Shifts in COVID-19 Wards and Emotional Challenges for Nurses: A Qualitative Study

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Abstract
Background: In the context of the coronavirus disease 2019 (COVID-19) pandemic, frontline nurses were active in this event and faced numerous challenges. This study aimed to discover the emotional challenges nurses faced on shifts in COVID-19 wards.

Methods: In this phenomenological qualitative research, purposive sampling was used to collect the data. A phone interview was conducted with nurses who worked in COVID-19 wards in five Medical Science Universities in Iran in 2020. Then, the recorded interviews were written down. Findings were analyzed using a 6-step thematic analysis guided by Van Manen's hermeneutic phenomenological approach. The validity and reliability of the study were assessed based on the four criteria proposed by Lincoln and Guba: credibility, dependability, confirmability, and transformability of data.

Results: According to analyzed data obtained from interviews with 15 nurses working in the COVID-19 ward, the age average of participants was about 32±5.05. The thematic analysis consisted of four themes, including unpleasant reception (subthemes of limited resources, lack of knowledge, and unpreparedness to deal with the crisis), full involvement and various conflicts (subthemes of extreme fatigue, affected family life, uncontrollable fear, and career change), mental or psychological tortures (subthemes of unexpected incidents, distressing observations, and performance dissatisfaction), and patients' emotional deprivation (subthemes of disappointment and frustration, communication disorder, and isolation).

Conclusion: This study described the experiences of nurses working in COVID-19 wards facing four emotional challenges. It is suggested to provide psychological support for nurses, meet their needs, and boost their morale as effective measures to expand the quality of care and society's satisfaction with healthcare services.

Keywords: COVID-19, Hospitals, Nurses, Pandemic, Qualitative research

Background
As an unprecedented public health emergency in today's modern world history, the coronavirus disease 2019 (COVID-19) pandemic has made it essential to accept psychological flexibility challenges for life adaptation due to dramatic long-term challenges in daily life (1). The rapid and unknown outbreak of this disease caused a high death rate accompanied by restrictions on life routines, business activities, and travel, and the closure of cities and couriers had a drastic global effect on the economy, health, and social life (2).

This infectious disease is still spreading and killing people all around the world. According to the World Health Organization (WHO), 105805951 definite infection cases and 2312278 deaths have been attributed to COVID-19 on February 8, 2021 (3). The critical problems regarding this pandemic include the lack of plans, readiness, and management projects on part of governments and health systems. For example, a shortage of required medical equipment such as personal protective equipment (PPE) for nurses and other healthcare workers (HCWs) has led to ethical challenges related to global emergencies as well as human rights (4).

Delay in the early detection of infection is one of the COVID-19 challenges. This was a threat to healthcare personnel, especially nurses who had the first connection with patients because nurses need to remain healthy to provide care for patients (5). Results of a previous study showed that healthcare staff became infected when providing care for those patients who had mechanical ventilation or needed nebulizer, tracheal tube suction, cardiopulmonary resuscitation, or nasogastric tube. The above-mentioned methods were introduced as highly risky procedures that cause infection in HCWs (6).

Lack of skilled nurses and insufficient information among infectious disease wards and hospitalized patients are examples of nursing challenges during the COVID-19 pandemic. According to studies conducted on Chinese nurses, those nurses who had no experience in caring for patients with critical conditions faced more considerable
mental and psychological problems (7,8).

Other challenges included a lack of access to PPE and difficulty working with such equipment in COVID-19 wards. Experiences of nurses who provided care for patients infected with the new coronavirus revealed that they face other new challenges in care units such as fatigue caused by long-term shifts, limited sources, hazardous infrastructures, and cumbersome PPE (1,8). Moreover, nurses were also concerned about the inaccessibility of suitable PPE (9). Increased work pressure, treatment stress, care for patients, adjustment to new workplaces, and physical and mental stress were challenges that caregivers faced during COVID-19 in China (8).

Nurses were under pressure because they had to take care of patients and protect the health of themselves and their families simultaneously (10). Another issue was coping with stressful situations when facing mental and psychological harm among nurses and frontline HCWs in COVID-19 wards. A review of the mental health of individuals who took care of patients during the COVID-19 pandemic demonstrated that, after returning to work, 10.8% of them indicated post-traumatic stress disorder, 3.8% anxiety, 3.7% depression, 1.5% stress, 2.3% insomnia, 1.3% paranoid disorders, 1% auditory hallucination, and 1% alcohol consumption, suicidal thoughts, or hurting others (11). Another study was conducted on the outbreak and factors affecting anxiety and depression, and results showed that 27.9% of nurses exhibited anxiety symptoms, and 43% had depression (12).

According to the World Bank, pandemic outbreak preparedness is critical to global security and strengthening service-providing systems. Regardless of the socioeconomic situation of countries, nursing is the prior frontline profession that prevents diseases and mitigates the pain that remains after the treatment of diseases such as COVID-19 (5). It seems essential to discover the changes in nurses to find solutions for changes resulting from pandemics and to improve the quality of care provided for patients based on a prospective outlook.

**Objectives**

This study aimed at determining the emotional challenges for shift-working nurses in COVID-19 wards.

**Material and Methods**

The extant study is phenomenological qualitative research, which uses a systematic method to extract and show the human experience perceptions of different kinds of the phenomenon and describe the lived experiences (13). This study employed Van Manen’s Interpretative Phenomenological Approach. According to Van Manen, hermeneutic or interpretive phenomenology is a systematic approach used by the researcher to study and interpret a phenomenon. This method is used when researchers tend to discover an unknown or less-known phenomenon through a profound assessment of lived experiences involved in the phenomenon (14,15).

The studied subjects comprised all nurses working in COVID-19 wards in five Medical Science Universities of Tehran, Hormozgan, Kermanshah, Mashhad, and Yasuj. Sampling was conducted from April to July 2020. The number of participants was calculated based on data saturation, and 15 nurses participated in this study. Purposive sampling was performed via phone interviews with nurses who were willing to participate in the study. Willingness to participate, working in the COVID-19 ward for at least 15 days, and having no history of known anxiety and mental illness in the last six months were chosen as inclusion criteria. To collect data, the semi-structured individual interview was done via phone. All of the interviews were conducted by the same researcher who was a nurse. To conduct the interview, a set of several open-ended questions referred to as an interview guide was used based on the research objectives. Each interview took 40 to 75 minutes, and interviews continued until the concepts became saturated, and a new notion was obtained.

Before each interview, participants were explained about research objectives, the reason for recording the interview, voluntary participation, and the confidentiality of their information and identity. Moreover, participants allowed to record their voices and presented their participation consent. In the first step of each interview, the participants were asked to introduce themselves, and some demographic questions were asked. Then, questions related to the phenomenon under investigation were surveying participants’ experiences with the challenges they faced when working in COVID-19 wards. Tracking the time, the interviewer continued the discussion until understanding the proposed concepts.

The interview form included two categories of questions: the main questions of the interview and follow-up items. The main questions were designed to include questions such as “What is your idea about shifts on COVID-19 wards”, “What are the challenges in such shifts”, “Can you give an example of your best experience in working shifts”, and “What have been the most unpleasant experiences for you during this pandemic”. The interviewer clarified the answers given to each question by the participant using follow-up questions and sentences such as “Can you explain more” or “What do you mean by saying...”. Interviews were not interrupted until achieving profound and adequate data, and the whole interview was recorded with the permission of the participants. Then, the recorded audio was listened to several times, and transcriptions were written down on paper to prepare the required feedback for ongoing interviews and data adequacy. In the next step, the written interviews were matched with the recorded information, and the considered codes were extracted from texts and analyzed. To avoid the effect of
the researcher’s thoughts and opinions, the researcher decided to ignore personal ideas before initiating the research and during data collection and analysis.

Descriptive statistics were employed to analyze the demographic features of participants. Van Manen’s six-step thematic analysis of the hermeneutic phenomenological approach was used to analyze the qualitative data. This approach includes the following steps: (a) turning to the nature of experience, (b) profound investigation of the experience, (c) reflecting on essential themes of the phenomenon, (d) hermeneutic writing and rewriting, (e) maintaining a strong and oriented relation with the phenomenon, and (f) balancing the research context by considering parts and the whole (15, 16). The hermeneutic phenomenology study requires the research to be involved in questions. Accordingly, the research question is constantly in the mind of the researcher to extract the contexts and their interpretations.

The validity and reliability of the study were examined using four criteria proposed by Lincoln and Guba: credibility, dependability, confirmability, and transformability of data (17,18). The researchers took the first step to expand data validity by increasing the number of interviews, and the interviewer tried to establish more close relationships with the participants. After implementing the interviews, research findings were given to participants to present their ideas about the connection between the findings and their lived experiences. In this regard, the researcher could verify the validity of such experiences. In addition to the researcher, some other qualitative research experts were asked to review the texts to ensure the reliability and revision of interviews as well as extracted meanings and patterns and to evaluate the analysis process. Purposive sampling was used to improve data transformability across sampling. In this context, various interviews were conducted with different participants.

The required permissions and ethics code were taken to collect data. The rights of participants were reserved, including the right to choose to participate in the study. Research objectives, collaboration, data capturing, and collecting methods were expressed before data collection, and participants gave their consent after making sure of information confidentiality. Participants were allowed to withdraw from the study at any stage. It was also promised to delete all of the recorded information after their discharge. Participant profiles were kept confidential, and their names were entered as codes and figures on recorded audio and transcripts. Next, references and transcripts were used based on fidelity and honesty throughout the research steps.

Results
According to analyzed data obtained from interviews with 15 nurses working in COVID-19 wards, 86.7% had a bachelor’s degree in Nursing with an average age of 32±5.05. The details of the participants are presented in Table 1. There were 1132 initial codes extracted from data analysis, which were then assigned to 30 categories, 14 subthemes, and four themes after compressing and classification of the initial codes. The obtained themes and classes were used to define the concept of emotional challenges of nurses on shifts in COVID-19 wards.

With the sudden advent of the COVID-19 pandemic and unknown conditions, limited knowledge and resources as well as unpreparedness of health systems for dealing with the crisis, nurses unwillingly accepted this infectious disease and faced considerable stress. The fear of disease and its effects on the private and professional life of nurses, along with the compassion fatigue of this hardworking staff led to various conflicts and their full involvement in the crisis. Nursing shifts in COVID-19 wards not only led to physical fatigue and burnout but also caused various mental harms because unexpected incidents and painful observations arise performance dissatisfaction. Furthermore, patients’ emotional deprivations and some feelings such as frustration, isolation, and difficulty in establishing relationships cause high pressure and stress on nurses. Participants described their lived experiences of each theme. Some examples have been presented in the following.

Theme 1: Unpleasant Reception
As an unknown virus, COVID-19 affected the whole Planet Earth in 2019. Since countries were not ready to cope with such a crisis and due to the shortage of human sources and medical equipment, it was hard to deal with this pandemic. The diseases highly developed unpredictability, and the statistical curve of infected...
cases underwent an incremental rise around the world. This theme comprises some classes, including limited resources, lack of knowledge, and unpreparedness to deal with the crisis.

“It is extremely difficult to work in the COVID-19 ward; in particular, we were not ready to face this virus. Anyone was working routinely, and anything was as usual, but this virus spread all over the world suddenly and took everyone by surprise. Unfortunately, countries were not prepared to cope with the virus” (Participant 3).

“Unfortunately, this disease spread unpredictably. One day it reaches the peak, and again the second curve is observed, so it is not possible to anticipate the disease process and virus behavior. We do not know the virus and its behavior. We are exhausted” (Participant 11).

Theme 2: Full Involvement and Various Conflicts
Nurses who work in COVID-19 wards are under numerous physical and psychological stress because no one likes to work in such wards where shifts are not readily switched. Moreover, fear of the virus and its transmission severely affects the family life and career of nurses. This theme includes classes of extreme fatigue, affected family life, uncontrollable fear, and career change.

“It is hard to provide care for these patients. We should always be aware of not being infected. The nature of our work is the same with more precautions. Our attire, communication, and patient care have been changed. Generally, Nursing is a tough job in such wards and requires good morale” (Participant 6).

“This pandemic had a considerable impact on the life, job, education, and other living affairs of people. Long-term social distancing is a painful process as human tends to develop social relationships. We have fewer social communication and commutations. In general, we should know the value of our lives” (Participant 4).

Theme 3: Mental or Psychological Torture
Nurses face difficulty when taking care of infected patients due to the high death rate of COVID-19 disease, the long duration of the disease in some patients, the existing underlying diseases, and the hard situation of patients. Hence, nurses should have high mental and motivational power. However, they may be dissatisfied with their performance. The psychological torture theme comprises classes of unexpected incidents, distressing observations, and performance dissatisfaction.

“My friend’s mother was hospitalized inward. Her lungs were severely infected. He had a cardiac arrest, and we did our best but could not save her. It is about two months that I am blaming myself thinking that trying other technics may have helped keep her alive. My friend is extremely sad, and I feel embarrassed” (Participant 1).

“We feel terrible when the respiratory status of patients gets worse. On the other hand, intubation and failed C-reactive proteins are horrible experiences, especially when these cases are young patients without any history of the disease. For example, we had a 28-year-old boy who died of COVID-19, unfortunately” (Participant 8).

Theme 4: Patients’ Emotional Deprivation
Patients cannot communicate with others simply due to their specific conditions of quarantine, and disease transmission causes their isolation. When nurses see patients’ needs for family, they feel disappointed and frustrated. Not only patients but also their families feel frustrated without any hope for recovery. This theme comprises classes of disappointment and frustration, communication disorder, and isolation.

“We had a patient who brought his fruits and nuts to the nursing station on the discharge day and asked me to eat them or give them to other patients. I said that my gloves are dirty and cannot take the staff. The patient said nothing and went. I got then annoyed and felt that I broke his heart” (Participant 10).

“Many patients are so frightened and disappointed that may die from the fear not the disease. Some patients even cannot sleep at night while they do not suffer from any sleep disorders” (Participant 7).

Discussion
This qualitative phenomenological study assessed nurses’ experiences of emotional challenges on shifts in COVID-19 wards. These challenges were presented as four themes: unpleasant reception, full involvement and conflicts, psychological tortures, and emotional deprivation. The sudden outbreak of the unknown COVID-19 virus in the 20th century surprised healthcare systems as a global crisis. There was inadequate medical information about the virus and its control and treatment methods. Further, insufficient PPE for virus control raised challenges in caring for infected patients. Sun and colleagues named the threats caused by COVID-19 as psychological helplessness and exhaustion, health threats, lack of knowledge, and unfamiliarity, which lead to negative emotions such as anxiety (19). This finding is in line with the results of the extant study. Various studies have presented similar challenges (20, 21). Frontline nurses require knowledge related to COVID-19 prevention and control to mitigate their psychological fears and increase their physical and mental safety (22). Shanafelt et al reported a lack of access to up-to-date information as the underlying source of anxiety in the medical team (9). The required knowledge is acquired via various methods. Saqlain et al (23) introduced mass media such as radio and television as the most significant sources for knowledge acquisition followed by obtaining information from colleagues. In general, the medical team should collect the required information from valid references such as guidelines and reports published by the WHO and the Center for Disease Control and Prevention.
Control and Prevention, and this new and up-to-date information should be shared among nurses.

Resource shortage is a challenge observed in the unpleasant acceptance of this disease. Lai et al discuss that a predictable shortage of resources and an increased number of infected and suspected patients can cause increased workload and concerns in medical teams (24). According to Joshi, nurses face some challenges during the COVID-19 pandemic, including a lack of experienced nurses, a shortage of PPE and quarantine facilities, delays in decision-making by managers, and providing insufficient supportive services such as food staff during shifts (25).

It is essential to prepare the required healthcare sources for unpredictable crises. There will be a rise in supplying sources to protect caregivers and assure health team preparedness to control infection under unpredictable conditions. Working in COVID-19 wards, nurses feel high physical and psychological stress in their private life, family, and careers causing chronic fatigue. Kang et al studied the experience of nurses during the Middle East respiratory syndrome (MERS) pandemic and pointed to the nurses’ exhaustion caused by the high workload (26). Liu et al (27) studied nurses working on the Ebola team and reported symptoms of insomnia, poor appetite, fatigue, and attention deficit in these nurses. The findings of other studies on COVID-19 were in line with the results of this study (19,25). Normally, nurses are worried about their families because they may transmit the virus to their family members, and nurses’ experiences during the MERS pandemic approve these results (20). Concerns of nurses will be mitigated, and their stress will be reduced by supporting the families of nurses who work in COVID-19 wards and meeting their needs.

As one of the challenges of nursing shifts in COVID-19 wards, unexpected incidents and painful observations lead to high emotional and psychological stress on nurses, which may create performance dissatisfaction among them. Morley et al who examined ethical challenges for nurses during the COVID-19 pandemic found similar results (28). Psychological experiences of nurses working in Turkey approved the mentioned finding (29). Seeing patients who die in isolation far from their beloved ones and hearing end-life conversations on phone in a non-spiritual atmosphere behind the scrubs and respiratory masks had long-term destructive effects on nurses’ morale.

Specific conditions of the coronavirus and imposed limits have led to the isolation and loneliness of patients, so nurses feel frustrated when seeing disappointed patients and their families. Moreover, it is not possible for caregivers to develop appropriate human communication with patients; furthermore, PPE shortage and social distancing cause some challenges for nurses who cannot express their emotions. Houchens and Tipirneni also emphasized these challenges (30). According to a comparative study on wearing or not wearing masks, the first option is a necessity to reduce coronavirus transmission. However, wearing a mask has a negative and significant effect on mutual perception and empathy between caregivers and patients (31). Nevertheless, wearing a mask and shield makes it hard to speak clearly with patients, especially those who have hearing impairment leading to patients’ emotional deprivation (30). Some issues such as fear, anxiety, and uncertainty emerge and develop over the COVID-19 pandemic during which caregivers, patients, and isolated and suspected individuals should be supported to reduce psychological problems during crises.

Limitations

Interviews were conducted on phone only in several provinces due to critical conditions and travel limits; hence, non-verbal evidence could not be understood from the face of the interviewee.

Conclusion

This study was conducted to assess the experience of nurses working in COVID-19 wards based on a phenomenological approach in which emotional challenges on shifts in these wards were presented in the form of four themes including unpleasant reception, full involvement and various conflicts, psychological tortures, and patient’s emotional deprivation. Of course, these emotional challenges were assessed only in wards related to COVID-19. Nurses who work in other wards such as psychiatry, obstetrics, burns, intensive care, emergency, and the like face many different challenges that require careful consideration. However, studies have been conducted in these areas.

With the advent of this crisis at the international level, nurses played a vital role and provided infected patients with high-quality care. In general, nurses who work in critical situations have valuable experiences. All of the acquired experiences during different shifts of caring for infectious patients should be used in similar future conditions. Such precious sources can be used to increase the preparedness of healthcare systems, overcome psychological and mental disorders among caregivers in hospitals, and cope with unexpected crises. Further, some efficient measures can be taken to improve the quality of care and satisfaction with healthcare services such as supporting nurses and meeting their needs, supporting their families, providing adequate psychological resources and equipment, and boosting the morale of nurses. It is recommended that various dimensions of emotional challenges such as the cultural or religious dimensions associated with these challenges be examined in nurses in future studies.

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Authors’ Contribution
ZK conceived and designed the study and wrote the final draft of the article. EI conceived and designed the study, provided research materials, analyzed and interpreted data, and wrote the initial draft of the article. MSM conducted research and collected data. All authors critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

Competing Interests
All authors declare that they have no significant competing interests that may influence the performance of the work or presentation of the research.

Ethical Approval
Ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancy have been completely observed by the authors.

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