



Review

A literature review of nurses' experience working with COVID-19 patients

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Abstract

Objectives: Nurses who worked long hours and contacting with coronavirus diseases 2019 (COVID-19) patients often felt stress, worry, and infection fears. However, there was a nurse's responsibility toward the patient's safety. This study aimed to describe nurses' experiences while treating COVID-19 patients.

Methods: This study was conducted with a systematic review. Preferred reporting items for systematic reviews and meta-analyses guidelines were used, with keywords "Determinant Factors" and "Mental Disorder" or "Mental Health," and (COVID-19 or "coronavirus diseases 2019"). The databases used were PubMed, Proquest, Springer Link, Taylor and Francis, and Science Direct. There were 72 articles from PubMed, 1012 from ProQuest, 2143 from Springer Link, 167 from Taylor Francis, and 2705 from Science Direct were used to identify phases. However, only 16 articles were analyzed.

Results: Nurses caring for COVID-19 patients endure stress and anxiety, according to eight articles. According to three studies, nurses are socially stigmatized in society. Listening to prayer produces mental peace and calming sentiments for both nurses and patients, according to the spiritual experience of nurses.

Conclusion: Nurses' psychological reactions to caring for COVID-19 patients were mostly fear, sadness, nervousness, worry, and exhaustion as a result of the condition in the COVID-19 isolation ward. They require appropriate psychological care to alleviate their psychological distress and provide comfort.

Keywords: Caring; coronavirus diseases 2019; experiences; nurse; patients.

Nurses who worked long hours had different workflows and shift patterns than typical during the coronavirus diseases 2019 (COVID-19) pandemic, and their workload increased, requiring both physical and psychological energy.^[1] Often, they frequently come into contact with COVID-19 patients, causing stress, worry, and infection fears.^[2-6] Fear of transmitting the disease on to their own family causes anxiety.^[7] While there were nurse's pressure which includes full responsibility for patient safety.^[8-10]

The World Health Organization reports that there are more than 22,000 medical workers spread across 52 countries and

territories declared infected with the coronavirus (COVID-19).^[11] COVID-19 has been detected in 12,454 health workers in the Asia-Pacific area.^[12] Around 7000 health workers had died around the world as a result of COVID-19 infection.^[13] India had the most number of health professionals killed by COVID-19, with 573, Indonesia had 184, Iran had 164, Egypt had 159, Afghanistan had 13 people, Bangladesh had 24 people, and the Philippines had 35 people.^[13] According to other statistics, health workers who treat COVID-19 patients reported symptoms of depression 50% of the time, anxiety 45% of the time, insomnia 34% of the time, and psychological discomfort

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71.5% of the time.^[14,15]

According to Wong et al.^[16] (2020), 60% of nurses were afraid when they first entered the infectious disease department. About 50% of the nurses said that they were concerned. Patients in a secluded setting with fewer nurses than patients are concerned 55% of the time. Mo et al.^[17] (2020) did research according to the report, 40% of the 180 nurses were stressed and 32% were anxious. According to Shen et al.^[18] (2020), 59% of 85 nurses had a decreased appetite, 55% were tired, 5% had trouble sleeping, and 28% were worried. 2% reported suicide thoughts, and 2% sobbed regularly.

There were inadequate researches documented on nurses' stress levels when treating COVID-19 patients. The results of data analysis reveal three primary themes and six sub-themes in many investigations carried out by Karimi et al.^[4] (2020). First, there are mental illnesses, with sub-themes such as "worry and stress" and "fear." Second, emotional states with the sub-themes "suffering" and "death waiting." Third, there is the care context, which includes sub-themes like "chaos" and "lack of assistance and equipment." Murat et al.^[19] (2021) did another study that found nurses to have significant levels of stress and exhaustion, as well as moderate depression. Younger nurses are more stressed and burned out.^[4]

The research question is how is the experience of nurses caring for COVID-19 patients in Asian countries based on literature studies?

Materials and Method

Objectives

Thus, the goal of this study was to describe nurses' experiences while treating COVID-19 patients. The research was based on literature studies that were drawn from earlier Asian country studies conducted by previous researchers. This study will look into the emotional, psychological, social, and spiritual experiences of nurses caring with COVID-19 patients.

Search Strategy

Preferred reporting items for systematic reviews and meta-analyses (PRISMA)'s guide is what we utilize. PRISMA is a tool and guide that is used to evaluate a systematic review and or meta-analysis. PRISMA assists writers and researchers in com-

What is presently known on this subject?

- Nurses who have been in direct contact with COVID-19 patients often experience feelings of stress, worry, and fear of infection, even as they uphold their responsibility towards ensuring patient safety.

What does this article add to the existing knowledge?

- This systematic review synthesizes findings from multiple sources and highlights that nurses not only face psychological challenges such as stress and anxiety but also social stigma when caring for COVID-19 patients. Additionally, spiritual practices, such as listening to prayers, have been identified as sources of mental solace and comfort for nurses and patients alike.

What are the implications for practice?

- Understanding the depth of psychological reactions that nurses face, including fear, sadness, nervousness, worry, and exhaustion, underscores the need for tailored psychological interventions. To ensure both the well-being of nurses and the quality of care provided to patients, health institutions should prioritize and implement psychological support mechanisms, including potentially integrating spiritual practices, to alleviate the mental distress of frontline healthcare workers.

piling a quality systematic review and meta-analysis Using the keywords "Experience or Experiences" and "Nurse or Nurse's" and "Caring or Care or Empathy," and "COVID-19 or SARS-Cov-2" and "Patients or Patient," we searched the publication on PubMed, Proquest, Springer Link, Taylor and Francis, and Science Direct. The article data in this research are in the period 2019–2021 (Table 1).

Study Selection

Seventy-two articles from PubMed, 1012 from ProQuest, 2143 from Springer Link, 167 from Taylor Francis, and 2705 from Science Direct were used to identify phases. There are 6099 articles in total. Furthermore, the screening included the title, full text, duplication, and study topics, and 52 publications were discovered. An additional feasibility study that includes the study sample, design, and outcomes is not required. A thorough literature review was conducted on 16 articles. Meanwhile theses, dissertations, and proceedings were not included in this study because the articles analyzed only focused on original studies that were published and passed highly peer reviewed (Fig. 1).

Data Extraction

Author/year, country, study design, and population/samples of primary findings were all retrieved from each study.

Table 1. Search list

Find the database	Keywords
PubMed=72 Proquest=1012 Spinger link=2143 Taylor Francis=167 ScienceDirect=2705	Experience or experiences AND nurse or nurse's AND caring or cares or empathy AND COVID-19 or SARS-Cov-2 and patients or patient

Table 2. Characteristics of respondents (n=16)

Characteristics	n	Percentage
Study area		
South Korea	1	6.3
Indonesia	1	6.3
Türkiye	2	12.5
Iran	6	37.5
China	6	37.5
Study design		
Qualitative study	14	87.5
Phenomenological study	2	12.5
JBI critical appraisal		
Strong		
Moderate		
Low		

Results

Characteristics

Table 2 shows that 37.5% of the nurses in this study came from China and 37.5% came from Iran. A qualitative research design is used in all study designs because the main purpose of this research is to explore the experiences of nurses in caring for COVID-19 patients. Qualitative studies account for 87.5% of all studies, while phenomenological studies account for 12.5%.

Psychological Experience

Table 3 depicts nurses' experiences, which include psychological, social, and spiritual aspects. Stress, worry, fear, tiredness, and ambivalence are all psychological experiences. According

to eight articles, nurses who treat COVID-19 patients endure tension and worry, namely, from Cui et al.^[20] (2020), Karimi et al.^[4] (2020), Galehdar et al.^[21] (2021), Muz et al.^[22] (2020), Sun et al.^[7] (2020), Kackin et al.^[23] (2021), Tan et al.^[24] (2020), and Galehdar et al.^[21] (2021). Nurses also experience fear of death Alizadeh et al.^[25](2020), Karimi et al.^[4] (2020), Galehdaret al.^[26] (2020), Liu et al.^[1] (2020), and Galehdar et al.^[21] (2021). Besides the fear of death, nurses are also afraid of being infected by Cui et al.^[20] (2020), Galehdar et al.^[26] (2020), Galehdar et al.^[21] (2021), and Sun et al.^[7] (2020).

Nurses psychologically also experience stress related to excessive workload. Alizadeh et al.^[25] (2020), Tan et al.^[24] (2020), and Liu et al.^[1] (2020). There is additional psychological pressure associated with the usage of personal protective equipment (PPE), in addition to the excessive workload. Alizadeh et al.^[25] (2020), Lee et al.^[28] (2020), and Liu et al.^[27] (2020). Nurses caring for COVID-19 patients also have sleep disturbances Cui et al.^[20] (2020) and ambivalence Lee and Lee^[28] (2020) and Zhang et al.^[29] (2020) (Table 3).

Social Experience

Nurses' social experiences include social stigma, a lack of support from family, coworkers, and the government, as well as social and organizational obligations, including lack of appreciation, finances, perks, and vacations. There are three studies that claim that society stigmatizes nurses, namely, Kalateh et al.^[30] (2021), Muz et al.^[22] (2020), and Gunawan et al.^[31] (2021). When caring with COVID-19 patients, nurses need to feel support from their families, colleagues, and the government.^[1,20,23] Nurses also feel that what they are doing is a social demand.^[26] Moreover, lack of respect, finances, benefits, and vacations are all unpleasant situations for nurses.^[29,32]

Spiritual Experience

The spiritual experience experienced by nurses is that listening to prayer provides mental calm and calming feelings for both nurses and patients. Nurses and patients pray together for their safety.^[21]

Discussion

Nurse Psychological Experience

According to Alizadeh et al.^[25] (2020), anxiety and fear are among the psychological experiences of nurses caring for COVID-19 patients as a result of a lack of awareness about the condition. Unusual illnesses, working with unfamiliar equipment, and performing unfamiliar jobs can all generate fear.^[22] Nurses caring for COVID-19 patients in isolation wards, according to Cui et al.^[20] (2020), were nervous and concerned about their high viral exposure. When their coworkers are diagnosed with COVID-19, when there is a possibility of exposure, or when they have cold symptoms like coughing, they get anxious and fearful. Nurses' mental health is harmed when a COVID-19 patient dies without their loved ones present. Nurses on the COVID-19 ward reported various levels of sleep

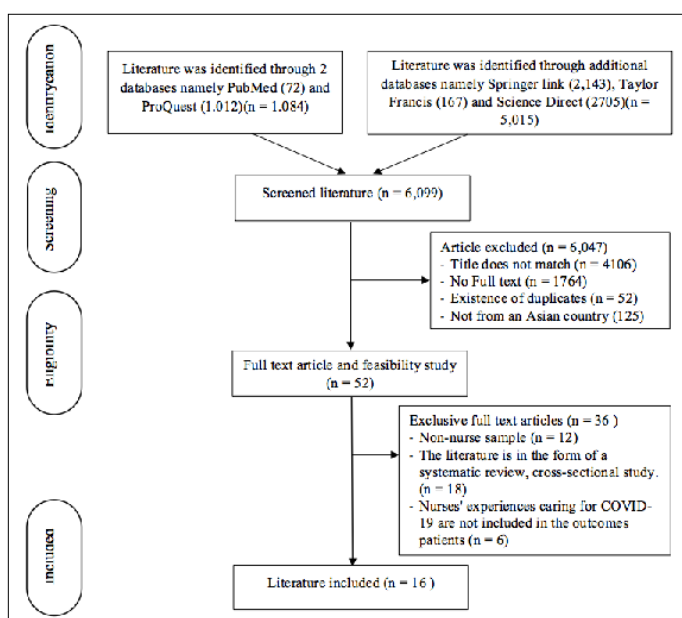


Figure 1. Selection of studies (preferred reporting items for systematic reviews and meta-analyses flow chart).

disturbance. Environmental and psychological factors, altering shift schedules, and patients' fear of missing information may all contribute to sleep problems. Nurses cope with this situation by exercising, listening to music, and keeping a journal.^[33,34]

The nurses conveyed their concern about the impending death of the patient. The fear of dying has become a difficult challenge for nurses.^[4] Delivering the patient's death announcement to his family is one source of anxiety for nurses. Nurses face emotional stress when they have to deliver bad news to the patient's family regarding their death. They also have to explain the patient's condition to the patient's family, which can be unpleasant. Nurses feel psychological distress when they witness the death of a COVID-19 patient, especially a young patient. This had such an impact on them that even the nurses were experiencing burial anxiety as a result of it. Because funerals for deceased patients must adhere to health regulations, relatives are unable to perform funeral rites in honor of their loved ones based on their culture and beliefs. This may have a negative impact on nurse morale. Nurses who are caring for COVID-19 patients have obsessive thoughts that cause them to see everything and everyone as polluted. The nurse refuses to eat or drink at work because of her compulsive thoughts, and she washes her hands frequently.^[27]

Speculation, isolation, depression, distraction, self-awareness, humor, and rationalization are among psychological defensive mechanisms used by nurses, according to Sun et al.^[7] (2020). Nurses employ psychological approaches such as journal and letter writing, breathing relaxation, music meditation, and emotional expression to adjust both actively and passively. Most nurses opt to manage their sleep while they are stressed at work. Some nurses will boost their food intake, exercise consistently, and keep their physical strength to retain normal workability. Sports, gratitude, watching movies, painting, listening to music, reading books, and tv are all used by nurses as a short-term coping method.^[24]

Nurses, according to Tan et al.^[25] (2020), are exhausted, overworked, and sleep deprived. As a result of disease outbreaks, close contact with patients, and the loss of a regular, balanced existence, most nurses are under a considerable deal of psychological stress, and they are sensitive to fear and anxiety. As the number of verified cases and deaths climbs, nurses are subject to feelings of anger, powerlessness, and even self-blame. Nurses suffer from varied degrees of psychological anguish, and their health deteriorates to the point where they need psychiatric help or counseling. Furthermore, due to patient's condition is gradually deteriorating, the number of confirmed patients is expanding, and a specific vaccine has yet to be developed, nurses are under a great deal of stress.^[1]

Nurse Social Experience

Nursing professionals, according to Kalateh et al.^[30] (2021), face societal stigma from their families and communities. They felt that nurses were carriers of the virus and that it might be spread. Family, friends, nurses, coworkers, and the commu-

nity shun them and are scared to speak with them for fear of contracting the illness. They understand what it's like to be rejected.^[32] Nurses face social stigma since they are infected with COVID-19, spend the most of their time in hospitals, are at high risk of transmission, and are socially isolated.^[24] Because they work in hospitals, nurses feel cutoff from society. For fear of infecting strangers, family members, and friends, they isolate themselves. They are forced to leave their families and live in dorms, which severely limits their social chances.^[22]

Nurses, according to Lee, (2020) believe that their efforts are undervalued. Despite struggling on the front lines of the epidemic, participants suffered delays in receiving indirect financial compensation, such as bonuses, and did not receive indirect compensation, such as vacation time and perks.^[35] Moreover, despite the fact that they were both medical professionals, they showed discomfort with spending more time on direct patient care or labor-intensive tasks than doctors. Doctors and clinical pathologists do not visit isolation units on a regular basis and return as soon as their work is completed. Nurses, on the other hand, must not only conduct nursing chores but also assist doctors and clinical pathologists when they arrive, as well as clean up the examination equipment after the doctors have departed. Nurses are spending more time in isolation units as a result, and they have more job to accomplish. The nurse received no bonuses. Nurses had heard a number of bonus stories, with some stating that doctors would get more. Nurses have it the worst, but it's more disheartening and irritating when they hear stories like that. Participants believed that nurses were not treated with the respect they deserved while facing significant levels of physical and psychological stress as a result of their encounter with COVID-19 patients. Nurses are spending more time and doing more work in isolation units. The nurse received no bonuses. Nurses have it the worst, but it is more disheartening and irritating when they hear stories like that.

Despite these conditions, nurses received social support from their coworkers, family, and friends. Nurses might be happy if they have the support from their families and teams, as well as encouragement from coworkers. The hospital management also has a reward system to encourage and motivate their staff.^[36] Based on research by Cui et al.^[20] (2020), nurses also surrounded with strong family, colleagues, and government support, which allows them to work and control the epidemics more smoothly. Simultaneously, social support can help to alleviate some of the psychological stress.^[20] The media also plays an important role while knowing there were shortages of PPE and medical personnel, from news broadcasts and social media, which motivates them to do everything they can to help the nurse's work. Thus, nurse became more secured, and do not feel alone due to this huge support received.^[37]

In one study, there were a reimbursement for anti-epidemic health insurance,^[7] as well as financial compensation and awards from the government and hospitals for acknowledging nurses' contributions.^[38] Nurses reported that the impor-

tance of their work was recognized, and they felt “supported” by their organization. Because nurse-affiliated hospitals are more likely to be re-designated as infectious disease hospitals in the occurrence of new communicable disease outbreaks, remuneration rules should be devised to promote nurse enthusiasm.

Nurse Spiritual Experience

Based on research results Galehdar et al.^[21] (2020), revealed patients and nurses deserve spiritual care as well. Listening to prayer promotes mental peace and pleasant sentiments for patients, according to nurses’ experience. Patients were also inspired by Quran passages and prayed for themselves and other patients, as per nurses. One of the nurses also emphasized the significance of paying attention to the spiritual dimension of the patient. Nurses and patients have been known to pray for each other’s safety. The use of nursing in satisfying spiritual needs seeks to make the patient feel balanced and alive so that they can obtain peace of mind, calm, worship tranquility, anxiety reduction, and healing.^[39] Spiritual care can help patients feel better about themselves and reducing stress and improving their perceptions of health and integrity.^[27]

Conclusion

Fear, despair, uneasiness, worry, and tiredness were among the nurses’ psychological reactions to the circumstances in the COVID-19 isolation unit while caring for COVID-19 patients. They require appropriate psychological care to alleviate their psychological distress and provide comfort, for nurses to give the best possible care for COVID-19 patients. Nurses’ social experiences caring for COVID-19 patients were faced with a lot of social stigma from their families and communities. So that nurses can deliver the greatest service, there must be strong support from family, coworkers, the government, and logistical help from the hospital.

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Table 3. Nurses' experiences care for COVID-19 patients

Author/year	Country	Study design/data collection/data analysis	Population and sample	Main findings
Alizadeh et al. ^[25]	Iran	Qualitative study/semi-structured interviews/ direct content analysis	Population: Health workers in the COVID-19 ward of Tehran Hospital. Sample: 18 nurses	<ul style="list-style-type: none"> Psychological experiences: Psychological stress by nature of illness, workload, wearing PPE, and fear of death. The social experience of nurses experiencing social demands, organizational demands.
Kalateh et al. ^[30]	Iran	Qualitative study/ semi-structured interviews/ inductive and deductive thematic analysis to	Population: Medical staff, mainly in Shiraz Hospital, Kashan, and Qazvin, Iran. Sample: 24 nurses	<ul style="list-style-type: none"> Nurses' social experiences: Social stigma and protection of their families.
Cui et al. ^[20]	China	Qualitative study/semi-structured interviews/ qualitative content analysis with NVivo 11.0 software	Population: Volunteer nurses who worked in Hubei Province during the COVID-19 pandemic. Sample: 12 nurses	<ul style="list-style-type: none"> Psychological experiences: Fear of infection, feeling lonely, stressed, and having trouble sleeping. The social experience of nurses gets strong support from family, colleagues, and government.
Muz et al. ^[22]	Türkiye	Qualitative stud/ semi-structured interviews/ Colaizzi's seven-step method.	Population: Nurses at a Tertiary General Hospital in Türkiye care for COVID-19 patients. Sample: 19 nurses	<ul style="list-style-type: none"> Psychological interactions Nurses have feelings of insecurity, unpreparedness, worry, and fear, as well as difficulty providing physical and psychological care and moral pressure. Social experience: Self-isolation and social stigma from society.
Karimi et al. ^[4]	Iran	Qualitative stud/semi-structured interviews/ Colaizzi's seven-step method.	Population: Nurses at the Coronavirus Center Iran provide care to patients infected with COVID-19. Sample: 12 nurses	<ul style="list-style-type: none"> Psychological experiences: Stress and anxiety, feeling afraid, experiencing suffering, and waiting for death.
Galehdar et al. ^[26]	Iran	Qualitative study/semi-structured in-depth telephone interviews/the conventional content analysis method	Population: Nurses working in Lorestan University of Medical Sciences hospital. Sample: 20 nurses	<ul style="list-style-type: none"> Psychological experiences: Anxiety due to death, nature of the disease (unknown extent and size of disease), anxiety due to burial of corpses, fear of contamination and infecting the family, emotional stress when conveying bad news to patient's family members, and feeling uncomfortable when wearing PPE
Lee et al. ^[28]	South Korea	Phenomenological study/semi-structured interviews/ Giorgi's phenomenological methodology	Population: Nurses at a COVID-19 hospital in Busan, South Korea. Sample: 18 nurses	<ul style="list-style-type: none"> Psychological experiences: feeling ambivalent, easily angry at uncooperative attitudes, feeling sorry for the patient, feeling uncomfortable because of wearing PPE, being sensitive to small things, feeling tired of body and mind.
Galehdar et al. ^[21]	Iran	Qualitative study/semi-structured interviews/ conventional content analysis method	Population: Nurses working in the inpatient department of the Lorestan University of Medical Sciences hospital with COVID-19 patients. Sample: 13 nurses	<ul style="list-style-type: none"> Social experiences: Nurses feel daily life to be changed, limiting social activities such as recreation, avoiding meeting with friends and family and their children. Nurses feel that their work is not properly recognized such as delays in financial compensation, vacation time, and benefits. Psychological experiences: stress and anxiety, mental and emotional stress, the dilemma between choosing the health of his family or providing care to COVID-19 patients. Social experience: wearing PPE limits nurses' ability to eat, drink, and use the restroom during a 12-h work shift.
Sun, et al. ^[7]	China	Qualitative research/ semi-structured interviews face-to-face or by telephone/ Colaizzi's seven-step method.	Population: Nurses at Henan University of Science and Technology Hospital care for COVID-19 patients. Sample: 20 nurses	<ul style="list-style-type: none"> Psychological experiences: Feeling tired, afraid of being infected with a virus, and experiencing anxiety. Nurses adjust both actively and passively through the use of psychological techniques such as journal and letter writing, breathing relaxation, music meditation, and emotional expression. Nurses report an increase in affection and gratitude, as well as responsibility for professional identity and self-reflection. The social experiences of nurses who received social support from patients, family members, team members, the government, and social groups
Kackin et al. ^[23]	Türkiye	Qualitative study/semi-structured interviews/Colaizzi's seven-step method.	Population: Nurses in Istanbul, Türkiye, who are caring for COVID-19 patients. Sample: 10 nurses	<ul style="list-style-type: none"> Psychological experiences: experiencing stress, fear, increased obsession, feeling threatened, uncertainty about the future, increased anxiety, increased attention and concentration, feeling suspicious, feeling as if infected with COVID-19 at the slightest sign, feeling life has become meaningless, experiencing depressive symptoms. Nurses divert their attention by participating in sports, being thankful for watching movies and television series, cooking, cleaning the house, painting, listening to music, reading books, feeding animals, and taking positive notes. The social experience of nurses experiencing social stigma, spending most of the time in hospital, high risk of transmission, and experiencing social isolation.
Tan et al. ^[24]	China	Qualitative study/semi-structured interviews/Colaizzi's seven-step method	Population: Clinical nurses on the front lines of the Wuhan Union Hospital epidemic. Sample: 30 nurses	<ul style="list-style-type: none"> Psychological experiences: fear and anxiety, helplessness and frustration, heavy workload, and pressure. Working in a closed infection ward with poor air circulation and little communication with the outside world was a social experience.
Liu et al. ^[27]	China	Qualitative study/semi-structured individual interviews/analyzed using standard qualitative methods.	Population: Frontline nurses from two hospitals in Wuhan, China, were recruited to care for COVID-19 patients. Sample: 15 nurses	<ul style="list-style-type: none"> Psychological experiences: Inevitable fear, exhaustion, and extreme stress.
Gunawan et al. ^[31]	Indonesia	Phenomenological study/semi-structured interviews/ direct content analysis	Population: Nurses in the fight against COVID-19 in Belitung, Indonesia. Sample: 17 nurses	<ul style="list-style-type: none"> Psychological experience: feeling that they are just pawns/pawns, they miss home, and feel betrayed by regulations. Social experience: Family members, friends, colleagues, and members of the community refuse to walk or meet them because they are suspected of being infected with the virus.
Liu et al. ^[1]	China	Qualitative study/semi-structured interviews/Colaizzi's seven-step method	Population: Nurses and doctors were recruited from five designated hospitals in Hubei province for COVID-19. Sample: Nine nurses and four doctors	<ul style="list-style-type: none"> Psychological symptoms include fatigue, feelings of uncertainty, and apprehension about contracting and infecting others. Social experience: Good relationship with patients, getting social support sources from hospital, colleagues, family, friends, and community.
Galehdar et al. ^[21]	Iran	Qualitative study/semi-structured interviews/ conventional content analysis method	Population: Nurses occupying the COVID-19 inpatient ward at the Lorestan University of Medical Sciences hospital Sample: 20 nurses	<ul style="list-style-type: none"> Psychological experiences: death anxiety, feeling hopeless, lonely, separated from family. The nurse's social experience states that getting social stigma, patients need to increase social support in the form of communication with family, the need for social welfare (economic needs). Spiritual experience: listening to prayer provides a mental calm and a calming feeling for both the nurse and the patient. Nurses and patients pray together for their safety.
Zhang et al. ^[29]	China	Qualitative study/semi-structured interviews/Colaizzi's seven-step method	Population: Hospital nurses in Wuhan, China, the COVID-19 outbreak's epicenter. Sample: 23 nurses	<ul style="list-style-type: none"> Psychological experiences: ambivalence, emotional exhaustion