



Phenomenological Study of the Psychological Condition of Nurses in COVID-19 Pandemic

Sri Eka Wahyuni^{1,2(✉)}, Budi Anna Keliat², and Junaiti Sahar²

¹ Faculty of Nursing, Universitas Sumatera Utara, 3 Prof T Ma'as, Medan, Indonesia
eka_rizky06@yahoo.co.id

² Faculty of Nursing, Universitas Indonesia, Prof Dr Bahder Djohan, Depok,
West Java, Indonesia

Abstract. Purpose

The study explores the psychological conditions of COVID-19 nurses at the Medan City Hospital.

Method

Research design was descriptive phenomenological qualitative. The purposive sampling method was used to obtain data from 10 participants through in-depth interviews. A tape recorder and a camera were used to record the interview process.

Results

The participants 8 female and 2 male, Nears and attended emergency training. The results identified seven themes, namely external and internal stressors experienced by nurses due to the pandemic, internal and external problems, strategies to deal with stressors, as well as physical and psychological support expected by nurses.

Conclusion

The result of this study can be used as primary data for further studies and help develop therapeutic models to overcome the psychosocial conditions of nurses during the COVID-19 pandemic. The results also can guide the government and hospitals in setting policies regarding the importance of overcoming the problems and forms of psychological support needed by nurses during the COVID-19 pandemic.

Keywords: nurse · COVID-19 · psychological

1 Introduction

Coronavirus Disease 2019 (COVID-19) is an infectious disorder caused by the SARS-COV-2 virus, which attacks the respiratory system [1]. Furthermore, it is a non-natural disaster that has a multidimensional impact on people's lives, with increased responsibilities assigned to nurses as the frontline health service workers [2]. Many nurses experienced psychological disorders, helplessness, depression, and anxiety during the pandemic [3]. A large percentage of nurses also experience fear and suffer from the pandemic [4], hence they need various interventions and mental health support to prevent,

improve and overcome psychological conditions. Furthermore, the government's inability to address the psychological conditions will lead to decreased work productivity of nurses, reduced satisfaction and quality of care, high turnover, the occurrence of medical and decision-making errors, substance abuse, depression, and suicide [4, 5].

The psychological condition of nurses is closely related to the stressors experienced due to the pandemic, such as discomfort due to prolonged working hours and the use of masks and Personal Protective Equipment (PPE) [6, 7]. Furthermore, nurses stand a higher rate of contracting and transmitting the virus to other people and family members [3, 4, 6]. Isolation and quarantine prevent them from meeting their families [4], leading to increased conflicts and responsibility [3]. The increase in mortality rate due to the virus, and the pains experienced by positively infected persons, raises a feeling of burden and uneasiness [4]. Lack of support, such as uncertain policies and care, shortage of staff, and PPE are some of the causes of stressors among nurses [4, 7, 8]. They also feel neglected by family, friends, and society, who perceive that they can transmit the disease easily [7]. In conclusion, the stressors experienced by nurses are changes in work patterns, increased infectious levels of the virus, in-house conflicts, difficulties in caring for COVID-19 patients, isolation, neglect or rejection by society, and lack of support.

It is essential to explore the psychological condition of nurses during the pandemic because they are the main health care team that assists clients 24 h a day. Nurses must be able to cope with and adapt to stressors caused by the virus to be able to help clients and themselves. Most studies conducted in Indonesia and Medan have not identified the psychological conditions, stressors, and interventions carried out by nurses as frontline workers during the pandemic. Therefore, this study explores the psychological conditions of COVID-19 nurses at a Hospital in Medan, Indonesia.

2 Method

This descriptive phenomenological qualitative research described and explained the phenomena related to the psychological condition of frontline nurses [9]. It was carried out using ten frontline nurses with the criteria of being able to speak and understand Indonesian, providing informed consent, having a minimum education of Diploma in Nursing, and having treated COVID-19 clients for at least six months. Sampling was carried out until it reached data saturation then a purposive sampling technique was used to select the participants. The purposive sampling method is selected based on research objectives using interview guides and field notes [10]. A tape recorder and a camera were used to record the interview process with assistive devices to obtain participants' consent. The study was conducted at one of the hospitals in Medan, used to treat COVID-19 patients, which had an adequate number of frontline nurses in April 2022. The data collection procedure was carried out through two stages, preparation and implementation. At the preparation stage, permission was obtained from the USU Faculty of Nursing Ethics Commission. While at the implementation stage, it was prepared through in-depth interviews conducted in a quiet room. At the time of the interview, only researchers and participants were present, and they sat opposite each other to allow eye contact.

Interrogative situations were avoided to enable the participants to answer the questions properly and openly. Interviews were conducted according to the agreement with

the participants and took 30 to 60 min using a tape recorder and a camera. Field notes were used to record nonverbal communication that supports or contradicts the participant's verbal communication and environmental conditions. Interviews were recorded by first asking participants' permission, and after the process, the results were presented on transcripts for validation and clarification.

All participant statements were read to obtain feelings, review and extract essential statements, and formulate meaning into cluster themes. The cluster was referred back to the states for validation to determine the differences to avoid incompatible themes. A description of the phenomenon under study was formulated as a firm statement to identify the results needed by participants as a validation step [11]. The data used in this study were validated to determine their credibility, transferability, dependability, and confirmability [12, 13].

3 Results

3.1 Characteristics of Participants

The participants in this study were ten frontline nurses who worked at the Hospital in Medan during the pandemic. Total number of participant, eight were female and two male, Ners and attended emergency training.

3.2 Results of Thematic Analysis

The results showed 7 themes, 30 sub-themes, and 55 categories.

3.2.1 Stressors Facing COVID-19 Nurses

One specific goal was answered from two themes; external and internal stressors experienced by the frontline nurses.

Theme 1. External Stressors Experienced by COVID-19 Nurses

The theme of external stressors experienced by nurses consists of two sub-themes, namely, the condition of the positive patient and the attitude of the patient's family. Likewise, the sub-theme of the client's condition is made up of two categories; the varied health conditions of the positive patients and their response to the virus. These can be seen in the following excerpts from participant interviews:

"... the category of patients is mild to moderate" (P1), "... mild is rare...." (P3) "...mild is present, moderate to severe is present" (P4). "Why is the result positive, the patients will accept the results" (P5) "Sometimes they are in denial and run away" (P5).

The family attitude sub-theme consists of two categories, namely the response when a COVID-19 patient dies and when diagnosed with the virus, as indicated in the following statements:

"The most difficult thing to do is if we tell a family that their loved one has died of the virus, they say it is impossible..." (P3). "Some families also blame the hospital for their loss...." (P5).

Theme 2. Internal Stressors Experienced by COVID-19 Nurses

The internal stressors experienced by frontline nurses consist of three sub-themes; lack of knowledge, new experiences, and fear. The sub-theme of inadequate knowledge consists of two categories; lack of information and misinformation. This is stated in the following statements:

“We have no guideline and explanation” (P3)”. Our knowledge about COVID at the beginning was minimal” (P2). “Even scary evaluations are explained” (P3).

New experiences in treating positive patients consist of two categories, namely new experiences and diseases with the following statements:

“This is the first time treating a COVID patient” (P3). “It is a new disease” (P5).

Fear in oneself is in three categories; the infectious virus, being alone at work, and fear of being infected and infecting others, as in the following:

“We can get the virus at any time” (P5). “.. Enter individually”.(P5) “..fear of being infected” (P4). “Comorbidities can make it worse, hence I’m afraid of contacting it when I return home” (P3). “I had a certain level of fear; in the beginning, ma’am...PPE is a bit exposed, what is high risk”(P4). “COVID-19 cannot be controlled” (P6, P7, P8, P9, P10).

3.2.2 Barriers Experienced by COVID-19 Nurses

The second particular objective related to the obstacles experienced by frontline nurses is external and internal factors.

Theme 3. External Problems Felt by COVID-19 Nurses

The themes of external problems felt by COVID-19 nurses were identified from 11 sub-themes, namely the use of Personal Protective Equipment (PPE), hospitals, changes in work carried out by human resources, facilities and infrastructure, collaboration with other health teams, internal conflicts, public stigma, self-stigma and lack of social support. The first sub-theme is PPE categorized into three, namely the nurse’s response to using PPE, the limitations, and time taken to wear it, as stated in the following excerpts:

“It is not comfortable when using PPE...” (P1, P2). “...gasp from running out of oxygen. (P1, P4, P5). “Our PPE is limited” (P3, P5)”. “.. it takes at least 15 min to wear” (P1).

The second sub-theme is hospitals and external parties with three categories; policies, finance, social media, and pressure from outside parties, as depicted in the following:

“The hospital management is less supportive with complicated regulations” (P4). “The allowance is not comparable to what was given to the other room (P5). There are lots of pressures (P2). “The social media consists of numerous news regarding the pandemic (P6, P7, P8, P9, P10).

The third sub-theme is the change in work consisting of three categories, namely working hours, patterns, and changing workloads during the pandemic.

“2 weeks each allocated to work and vacation, alternately for isolation” (P4, P2). “Working hours are not like normal nurse routines...” (P3). “.1 person enters the patient’s room to determine the lacking tools before giving medicine at 9 o’clock, two more people are in charge of status files, and one person stays outside...” (P3). “The workload is too heavy...” (P3).

The fourth sub-theme is the problem of human resources consisting of one category, namely the shortage of nurses with the following statements:

“There are no human resources, and the most difficult is due to shortages” (P3, P6, P7, P8, P9, P10).

The fifth sub-theme is the lack of hospital facilities and infrastructure, as stated in the following statement:

“The use of CCTV to visualize the patient’s condition is ineffective” (P2). “Pharmacy and treatment rooms are on different floors” (P1). “Facilities do not exist, and those available are limited” (P3).

The sixth sub-theme is the problem of collaboration with other health teams, as stated in the following excerpts:

“. The doctor also took a long time to pick up the phone, he couldn’t standby immediately..” (P1). “Even doctors rarely come in” (P4). “The patient asks after the doctor (P2).

The seventh sub-theme, namely communication problems, is a communication problem with patients and families, as illustrated in the following statements:

“Communication with the patient’s family and the patient is a bit complicated” (P2). “Such an obstacle makes the patient angry...” (P4).

The eighth sub-theme, namely internal conflict, is the feeling of being forced to become a COVID-19 nurse with the following statement:

“Forcibly selected” (P4). “..appointed..”(P2).

The ninth sub-theme, namely public stigma, feels shunned, as indicated in the following statement:

“.. Like being exiled..” (P2). “Friends who were originally close are now distant (P4). “avoid us..fear of contamination too” (P5).

The tenth sub-theme is that self-stigma can infect others, as indicated in the following excerpts:

“Afraid of going home to avoid contracting the virus” (P3). “..you mingle with others suddenly you will be called a carrier spreader” (P5). “Those who are afraid of infecting them...” (P4).

The eleventh sub-theme is lack of social support with two categories, namely the support of peers and family with the following statements:

“Support from the people around is less than those from our peers too” (P2). “Not telling family because of negative comments” (P2).

Theme 4. Internal Problems Felt by COVID-19 Nurses

The themes of internal problems handled by COVID-19 nurses were identified from three sub-themes, namely physical problems, positive and psychological responses.

The sub-theme of physical problems consists of two categories, namely lack of sleep, and other physical issues, as stated in the following excerpts:

“... lack of sleep” (P2). “We both trembled to enter the room”(P2).

Positive response sub-themes with four categories, namely feeling happy, valuable, compact, and sincere, as in the following statements:

“It is good to be very careful during family visiting hours because they are not bothered” (P1). “The patients are like family to us, and we show each other respect”

(P4). *“It feels like sharing”* (P5). *“Entering the COVID room feels like a long time, to be sincere”* (P4).

Psychological response sub-themes with eight categories, namely feelings of anxiety, confusion, fear, sadness, depression, confusion, anger, and withdrawal, in accordance with the following excerpts:

“..worried..” (P5, P2, P1, P3). *“anxious”* (P6, P7, P8, P9, P10). *“Confused”* (P2). *“Afraid.”* (P4, P5, P1, P3, P2). *“It’s sad because every day some patients die”* (P3, P4). *“I felt the pressure before entering the room”* (P4). *“I am angry because human resources are lacking, patient rooms are increasingly being expanded to accommodate 40 beds, there are no special ICUs for COVID”* (P5, P3). *“It is also difficult to mingle with others...”* (P5).

3.2.3 Efforts Made by COVID-19 Nurses

The third specific goal related to the efforts made by COVID-19 nurses comprises one theme, namely ways to deal with stressors.

Theme 5. How to Deal with Stressors

Theme 5 consists of four sub-themes; conducting spiritual, physical, psychological, and social activities. The sub-theme of spiritual activities consists of one category, namely religion, with the following statements:

“Read the al-Fatihah, the verse containing the chair” (P1). *“We pray to be healthy to assist the patients.”* (P2, P5).

The sub-theme of physical activity consists of two categories, prevention, and activities to increase immunity, as stated in the following statements:

“Do it for patient safety” (P1). *“I took a bath at the hospital and arrived at the bathhouse”* (P5). *“Eat vitamins”* (P3). *“Take breaks”* (P2).

The sub-theme of psychological activities consists of one category, namely the act of managing emotions, as stated in the following statements:

“.. Calm down like 15 min in bed, play with your cellphone for a while” (P2). *“It does not matter. It’s a piece of cake, right?”* (P5). *“Think positive.”* (P1). *“Try to be strong, and accept other people’s abilities”* (P3). *“.. Just ignore it”* (P4).

The sub-theme of social activities consists of one category, namely seeking help from others with the following statements:

“Just sharing with friends” (P3, P2). *“It was Karu who tried to ask for help in the room.”* (P3). *Communication and mutual reinforcement among team members* (P6, P7, P8, P9, P10).

3.2.4 The Support that COVID-19 Nurses Expect

The fourth special goal obtained two themes, namely physical and psychological support.

Theme 6. Physical Support

The theme of physical support consists of four sub-themes, namely facilities and infrastructure, increasing immunity, hospital management, and raising the nurses’ capacities.

The sub-theme of facilities and infrastructure consists of one category, namely repair of buildings and hospital facilities with the following statement:

"I wish there were a special building for isolating rooms equipped with supporting examinations" (P1) "...there is a rest room" (P1). "... then the place is too messy to live..." (P2).

The sub-theme of increasing immunity consists of two categories, namely the fulfilment of nutrition and vitamins with the following statements:

"...puddings, what vitamins?" (P2, P3), "nutrition to increase endurance" (P1).

Hospital management sub-themes consist of one category, namely improvement of hospital policies, as stated in the following excerpts:

"...there is a doctor on duty who can determine therapy. ("P1)." ..HR. "P3)." The decree is proof that we have treated COVID patients" (P5).

The sub-theme of increasing the capacity of nurses consists of one category; the knowledge/skills of nurses. This is in accordance with the following statements:

"Update knowledge.. Maybe there is training given to nurses" (P1).

Theme 7. Psychological Support

There are three sub-themes of psychology; support system, financial support, and stress management. The support system sub-theme consists of one category, including support from the surrounding environment, as stated in the following statements:

"Nurses pay more attention" (P2). "Just appreciate it, you don't have to put them down.. at least give minimum appreciation" (P4). "Please don't give spirit." (P5).

The financial support sub-theme consists of one category, namely material, which is in accordance with the following statements:

"For COVID nurses, ma'am, the first ee is the exact material" (P2). "Material support can later be used for vitamin fulfillment needs" (P3).

The stress management sub-theme consists of one category, namely refreshing, as stated in the following statements:

"Recreational cake is needed as a form of healing" (P3, P1, P5).

4 Discussion

The results showed that nurses experienced external and internal stressors during the pandemic. Stressors (stimuli) are generated from the process of human interaction with their environment [14, 26]. Nurses, as the frontline workers of health services, provide direct nurses caring for COVID-19 patients hospitalized with various health conditions, such as comorbid diseases and shortness of breath [15]. The health conditions of positive patients are classified into asymptomatic, mild, moderate, severe, and critical symptoms [16]. Mild symptoms are experienced if the patient shows only minimal respiratory tract infection symptoms. Moderate symptoms are associated with milder and less severe symptoms of pneumonia. Severe symptoms are clients with clinical signs of pneumonia, such as fever, cough, shortness of breath, and rapid breathing. This is in addition to one respiratory rate >30 x/minute, distress, and oxygenation status $<93\%$ in the room. Critical symptoms are patients with Acute Respiratory Distress Syndrome (ARDS), sepsis, and septic shock [1]. Based on the above, it can be concluded that the more

severe the symptoms experienced, the greater the client is required to be intensively monitored by nurses.

The external stressor nurses is responsible for COVID-19 patient in dealing with the disease and the patient's family attitude. The results showed that the client felt alone without family for mental and emotional support. Most clients look depressed and scared [17]. The COVID-19 pandemic makes people to experience a process of grieving due to a lack of social, cultural, and religious support [18]. In line with the above, the study shows that all positive patients experience fear, denial, and stigma at the beginning of being diagnosed with the disease [19]. The response of COVID-19 patients in dealing with the process of grieving and loss as well as their family's attitude, is a stressor for frontline nurses. The results showed that the families of positive patients experienced anxiety, fear, and worry that their relatives might die, be lonely, and be restricted from visitations [20]. Furthermore, the above conditions indicate that family attitudes, such as anger and blaming nurses, can be difficult.

Internal stressors nurses face a lack of knowledge and experience in caring for infected patients for fear of being infected. Lack of skills and experience are stressors [21, 22]. Nurses are afraid of the increased risk of COVID-19, and the majority are scared of becoming potential carriers capable of transmitting the disease to family members [23]. Research shows that the stressor factors for nurses during the pandemic were due to a lack of information on the virus [8].

Nurses experienced obstacles when caring for COVID-19-infected patients both externally and internally. External problems are related to using Personal Protective Equipment (PPE), hospital policies, changes, human resources, facilities and infrastructure, collaboration with the team, internal conflict, public stigma, self-stigma, and lack of social support.

Nurses were not only worried about the lack of PPE but physical problems and obstacles such as the prolonged timeframe consumed by the process [2, 7]. The COVID-19 pandemic has also forced nurses to limit their social interactions with family and society. They feel isolated and discriminated against by society. Public stigma is carried out with actual actions, labelling nurses and families as dangerous people capable of transmitting the virus. Nurses accept rejection at home and work [19, 24], such as those in Japan [25]. Feelings of not being able to work, socialize with the community, worship in public places, not able to do activities with friends and family, and worrying about discrimination from the community are socio-cultural stressors for nurses [27]. Socio-cultural stressors also occur due to nurses' lack of social support [21].

Internal problems felt by COVID-19 nurses were identified from three sub-themes; physical, positive and psychological responses. They are required to be able to adapt, stay healthy both physically and psychologically and provide quality and optimal services to positively infected patients. Nurses experience physical and psychological burdens such as anxiety, burnout, post-traumatic stress disorder (PTSD), and depression due to stressors when caring for COVID-19 clients [23]. Nurses experienced anxiety, frustration, and fear [21, 28]. Preliminary studies in Wuhan reported that nurses experienced anxiety, stress, and difficulties during the pandemic, and a higher incidence occurred in the operating room [3, 4, 29, 30]. Furthermore, nurses also experienced a decrease in sleep quality [31], in addition to negative responses, from clients and families. The

results of this study are consistent with previous ones, stating that nurses feel like heroes because they can cooperate with clients [2, 32].

Frontline nurses have tried to overcome the psychological conditions experienced during the pandemic. Stressors can be overcome in four sub-themes; conducting spiritual, physical, psychological, and social activities. The results showed that nurses cope with various stressors by spending as much time outside the home as possible, many of which describe a deeper spiritual relationship with God, themselves, and others [2]. This is in accordance with the statement by participants that nurses deal with stressors by conducting religious activities such as praying and reading holy verses according to their religion and beliefs.

Nurses need to get physical and psychological support in dealing with their psychological conditions. Physical support consists of four sub-themes; improving facilities and infrastructure, increasing immunity, hospital management, and raising nurse capacity. Furthermore, nurses need physical and psychological support, such as training and increasing knowledge, learning, and strategies to care for COVID-19 patients [8, 23].

Three sub-themes identified the psychological support expected by COVID-19 nurses; the support system, financial support, and stress management. Adequate resources, welfare enhancement, incentives, counselling, environmental support, and managers are needed during the pandemic [8]. Social support is needed by nurses from family, managers in hospitals, and people in the surrounding environment [33].

5 Conclusions

In conclusion, nurses' internal and external stressors are divided into seven themes to determine the physical and psychological support expected by frontline nurses. The results can be a data source for further studies and are helpful in developing therapeutic models to overcome psychosocial problems experienced by frontline nurses. It is also a reference for the government and hospitals in setting a policy related to the efforts made by health workers, especially nurses, in dealing with psychosocial problems.

References

1. Minister of Health of the Republic of Indonesia. (2020). Minister of Health of the Republic of Indonesia Nomor HK.01.07/MenKes/413/2020 Tentang Pedoman Pencegahan dan Pengendalian Corona Virus Disease 2019 (COVID-19). *MenKes/413/2020*, 2019, 207.
2. Robinson, R., & Stinson, C. K. (2021). The Lived Experiences of Nurses Working During the COVID-19 Pandemic. *Dimensions of Critical Care Nursing : DCCN*, 40(3), 156–163. <https://doi.org/10.1097/DCC.0000000000000481>
3. Peng, X., Yang, Y., Gao, P., Ren, Y., Hu, D., & He, Q. (2021). Negative and positive psychological experience of frontline nurses in combatting COVID-19: A qualitative study. *Journal of Nursing Management*, September, 1–9. <https://doi.org/10.1111/jonm.13481>
4. Karimi., et al. (2020). The Lived Experience of Nurses Caring for Patients with COVID-19 in Iran: A Phenomenological Study. *Journal Risk Management and Healthcare Policy*, 51(5), 561–572. <https://doi.org/10.4040/jkan.21112>

5. Restauri, N., & Sheridan, A. D. (2020). Burnout and Posttraumatic Stress Disorder in the Coronavirus Disease 2019 (COVID-19) Pandemic: Intersection, Impact, and Interventions. *Journal of the American College of Radiology*, 17(7), 921–926. <https://doi.org/10.1016/j.jacr.2020.05.021>
6. Arnetz, J. E., Goetz, C. M., Arnetz, B. B., & Arble, E. (2020). Nurse reports of stressful situations during the COVID-19 pandemic: Qualitative analysis of survey responses. *International Journal of Environmental Research and Public Health*, 17(21), 1–12. <https://doi.org/10.3390/ijerph17218126>
7. Fahim Irandoost, S., Yoose Lebni, J., Khoram, F., Ahmadi, S., & Soozad, G. (2020). *Explaining the experiences, challenges and adaptation strategies of nurses in caring for patients with COVID-19: A qualitative study in Iran*. 1–25. <https://doi.org/10.21203/rs.3.rs-100575/v1>
8. Ghorbani, A., Shali, M., Matourypour, P., Salehi Morkani, E., Salehpoor Emran, M., & Nikbakht Nasrabadi, A. (2022). Explaining nurses' experience of stresses and coping mechanisms in coronavirus pandemic. *Nursing Forum*, 57(1), 18–25. <https://doi.org/10.1111/nuf.12644>
9. Watson et al. (2008). *Nursing Research Designs and Methods*. Churchill Livingstone Elsevier
10. Bandur, Agustinus. (2019). *Penelitian Kualitatif: Studi Multi Disiplin Keilmuan dengan NVivo 12 Plus*. Bogor: Penerbit Mitra wacana Media.
11. Polit & Beck (2010). *Essentials of nursing research : appraising evidence for nursing practice*. China: Library of Congress Cataloging-in-Publication Data
12. Creswell & Poth (2018). *Kualitatif Inquiry & Research Design Choosing Among Five Approachs*. Singapore: Sage
13. Afyanti & Rachmawati (2014). *Metodologi Penelitian Kualitatif dalam Riset Keperawatan*. Jakarta: Raja Grafindo Persada
14. Aligood (2014). *Nursing Theorists And Their Work, Eighth Edition*. St. Louis, Missouri Elsevier
15. Nasution (2021). Menkes Atur Kriteria Pasien Corona yang Perlu Dirawat di Rumah Sakit <https://katadata.co.id/ameidyonasution/berita/60d051e00a99a/menkes-atur-kriteria-pasien-corona-yang-perlu-dirawat-di-rumah-sakit>
16. Yuki, K., Fujiogi, M., & Koutsogiannaki, S. (2020). *Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is hosted on Elsevier Connect , the company ' s public news and information . January*.
17. Logiudice, J. A., & Bartos, S. (2021). Experiences of Nurses During the COVID- 19 Pandemic: A Mixed-Methods Study. *AACN Advanced Critical Care*, 32(1), 14–25. <https://doi.org/10.4037/aacnacc2021816>
18. Cordero, D. A. (2021). In loving memory of “us”: facing grief during the time of COVID-19 through redirecting perception of life’s realities. *Journal of Public Health (Oxford, England)*, 43(2), e299–e300. <https://doi.org/10.1093/pubmed/fdab015>
19. Sun, S., Lin, D., Goldberg, S., Shen, Z., Chen, P., Qiao, S., Brewer, J., Loucks, E., & Operario, D. (2021). A mindfulness-based mobile health (mHealth) intervention among psychologically distressed university students in quarantine during the COVID-19 pandemic: A randomized controlled trial. *Journal of Counseling Psychology*. <https://doi.org/10.1037/cou0000568>
20. Khaleghparast, S., Ghanbari, B., Maleki, M., Zamani, F., Peighambari, M. M., Niya, M. H. K., Mazloomzadeh, S., Tameshkel, F. S., & Manshoury, S. (2022). Anxiety, Knowledge and Lived Experiences of Families with COVID-19 Patients: A Mixed-Method Multi-Center Study in Iran. *Iranian Journal of Medical Sciences*, 47(2), 131–138. <https://doi.org/10.30476/ijms.2021.89157.1997>
21. Policy, H. (2021). *Impact of COVID-19 on Anxiety , Stres , and Coping Styles in Nurses in Emergency Departments and Fever Clinics : A Cross-Sectional Survey*.

22. Hoseinabadi, T. S., Kakhki, S., Teimori, G., & Nayyeri, S. (2020). Burnout and its influencing factors between frontline nurses and nurses from other wards during the outbreak of Coronavirus Disease-COVID-19-in Iran. *Investigacion y Educacion En Enfermeria*, 38(2). *Health*, 9(May), 1–12. <https://doi.org/10.3389/fpubh.2021.679397>
23. Rathnayake et al (2020). *Nurses perspectives of taking care of patients with Coronavirus disease 2019: A phenomenological study*
24. Keliat, B. A. (2020). *Dkjps Covid19_Keperawatan Jiwa_Draft 6 Final versi JPEG with watermark.pdf*.
25. ICN. (2021). *International Council of Nurses Covid-19 Update. January*, 4.
26. Jennings. (2017). *The Roy Adaptation Model: A Theoritical Framework for nurses providing care to individuals with anorexia nervosa*
27. Putri (2020). *Gambaran Kesehatan Jiwa Pada Terkait Covid-19 Pada Perawat Yang Bekerja Di Rumah Sakit*
28. Batista, P., Duque, V., Vaz, A. L., & Pereira, A. (2021). Anxiety impact during COVID-19: A systematic review. *Journal of Infection in Developing Countries*, 15(3), 320–325. <https://doi.org/10.3855/jidc.12730>
29. Shen, Y., Zhan, Y., Zheng, H., Liu, H., Wan, Y., & Zhou, W. (2021). Anxiety and its association with perceived stress and insomnia among nurses fighting against COVID-19 in Wuhan: A cross-sectional survey. *Journal of Clinical Nursing*, 30(17–18), 2654–2664. <https://doi.org/10.1111/jocn.1567>
30. Li, D., Shi, C., Shi, F., Zhao, L., Zhao, R., & Kang, W. (2020). *Effects of simulation training on COVID-19 control ability and psychological states of nurses in a children ' s hospital*. 11381–11385.
31. Ha, Y., Lee, S. H., Lee, D. H., Kang, Y. H., Choi, W., & An, J. (2022). *Effectiveness of a mobile wellness program for nurses with rotating shifts during covid-19 pandemic: A pilot cluster-randomized trial*. *International Journal Of Environmental Research And Public Health*, 19(2). <https://doi.org/10.3390/ijerph19021014>
32. Castaldo, A., Matarese, M., Lusignani, M., Papini, M., & Eleuteri, S. (2022). *Nurses ' experiences of accompanying patients dying during the 19 pandemic : A qualitative descriptive study*. December 2021, 1–15. <https://doi.org/10.1111/jan.15195>
33. Kim, J., & Kim, S. (2021). Nurses' adaptations in caring for covid-19 patients: A grounded theory study. In *International Journal of Environmental Research and Public Health* (Vol. 18, Issue 19). <https://doi.org/10.3390/ijerph181910141>

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

