively and did not give any suggestions for improvement in the format or wording; therefore,

no changes were made. The data obtained from these participants were not included in the study. These four participants were recruited through social media applications. The data collection tool was written in Portuguese. Upon reaching 40 participants, data saturation was achieved (14). However, two more participants were included in the study.

Data Analysis

Participants' sociodemographic characteristics were summarized (Table 1). The responses of the 42 participants were read repeatedly and content analysis was used to analyze the data (14). The researcher read several times, line by line, the responses of the participants to immerse herself fully in the data. The data were coded manually by identifying themes, main ideas, similarities, and differences. The identified themes and sub-themes have been checked many times by the researcher. The interpretation of the narratives was completed through deep reflections on the research purposes.

Rigor

Creditability, confirmability, dependability, and transferability were used to increase reliability and validity. A variety of participants was provided; detailed information about the researcher was given; the data collection tool was pilot-tested, and prolonged engagement with the data was ensured. An important point for the credibility of the study is that participants' responses were provided in writing. The narratives, coding, sub-themes, and themes were read and reread many times. A specific routine was followed for data collection, and reflexivity was maintained, thus avoiding opinions on the interpretation of data. In addition, purposive sampling was used, data saturation was reached, and comprehensive analysis was provided.

Results

Most participants (90.5%) were female; 40.5% of participants were between 46 to 55 years old; 40.5% had a postgraduate degree; 45.2% were married; 64.3% were nurses; 23.8% were working in emergency rooms and 30.9% of participants had between 21 and 25 years of work experience. The characteristics of the participants are presented in Table 1. Participants were from seven different states of Brazil.

Table 1: Characteristics of nurse participants

Variable		N	%
Gender	Female	38	90.5
	Male	4	9.5
Age	18-25	1	2.4
	26-35	3	7.1
	36-45	16	38.1
	46-55	17	40.5
	56-65	4	9.5
	66+	1	2.4
Marital Status	Divorced	5	12.0
	Married	19	45.2
	Separated	3	7.1
	Single	9	21.4
	Stable Union	6	14.3
Educational Level	High School	6	14.3
	Bachelor's Degree	13	30.9
	Postgraduate (Specialization)	17	40.5
	Master's Degree	6	14.3
Position at Work	Nursing Assistant	3	7.1
	Nursing Technician	12	28.6
	Nurse	27	64.3
Unity of Work	Central Sterilization Unit	2	4.8
	Diabetes Program	1	2.4
	Emergency Room	10	23.8
	Health Surveillance	1	2.4
	Home Care	1	2.4
	Intensive Care Unit	8	18.9
	Operation Room	2	4.8
	Outpatient	9	21.4
	Primary Health Care	2	4.8
Ward	6	14.3	
Work Experience	1-5 years	2	4.8
	6-10 years	2	4.8
	11-15 years	6	14.3
	16-20 years	9	21.4
	21-25 years	13	30.9
	26+	10	23.8

The first of the three themes that emerged is the effects of the pandemic on the health of nursing professionals. It was identified that the health of nursing professionals was affected in all its dimensions. Thus, this theme was divided into four sub-themes: "Effects on physical health", "Effects on psychological/mental health", "Effects on social health", and "Effects on spiritual health". Twenty-seven (64.3%) participants stated having been infected with COVID-19, and varied symptoms of the disease, such as headaches, muscle aches, and dizziness were reported by them. Participants also emphasized that even after a few months, they were unable to fully recover from the disease and still suffered from some symptoms, such as loss of smell. In the second sub-theme, the participants' narratives regarding the effects of the pandemic on psychological/mental health were presented. Fear and emotional exhaustion were the most common effects pointed out by the participants. In the third sub-theme, the effects of the pandemic on the social health of the participants were shown. It was reported that social isolation, one of the preventive measures adopted at

the beginning of the pandemic, in addition to affecting the emotional health of the participants, also changed their social lives. Finally, the effects of the pandemic on the spiritual health of the participants were presented. Nursing professionals emphasized the fact that social isolation kept people away from their religious rituals. On the other hand, many of the participants stated that the pandemic served to increase faith and in this way, the emergence of the coronavirus positively affected their spiritual health.

The second theme is about major difficulties faced by nursing professionals during the COVID-19 pandemic and was organized into five sub-themes: "The lack of material and human resources", "Increased demand and professional devaluation", "Social distancing", "Caring and facing death", and "Insufficient information and the lack of social commitment". Problems related to the insufficiency of PPE and medical materials, staff shortages, and the lack of training are among the difficulties cited by the participants. The shortage of health professionals trained to work during the pandemic was also a problem experienced by nursing professionals. Several participants mentioned the increase in demand, physical and emotional exhaustion, and the devaluation of the profession. The need for social distancing and the use of public transport were other barriers emphasized by nursing professionals. Thirty-four (81%) participants reported having had direct contact with COVID-19 patients. Being close to sick patients and family members and facing constant deaths were other difficulties reported by the participants. The existence of insufficient information in professional and social contexts, including a lack of social commitment towards preventive measures, was also stated by nursing professionals when they mentioned the difficulties faced during the COVID-19 pandemic.

The last theme refers to the measures that nursing professionals have adopted to solve the problems arising from the COVID-19 pandemic. This theme was organized into two sub-themes: "Protecting physical health" and "Protecting psychological/mental, social and spiritual health". Most of the measures cited by nursing professionals to protect their physical health involve using PPE, practicing hygiene care, and boosting the immune system. Additionally, according to their responses, they engaged in physical exercises, listened to music, maintained social connections, relied on faith, utilized the Internet for communication, underwent psychotherapy, and prioritized delivering quality care to the community to protect their psychological, mental, social, and spiritual health. The three identified themes, eleven sub-themes, and examples of participants' quotes are shown in Table 2.

Table 2: Themes, Sub-themes and Quotes

Themes	Sub-themes	Quotes
Effects of the pandemic on the health of nursing professionals	Effects on physical health	"I had mild symptoms such as headache, body aches, and low-grade fever." (Participant 7) "I lost my sense of smell. Until today, I don't smell things properly." (Participant 12) "I gained 20 kilos..." (Participant 40)
	Effects on psychological/mental health	"I had insomnia; fear of getting infected by the virus; I experienced paranoia and mental exhaustion!" (Participant 6) "The psychological effects of Covid were enormous. I was afraid of acquiring the disease and dying, of contaminating my family members, or that they would contaminate themselves. I lost some co-workers and personal friends due to Covid. Many things happened in a short period of time and I didn't have time to elaborate everything because I was focused on surviving." (Participant 21)
	Effects on social health	"I started to avoid going out anywhere and I isolated myself a lot." (Participant 17) "With the increased workload due to the pandemic, and also with the circulation of the virus, I don't go out much or visit friends and relatives. My social life has changed a lot." (Participant 39) "I'm afraid of socializing." (Participant 40)
	Effects on spiritual health	"I got attached to God much more than before." (Participant 3) "My faith has decreased a lot. After the pandemic, I stopped going to church." (Participant 39)
Major difficulties faced by nursing professionals during the pandemic	The lack of material and human resources	"The lack of PPE and medical equipment for ventilatory assistance in the hospital, such as Ambu and venturi mask and constant changes in treatments and protocols were big problems." (Participant 11) "I believe that the lack of structure and trained professionals were great difficulties." (Participant 41)
	Increased demand and professional devaluation	"I think we should show more the value of the work of nursing professionals. One of the categories that didn't stop for a single minute on their strenuous journeys! (...) We are underutilized "heroes"! That's sad!" (Participant 34) "The work overload and the lack of appreciation... The pandemic greatly increased demand; on the other hand, there was no change in salary, nor increased benefits." (Participant 39)
	Social distancing	"Not being together with the people I love was very hard." (Participant 1) "I had a lot of difficulties while going to work due to the reduced in the amount of public transport." (Participant 5)
	Caring and facing death	"Seeing intubated patients awake and tied up because of the lack of sedatives are scenes that still torment me." (Participant 8) "Taking care of my father hospitalized in the ward for Covid was very traumatic." (Participant 35)
	Insufficient information and the lack of social commitment	"Patients were not committed to prevention." (Participant 27) "Disinformation from everyone, including both professional and social contexts, was a big problem." (Participant 42)
Protection measures adopted by nursing professionals during the pandemic	Protecting physical health	"I resorted to immunity boosting with vitamins." (Participant 10) "I protected myself using masks, coveralls and protective aprons, gloves, face shield." (Participant 21)
	Protecting psychological/mental, social and spiritual health	"Having faith in the mission I was carrying out as a nurse was important." (Participant 10) "Talking to God and praying several times a day. Asking for the pandemic to end as soon as possible... Watching movies and listening to music helped me." (Participant 32)

Discussion

Nursing staff participating in this study reported that the COVID-19 pandemic affected their health in several dimensions; thus, effects on physical, psychological/mental, social, and spiritual health were identified. The lack of material and human resources, increased demand and professional devaluation, social distancing, facing death, insufficient information and the lack of social commitment were cited as the main problems faced by the participants. Nursing staff resorted to different measures to protect their health in all dimensions.

Participants cited symptoms of COVID-19, such as headaches, muscle aches, and memory and sensory losses. The scientific literature states that the most common symptoms of COVID-19 are fever, dyspnea, and cough; however, infected individuals may present a variety of other signs and symptoms, including loss of smell, headache, and muscle pain (17). Although some participants reported tiredness due to increased workload, others related that their physical health was affected due to the sedentary lifestyle imposed by social isolation, which led to weight gain. The results of the present study align with those of previous studies, in which fatigue and discomfort due to increased workload and the constant use of PPE (8) and gain or loss of weight (18) were identified as effects of COVID-19 on the physical health of nurses.

Concerning psychological/mental health, the participants listed several symptoms and diseases that emerged due to the COVID-19 pandemic, such as fear, sadness, anxiety, panic attacks, and depression. Studies showed that in previous outbreaks such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS); anxiety, fear, insomnia, stress, and burnout were triggered in nurses who worked on the front lines (19,20). Regarding the COVID-19 pandemic specifically, the results of research carried out in different countries align with those found in this study. A survey conducted in China showed that nurses had high rates of anxiety, fear, depression and burnout in the first periods of the pandemic (7). Stress, fear, anxiety, and depression were identified in Turkish nurses during the COVID-19 pandemic (18). An interesting fact was also seen in a study carried out with Chinese nurses, in which a relationship was identified between skin damage caused by the constant use of PPE and the emergence of problems related to mental health, such as anxiety, fear, burnout, and depression (7).

Participants reported social distancing as a major threat to social health. Previous studies have also pointed to the pandemic's risks to health professionals' social well-being. In a study conducted in the United Kingdom (UK), health and social care professionals working during the COVID-19 pandemic stated that their social health was impaired due to social distancing that took them away from loved ones (21). Social interactions are essential for individuals to feel healthy, but the advent of the pandemic harmed humanity's social health. Even after the relaxation of protective measures such as social isolation, some people still have difficulties in socializing, alleging the emergence of agoraphobia, that is, the fear of being in open and crowded places (22), as pointed out by some participants in this study.

The spiritual health of the nursing staff participating in the present study was also affected. Still, unlike the other dimensions of health, it was identified that the pandemic caused both negative and positive effects on the spiritual health of nursing professionals. While some participants reported a decrease in faith, others stated that the pandemic period was a time of spiritual strengthening. Similarly, a study carried out with advanced clinical practitioners identified that the COVID-19 pandemic has impacted their spiritual well-being. Participants in the study exhibited low levels of spiritual well-being, and those with higher levels reported greater resilience (23). A study conducted in Saudi Arabia pointed to the importance of spiritual well-being for nurses facing the challenges of the pandemic (10).

Nursing professionals reported facing many barriers during the COVID-19 pandemic due to a lack of material and human resources. Similar results were identified in several studies carried out in different countries (8,12). The death of patients and loved ones, the existence of insufficient information, and the lack of social commitment were also cited by participants as the main problems encountered during the pandemic. These results are in line with several other international research findings. A study conducted in Iran identified that observing the health state of patients was a factor that negatively affected nurses' mental health (24). Nurse participants in a study conducted in Canada reported psychological distress due to constant policy changes and different information about the disease and protective measures (25). Problems due to the need for more sharing important information about COVID-19 with frontline nurses were also identified (12). Health and social care professionals working during the COVID-19 pandemic in the UK expressed their frustration due to members of the public not following social distancing and other guidelines (21).

Participants in this study pointed out that the lack of professional appreciation was also a problem faced during the pandemic; these findings align with a study carried out with nurses during the MERS epidemic in which participants reported feeling devalued as professionals (19). Participants also stated a need for governmental and institutional support. The importance of support from health institutions' administrators was pointed out in previous studies carried out with nurses during the COVID-19 pandemic (2,11,18).

Given so many problems and barriers, nursing professionals have adopted diversified measures to protect the different dimensions of health. These results are in accordance with previous studies carried out during the COVID-19 pandemic in which the use of PPE and hygiene care were reported as the main protective measures adopted by nurses (26,27). In many studies, qualified and sufficient PPE provision was shown as a measure that should alleviate nurses' psychological pressure (28,29).

Doing physical exercises, listening to music, watching movies, talking to friends, having faith in God, maintaining communication through the Internet, avoiding news about the pandemic, undergoing psychotherapy, and focusing on their mission as nursing professionals were measures reported by the participants to protect their psychological/mental, social, and spiritual health. These results are in line with those of previous studies conducted in different countries. Avoiding news about COVID-19 seems to have been an important measure, as nurse participants in a survey by Coffré and Aguirre (26) reported stress due to different news from social media. However, the most common and effective measure taken by nurses to protect psychosocial health during the COVID-19 pandemic was communication with family and colleagues. Regular rest and exercises were also strategies adopted by Chinese nurses (11). In another study conducted in China, nurses shared their sense of duty as healthcare providers, highlighting that witnessing patients' improvements was a source of resilience (30). Some studies also emphasized the importance of providing spiritual support for nurses during the COVID-19 pandemic (18,24). In addition, focusing on delivering the best possible care to the community during the pandemic was another important resilience strategy adopted by nurses (30). Nursing staff implemented several strategies to face the challenges arising from the COVID-19 pandemic. It is essential to note that nursing professionals need to feel healthy so that they can provide quality care. The support from

health administrators and nurse managers is crucial in this process.

Limitations

In-depth analysis of participants' experiences was hindered because the data were collected through online self-report instruments. The lack of variety in terms of participants' gender can also be pointed out as a limitation of the study since most of the interviewees were female. Another limitation of the study is that only seven states of Brazil were represented. In addition, the data were analyzed by only one researcher, and although she has experience in qualitative research, this can be considered a weakness of this study.

Implications for Nursing Management

The results of this study, along with other research, show that the health of nursing professionals is significantly impacted during outbreaks. Nursing management must prioritize better preparation for crises through comprehensive planning and resource allocation. Continuing education and psychosocial support programs should be developed to protect nursing professionals' physical and psychosocial health. By focusing on these areas, nursing management can enhance the resilience and readiness of nursing professionals, ultimately leading to improved patient care during crises.

Conclusion

This study sought to explore the effects of the COVID-19 pandemic on the physical, psychological, social, and spiritual health of nursing team members and to identify the coping measures adopted by them. It was identified that the health of nursing professionals was negatively affected in all dimensions, but the COVID-19 pandemic also represented a spiritual strengthening. Several difficulties experienced during the COVID-19 pandemic were highlighted by nursing professionals, including the lack of material and human resources, as well as social distancing, which kept them away from loved ones. Participants utilized PPE, practiced hygiene, and bolstered their immune systems to protect their physical health. They safeguarded their psychosocial and spiritual well-being through sports, reading, socializing with friends, strengthening their faith, undergoing psychotherapy, and maintaining a focus on delivering quality care to the community.

Declarations

Conflicts of Interest

The author declares that there is no conflict of interest.

Availability of Data

Available upon request.

Funding

This study received no specific grant from any funding agency in the public commercial, or not-for-profit sector.

Ethics Approval

Ethical approval was obtained from the Research Ethics Committee of the Anna Nery School of Nursing – São Francisco de Assis School Hospital of the Federal University of Rio de Janeiro through the Brazil Platform (approval date: June 22, 2022; decision number: 5.481.843). The ethical principles for medical research on human subjects established by the Declaration of Helsinki were followed.

REFERENCES

- World Health Organization (WHO). Timeline: WHO's COVID-19 response [Internet]. Who.int. [Updated: 2020; Cited 2022 Aug 26]. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline>
- Sampaio ABO, Cirqueira AP, Brito FSL, Siqueira SMC. Burnout entre profissionais de enfermagem em época de coronavírus: o que dizem as evidências científicas? In: Siqueira SMC, editor. COVID-19: O trabalho dos profissionais da saúde em tempos de pandemia. São Paulo: Editora Científica Digital, 2021, p. 64–75. Portuguese.
- World Health Organization (WHO). WHO Coronavirus (COVID-19) dashboard [Internet]. Who.int. [Updated: 14 Aug 2022; Cited 2022 Aug 26]. Available from: <https://covid19.who.int/>
- Al Thobaity A, Alshammari F. Nurses on the frontline against the COVID-19 pandemic: An integrative review. *Dubai Med J.* 2020; 3(3):87–92. DOI: 10.1159/000509361
- Brazil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Boletim Epidemiológico Especial. Doença pelo novo Coronavírus COVID-19. Brasília: Ministério da Saúde; 2020. n. 21, p. 1–59.
- Helioterio MC, Lopes FQR de S, Sousa CC de, Souza F de O, Pinho P de S, Sousa FN e. F de, et al. COVID-19: Por que a proteção de trabalhadores e trabalhadoras da saúde é prioritária no combate à pandemia? COVID-19: why the protection of health workers is a priority in the fight against the pandemic? *Trab Educ Saúde.* 2020; 18(3). DOI: 10.1590/1981-7746-sol00289
- Hu D, Kong Y, Li W, Han Q, Zhang X, Zhu LX, et al. Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: A large-scale cross-sectional study. *EclinicalMedicine.* 2020; 24(100424):100424. DOI: 10.1016/j.eclinm.2020.100424
- Sun N, Wei L, Shi S, Jiao D, Song R, Ma L, et al. A qualitative study on the psychological experience of caregivers of COVID-19 patients. *Am J Infect Control.* 2020; 48(6):592–8. DOI: 10.1016/j.ajic.2020.03.018
- Aydogdu ALF. Violência e discriminação contra profissionais de saúde em tempos de novo coronavírus/Violence and discrimination against healthcare workers in times of new coronavirus. *J Nurs Health.* 2020; 10(4).
- Alquwez N, Cruz JP, Balay-Odao EM. Nurses' spiritual well-being and the COVID-19 pandemic: A thematic approach. *J Nurs Manag.* 2022; 30(3):604–11. DOI: 10.1111/jonm.13540
- Chen H, Sun L, Du Z, Zhao L, Wang L. A cross-sectional study of mental health status and self-psychological adjustment in nurses who supported Wuhan for fighting against the COVID-19. *J Clin Nurs.* 2020; 29(21–22):4161–70. DOI: 10.1111/jocn.15444
- Muz G, Erdogan Yüce G. Experiences of nurses caring for patients with COVID-19 in Turkey: A phenomenological enquiry. *J Nurs Manag.* 2021; 29(5):1026–35. DOI: 10.1111/jonm.13240
- Deldar K, Froutan R, Ebadi A. Nurse managers' perceptions and experiences during the COVID-19 crisis: A qualitative study. *Iran J Nurs Midwifery Res.* 2021; 26(3):238–44. DOI: 10.4103/ijnmr.IJNMR_285_20
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care.* 2007; 19(6):349–57. DOI: 10.1093/intqhc/mzm042
- Erdogan S, Nitel Arastirmalar. In Erdogan S, Nahcivan N, Esin MN, editors, *Hemsirelikte Arastirma*. Istanbul: Nobel; 2014. p. 131–165.
- Mota JS. Utilização do Google Forms na pesquisa acadêmica [Use of Google Forms in academic research]. *Revista Humanidades e Inovação.* 2019; 6(12):371–380.
- Iser BPM, Sliva I, Raymundo VT, Poletto MB, Schuelter-Trevisol F, Bobinski F. Definição de caso suspeito da COVID-19: uma revisão narrativa dos sinais e sintomas mais frequentes entre os casos confirmados [Suspected COVID-19 case definition: a narrative review of the most frequent signs and symptoms among confirmed cases]. *Epidemiol Serv Saude.* 2020; 29(3).
- Bahadır-Yilmaz E, Yüksel A. State anxiety levels of nurses providing care to patients with COVID-19 in Turkey. *Perspect Psychiatr Care.* 2021; 57(3):1088–94. DOI: 10.1111/ppc.12661
- Park J-S, Lee E-H, Park N-R, Choi YH. Mental health of nurses working at a government-designated hospital during a MERS-CoV outbreak: A cross-sectional study. *Arch Psychiatr Nurs.* 2018; 32(1):2–6. DOI: 10.1016/j.apnu.2017.09.006
- Su T-P, Lien T-C, Yang C-Y, Su YL, Wang J-H, Tsai S-L, et al. Prevalence of psychiatric morbidity and psychological adaptation of the nurses in a structured SARS caring unit during outbreak: a prospective and periodic assessment study in Taiwan. *J Psychiatr Res.* 2007; 41(1–2):119–30. DOI: 10.1016/j.jpsychires.2005.12.006
- Aughterson H, McKinlay AR, Fancourt D, Burton A. Psychosocial impact on frontline health and social care professionals in the UK during the COVID-19 pandemic: A qualitative interview study. *BMJ Open.* 2021; 11(2):e047353. DOI: 10.1136/bmjopen-2020-047353
- Regalado-Chamorro M, Medina-Gamero A, Rosario-Pacahuala E. Agoraphobia in times of confinement: Fear of losing control? *Aten Primaria.* 2021; 53(9):102150. DOI: 10.1016/j.aprim.2021.102150
- Rogers M, Windle A, Wu L, Taylor V, Bale C. Emotional well-being, spiritual well-being and resilience of advanced clinical practitioners in the United Kingdom during COVID-19: an exploratory mixed method study. *J Nurs Manag.* 2022; 30(4):883–91. DOI: 10.1111/jonm.13577
- Galehdar N, Toulabi T, Kamran A, Heydari H. Exploring nurses' perception of taking care of patients with coronavirus disease (COVID-19): A qualitative study. *Nurs Open.* 2021; 8(1):171–9. DOI: 10.1002/nop.2616

25. Crowe S, Howard AF, Vanderspank-Wright B, Gillis P, McLeod F, Penner C, et al. The effect of COVID-19 pandemic on the mental health of Canadian critical care nurses providing patient care during the early phase pandemic: A mixed method study. *Intensive Crit Care Nurs.* 2021; 63(102999):102999. DOI: 10.1016/j.iccn.2020.102999
26. Coffré FJA, Aguirre, PAL. Feelings, stress, and adaptation strategies of nurses against COVID-19 in Guayaquil. *Invest Educ Enferm.* 2020; 38(3). DOI: 10.17533/udea.iee.v38n3e07
27. Zhang Y, Wei L, Li H, Pan Y, Wang J, Li Q, et al. The psychological change process of frontline nurses caring for patients with COVID-19 during its outbreak. *Issues Ment Health Nurs.* 2020; 41(6):525–30. DOI: 10.1080/01612840.2020.1752865
28. Arnetz JE, Goetz CM, Arnetz BB, Arble E. Nurse reports of stressful situations during the COVID-19 pandemic: Qualitative analysis of survey responses. *Int J Environ Res Public Health.* 2020; 17(21):8126. DOI: 10.3390/ijerph17218126
29. Labrague LJ, De Los Santos JAA. COVID-19 anxiety among front-line nurses: Predictive role of organisational support, personal resilience and social support. *J Nurs Manag.* 2020; 28(7):1653–61. DOI: 10.1111/jonm.13121
30. Liu Y-E, Zhai Z-C, Han Y-H, Liu Y-L, Liu F-P, Hu D-Y. Experiences of front-line nurses combating coronavirus disease-2019 in China: A qualitative analysis. *Public Health Nurs.* 2020; 37(5):757–63. DOI: 10.1111/phn.12768