# EXPERIENCE OF FRONTLINE NURSE WORKING IN HOSPITAL-BASED SETTINGS DURING THE COVID-19 PANDEMIC

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## ABSTRACT

This study aims to describe the experiences of frontline nurses in dealing with COVID-19 patients during the pandemic. This research method uses a scoping review method with a search method on four journal databases consisting of Sage, PubMed, Science Direct, and Proquest. The results obtained were 424 articles were found in the journal database but only 9 articles met the criteria and were included in this study. Qualitative research data show that nurses experience psychological, social, and emotional stress. However, nurses can prepare coping strategies using self-care, distraction, and peer and family support. In conclusion, nurses in charge of caring for COVID-19 patients have serious challenges in maintaining individual coping with negative psychological and social responses. Therefore, it is important to strengthen government support and policies to improve nurses' welfare.

Keywords: COVID-19, Qualitative, Experience, Frontline Nurse

## INTRODUCTION

World Health Organization (WHO) declared the outbreak of the SARS-CoV-2 virus that causes coronavirus disease (COVID-19) of international concern because it spread rapidly throughout the world (WHO, 2022a). Some of the common signs and symptoms of COVID-19 are fever, dry cough, and shortness of breath. These signs and symptoms indicate a serious problem with impaired function of the vital organs of the lungs in the respiratory system. This virus spreads through droplets, especially when people infected with COVID-19 cough and sneeze. Data shows that while talking, coughing or sneezing can transmit the virus from a few meters away, variations in particle size affect the distance it can spread through the air and coughs can reach longer distances than sneezes (Hassan et al., 2022).

Nurses are at the forefront of the health system involved in health checks and treatment during pandemics including COVID-19 (Xu & Stjernsw, 2021). Nurses have the largest number of health care providers worldwide, so they are identified as a population vulnerable to the COVID-19 virus (WHO, 2022). Nurses who are in close contact with COVID-19 patients spend most of their time with patients and thus face greater difficulties than other health workers, including doctors during the pandemic (Lee & Lee, 2020).

Frontline nurses carry out their duties with diligence and tend to ignore their own needs to combat emerging pandemics, unexpected natural disasters, and outbreaks of infectious diseases. Nursing staff operating on the front lines, such as emergency rooms, intensive care units, infection control departments, and other units caring for COVID-19 patients will have to work extra shifts during the pandemic (Fawaz & Itani, 2021). As a result, nurses are not only at risk of experiencing physical problems such as fever, cough, weakness, chest distress, hemoptysis, headache, and diarrhea but also psychological

problems. Research findings show nurses are very often in close contact with patients infected with COVID-19, so they experience anxiety and worry about transmitting the disease to their families. Nurses express fear, uncertainty, stress, and hardship during COVID-19, especially when they see other healthcare providers infected (Liu et al., 2020). In addition, nurses face ethical dilemmas in patient care management, such as determining which patients should be prioritized to get ventilator facilities in a very limited number.

Other research shows that during a pandemic, nurses experience high stress, depression, and anxiety, as well as Post Traumatic Stress Diseases (PTSD). In addition, their concentration, understanding, and decision-making abilities are impaired. The emotional burden experienced by nurses is especially related to the feeling of facing challenges and dangers. Along with these feelings, nurses also fulfill a strong obligation and responsibility to be frontline health care providers during the COVID-19 pandemic (Koren et al., 2021).

Another problem is that it is difficult to triage emergency patients suspected of being infected with COVID-19, thereby potentially increasing the spread of disease between patients, as well as between patients and nurses. In addition, in this challenging situation, nurses or health workers are required to demonstrate high performance in the absence of definitive COVID-19 treatment and an increasing number of cases (Setiawan et al., 2021). Fear of meeting with family, friends, and neighbors of health care workers causes psychological morbidity among health workers. These mental health problems not only affect the attention, understanding, and decision-making of Health workers which can hinder performance but also affect all aspects in the long term to control the pandemic and their health (Hong et al., 2020).

WHO shows that health workers face several psychosocial hazards during the COVID-19 pandemic, such as long working hours and high workloads that can cause worker fatigue and increased psychological stress with decreased mental health. Nurses are often on the cutting edge of a pandemic, and learning from their experience helps plan the management of similar situations in the future or provides information to those who will be affected by the current pandemic (Catania et al., 2021). During a pandemic, nurses are at high risk of infection, and those who are inexperienced, and not adequately prepared, are vulnerable to physical and psychological harm. Nurse experience is very helpful to understand the needs of nurses during an emergency (Tan et al., 2020). It is important to study the experience of nurses during the COVID-19 pandemic to determine how personnel needs can be handled properly (Zipf et al., 2021).

**RESEARCH METHODS**
**Study Design**
The Arksey and O'Malley framework is used as a scoping review method which consists of five steps, namely identification of questions and objectives, identification of relevant articles, extraction, analysis, and reporting of data described by Prism Flowcharts.

**Questions and Goals**
The question in this review is how the experiences of frontline nurses working in hospitals during a pandemic describe the experiences of frontline nurses in caring for COVID-19 patients during the pandemic.

**Search Strategy**

Researchers conduct data searches using operating on the front lines, such as emergency rooms, intensive care units, infection control departments, and other units treating COVID-19 patients, there are four journal databases consisting of Sage Journals, PubMed, Science Direct, and Proquest. Journal search using keywords 'COVID-19', 'Frontline-Nurse', 'Experience', 'Qualitative'.

**Eligibility Criteria**

Researchers include studies from the experiences of front-line nurses who have close contact with patients or who care for patients while working in hospitals during the COVID-19 pandemic, with the inclusion criteria of the original article, full text in English for 2020-2021 with a population of COVID-19 nurses who work in a hospital during a pandemic and the outcome is experience. Article reviews, quantitative research, letters to editors, comments, and discussion letters are excluded from this research.

**Study Identification and Selection**

This review identifies informational articles that discuss experiences with frontline nurses working in hospitals during a pandemic. The search strategy is used from each selected database according to the framework.

**Extraction of Data from Included Studies**

After the selection, each of the selected articles was read several times comprehensively by the researcher to capture all relevant information and ensure that no information was missed. Researchers summarize the findings into the following research domains: Experiences of frontline nurses in hospitals during a pandemic.

**RESULTS**

Table. 1
Literature Review

| Author Name, Article Title, Literature Type | Year | Aims | Findings |
|---|---|---|---|
| Villar et al., The lived experiences of frontline nurses during the coronavirus disease 2019 ( COVID-19 ) pandemic in Qatar: A qualitative study, Qualitative | 2021 | To explore the hands-on experience of frontline nurses providing care for COVID-19 patients in Qatar | A total of 30 nurses were interviewed; (76.7%) were deployed for >6 months. Three major themes were drawn from the analysis: (a) The challenges of working in a COVID-19 facility (sub-themes: working in a new context and new work environment, tired from the workload, struggles to wear personal protective equipment, fear of COVID-19, witnessing suffering); (b) Surviving COVID-19 (subthemes: keeping it safe with extra measures, changes in eating habits, teamwork, and friendship, social support); and (c) Nurse Resilience (subthemes: true calling, sense of purpose) |

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|---|---|---|---|
| Specht et al., Frontline nurses' experiences of working in a COVID- A qualitative study, An exploratory qualitative study | 2021 | To explore how nurses experience working in newly organized COVID-19 wards with high risk patients during a new and unknown pandemic | During the structural analysis, four themes were generated: (a) A challenging and uncertain situation, but also a positive experience (b) Professional and personal development (c) a Lack of rights for nurses during a pandemic (d) The gift itself or the desire for financial reward. |
| Moradi et al., Challenges experienced by ICU nurses throughout the provision of care for COVID-19 patients: A qualitative study, Qualitative descriptive | 2021 | To explore the challenges experienced by ICU nurses during the delivery of care for COVID-19 patients | Nurses reported the following four challenges throughout the provision of care for COVID-19 patients: 'organizational inefficiency in supporting nurses', 'physical exhaustion', 'living with uncertainty, and 'psychological burden of illness'. |
| Peng et al., The negative and positive psychological experience of frontline nurses in combatting COVID-19: A qualitative study, The consolidated criteria for reporting qualitative research guidelines (COREQ) | 2021 | To qualitatively explore the potential experiences among frontline nurses who have been battling COVID-19 infection since the outbreak | Twenty female frontline nurses (aged 24 to 43 years) were interviewed. Two broader themes, negative and positive, were identified. Negative experiences include rejection and helplessness (refusal to work on the front line, lack of confidence in work and helplessness), fear and anxiety, excessive loss, and other health problems. Positive experiences include improved interpersonal relationships, sublimation of faith and personal strength, and changes in the understanding of the meaning of life and new possibilities. |
| Lianget al., Nurses' experiences of providing care during the COVID-19 pandemic in Taiwan: A qualitative study. Qualitative descriptive | 2021 | To explore nurses' experiences in depth in providing care during the global COVID-19 pandemic | 1. Facing emerging challenges Environmental care and vigilance, Careful use of medical supplies, Challenges of sensitivity and trust 2. Struggling with uncertainty, fear, stigma, and workload Lives in danger Workload Stigma 3. Adapting to a changing environment: learning and innovation Appreciated and accepted adequate support Hygiene and hygiene behaviors are incorporated into daily habits. Adapt, keep learning, innovate,. |
| Gordon et al., The experiences of critical care nurses caring for patients with COVID-19 during the 2020 pandemic: A qualitative study, A qualitative descriptive | 2021 | To review the experience of critical care nurses caring for COVID-19 patients during the 2020 pandemic | Experiences among critical care nurses caring for patients diagnosed with COVID-19 are divided into five themes and subthemes. The emotions experienced were categorized into anxiety/stress, fear, helplessness, worry, and |

| | | | empathy. Physical symptoms are categorized into sleep disturbance, headache, discomfort, fatigue, and shortness of breath. The challenges of the care environment were categorized into nurses as surrogates, inability to provide comforting human connections, patient deaths, personal protective equipment (PPE), isolation, delays in care, changes to practice guidelines, and language. |
|---|---|---|---|
| Wang et al., Psychosocial Experiences of Front-Line Nurses Working During the COVID-19 Pandemic in Hubei, China: A Qualitative Study, Qualitative descriptive | 2022 | To describe the psychological experience of nurses involved in fighting the anti-COVID-19 pandemic in Hubei province | Our analysis yielded three main themes: (I) Context; (II) Psychological responses; and (III) Coping strategies (most participants identified appropriate coping strategies including relaxing activities and seeking social support). |
| Zhang et al., The experience of frontline nurses four months after COVID-19 rescue task in China: A qualitative study, Qualitative study | 2021 | To explore the experiences of frontline nurses four months after COVID-19 rescue duty | The findings showed that first-line nurses had some negative psychological effects, four months after the COVID-19 rescue task, such as recurring unconscious memories of the experience and feeling guilty and depressed. On the other hand, it also increases employability and increases the sense of pride and happiness as a nurse. One of the most important findings of this study was negative. experiences of front-line nurses four months after COVID-19 rescue work namely, recurring subconscious memories, guilt, hopelessness, insomnia, and other emotions. Similar to post-traumatic stress disorder (PTSD), it reverts to abnormal mental reactions to severe stress factors such as trauma, which is delayed and persistent psychosomatic reactions. |
| Jun & Rossemberg I Am a Nurse, Not a Martyr: Qualitative Investigation of Nurses' Experiences During Onset of the Coronavirus Pandemic, Qualitative descriptive study | 2022 | To explore professional experiences with nurses working in hospitals during the first wave of COVID-19 in the United States | Through the thematic analysis, four main themes emerged: (1) fear, (2) collective resilience through shared trauma, (3) uncharted territory, and (4) perceptions of disability. Nurses feel unprepared for the rapid changes caused by COVID-19, but they also take pride in a renewed sense of meaning in their work. While unit colleagues |

| | are a great source of strength, nurses still report disappointment, even feeling left out by their organization. These findings are invaluable for policy development and the establishment of prevention and early intervention strategies. |
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The search results obtained 424 articles from four journal databases (PubMed, Sage Journals, Proquest, Science Direct) with relevant article results after reviewing 35 titles and abstracts with 3 duplicates. Then, the exclusion of articles from abstracts that did not find the eligibility criteria was 15 articles. with potential articles 15 and 6 articles not available full text. From these stages, 9 articles met the criteria.

Twenty female frontline nurses (aged 24 to 43 years) were interviewed. Two broader themes, negative and positive, were identified. Negative experiences include rejection and helplessness (refusal to work on the front line, lack of confidence in work and helplessness), fear and anxiety, excessive loss, and other health problems. Positive experiences include improved interpersonal relationships, sublimation of faith and personal strength, and changes in the understanding of the meaning of life and new possibilities.

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## DISCUSSION
### Nurse's Emotional, Mental, and Physical Reaction During COVID-19

Nurses on the front line face many challenges that affect them physically, psychologically, and emotionally, several articles describe the various emotional states of nurses during the COVID-19 pandemic (Moradi et al., 2021). Nurses have an excessive workload where they have to treat more patients than usual, have more tasks to complete, and have to work long hours to care for critically ill patients, absence of leave, shortage of nurses, and busy shifts in providing care to patients. COVID-19 (Villar et al., 2021).

Fear and anxiety are experienced by almost all nurses because they work with real risks of infection and are in a special and different work environment (Jun & Rosemberg, 2022). Dealing with this virus face-to-face makes nurses fearful of becoming asymptomatic carriers of the virus who unwittingly spread it to patients, co-workers, family members, and people in their communities (Peng et al., 2021). As a result, many practice social isolation at home, for example, sleeping in separate rooms or moving to hotels or temporary accommodation provided by hospitals (Taylor et al., 2020).

Stress, worry, helplessness, and knowledge deficit are experienced by nurses in providing interventions in an isolated environment (Gordon et al., 2021). They are sometimes stigmatized or ostracized because of their profession, nurses also work with high intensity and psychological stress during the COVID-19 epidemic (Liang et al., 2021). As a result, many nurses feel depressed, feel guilty, and have other negative emotions (Zhang et al., 2021). Nurses are separated from their families for at least 3 weeks which makes them feel homesick and feel guilty for their families, nurses are also afraid of being infected and transmitting it to their families causing some kind of insecurity (Peng et al., 2021).

Nurses have to treat more patients than usual, have more tasks to complete, and have to work long hours to treat patients and most of the nurses feel tired due to overwork (Wang et al., 2022). Nurses also experienced changes in sleeping habits, felt discomfort, experienced headaches, shortness of breath due to the use of PPE, fever, cough, weakness, chest distress, hemoptysis, headaches, and diarrhea. Especially in the early stages of the pandemic, frontline nurses experience fatigue due to the surge in patients (Shaukat et al., 2020).

The nurse also revealed that wearing personal protective equipment is a tiring challenge that causes reduced ability and focuses when working with personal protective equipment, the weight of personal protective equipment, difficulty eating/drinking, and difficulty using the bathroom because of personal protective equipment (Andersson et al., 2022). Nurses and doctors also experience discrimination by wearing personal protective equipment which is a challenge, this can make nurses lose motivation in providing quality patient care (Moradi et al., 2021).

**Coping Strategies Supported Internally and Externally**

Nurse coping strategies in overcoming physical and psychological problems during the COVID-19 pandemic include self-care, peer support, and family and social support. Self-care is a relaxation activity, generally adopted for self-care, such as singing, watching movies, reading, exercising, and keeping a diary. Three participants reported that they learned stress relief techniques online. Some participants deliberately avoided receiving information about COVID-19 after work to ensure quality rest.

Nurses consider their colleagues as partners in the struggle, so they provide peer support among co-workers by giving each other encouragement and encouragement, this makes the struggle easier. In addition, talking and sharing experiences with people who have experienced the same thing can effectively reduce work pressure. Also, the support and advice of colleagues who have experienced a pandemic can help overcome fear.

The family and social support allow them to focus on patient care. Nurses make video calls with family or friends every day and share information and experiences. For nurses, talking to family or colleagues is a good approach to relaxing and letting go of worries (Wang et al., 2022).

**Development of Employability and Increased Professional Pride and Happiness**

Nurses have demonstrated that their skills, nursing knowledge, communication skills, and professional confidence have been strengthened by participating in the COVID-19 pandemic on the front lines. Many nurses say they have a sense of professional pride in being on the front line against COVID-19 and are doing something for patients. By participating in COVID-19 rescue work on the front lines, nurses feel the joy of being able to heal and save patients (Zhang et al., 2021).

Most nurses acquire developments such as new skills in the infection ward or intensive care unit, and the development of new strategies to provide a better quality of care. One of them is the surrogate family where the role played by the nurse is responsible for the patient because the family cannot visit them due to the high risk of infection. This surrogate family provides a lot of support including meeting daily needs, providing psychological support, acting as an intermediary between the patient and the doctor, developing an individualized rehabilitation plan, and follow-up after discharge. The development of nurses includes strengthening willpower, having a more positive attitude, and awareness of the importance of health and family (Wang et al., 2022).

Nurses need to make continuous adaptations along with the development of knowledge about COVID-19. Adaptation includes protecting oneself with adequate equipment and implementing further protection for patients, family members, and the community. By getting social support, following scientific plans, and policies from the Ministry of Health and hospital administration (Liang, 2021).

## CONCLUSION

The COVID-19 is a challenge for nurses work the front lines of the pandemic causing them to experience negative psychological, social, and emotional stress at work. The results about the need for psychological and social support for nurses to maintain their well-being which will affect the outcomes and efficiency of nursing care. Therefore, it is important to strengthen government support and policies in improving the welfare of nurses.

## SUGGESTIONS

As the COVID-19 pandemic continues, there are more qualitative studies available for consideration. The next steps in research could include something broader about nurses' experiences working during the COVID-19 pandemic, followed by other research specifically focused on both intervention and implementation.

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