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COVID-19 Pandemic and Mental Health of Nurses: Impact on International Health Security

Gonca Ustun

Abstract

COVID-19 was first detected in Wuhan, China, in December 2019 and spread rapidly in many other countries. This situation, defined now as a pandemic, has turned into a worldwide public health problem that threatens health security, especially that of healthcare professionals. Nurses, particularly those at the forefront of healthcare and directly involved in COVID-19 patient care, have been affected not only physically but also mentally. Because nurses have longer communication and interaction times with patients, they are more concerned about becoming infected or infecting others. Nurses have the highest level of occupational stress compared to other groups and are accordingly subjected to anxiety and depression. For many reasons such as intense working hours, working in a shift system, an insufficient number of personnel, severe conditions of the unit, being in constant contact with patients and their relatives and showing intense empathy for them, nurses experience primary and secondary traumatic stress, job burnout, compassion fatigue, and moral injuries. For this reason, conducting appropriate prevention activities and planning prevention strategies for future pandemic situations is important to support nurses psychologically and to protect their mental health.

Keywords: COVID-19, health security, mental health, mental problems, nurse, pandemic, psychological empowerment, resilience

1. Introduction

Coronavirus disease (COVID-19) is an infectious respiratory tract infection with common symptoms including high fever, dry cough, and fatigue; it is caused by a newly discovered coronavirus (SARS-CoV-2). The novel coronavirus was first detected in Wuhan, China's Hubei province in December 2019 and spread rapidly in China, and then, worldwide. The World Health Organization (WHO) declared the COVID-19 epidemic a pandemic on March 11, 2020 [1]. A total of 70,829,855 confirmed cases of COVID-19 and 1,605,091 deaths had been reported worldwide as of 10:25 AM, December 14, 2020, with cases continuing to increase [2].

The COVID-19 epidemic is unprecedented in modern times and has become a major public health problem, not only for China but worldwide [3–6]. The increasing number of cases posed a major challenge to hospitals treating individuals with

COVID-19 symptoms and has resulted in a serious shortage of medical supplies and health personnel, especially in intensive care units [7–9]. During the COVID-19 pandemic, healthcare workers were infected and forced to fight against a deadly virus while lacking personal protective equipment [9–11]. The International Council of Nurses (ICN) reported that approximately 10% of worldwide cases are healthcare workers and that more than 20,000 healthcare workers were infected. It was reported that the epidemic cost the lives of at least 1,500 nurses and many other healthcare workers [12].

This fatal situation has caused all healthcare professionals, especially nurses who work directly with sick or quarantined individuals, to face serious physical and psychological problems. Working with protective equipment that restricts breathing and movement makes it difficult to meet basic physiological needs such as eating, drinking, going to the toilet, and sleeping [13–15]. In addition, conditions such as limited hospital resources, long working hours, physical fatigue, infection risk, lack of protective equipment, disruption of sleep patterns, loneliness, and being separated from their families cause nurses' mental health also to be at risk [4, 8, 16]. All these stressors cause noticeable psychological changes for nurses working closely with patients [6, 8, 15]. It has been reported that nurses experience major mental problems such as primary and secondary traumatic stress, job burnout, compassion fatigue, and moral injury during this process [4, 17–26].

Although it is difficult to provide both safe physical environmental conditions and mental security, having a safe work environment is the right of every health worker. Nevertheless, although physical security measures are prioritized for nurses serving in difficult conditions, mental security measures are either insufficient or ignored completely, despite nurses' mental health being very important for controlling an epidemic [15, 16, 27]. For this reason, conducting appropriate prevention activities and planning prevention strategies for future pandemic situations is important to support nurses psychologically and to protect their mental health. This study discusses the mental problems of nurses caring for COVID-19 patients and psychological empowerment studies for nurses; it will make an important contribution to the health security of nurses.

2. Methods

This chapter deals with the mental problems faced by nurses during the COVID-19 pandemic at an international level. Academic literature and other public databases for the year 2020, when COVID-19 cases started to appear and studies on the subject were carried out all over the world, were examined. Articles published in electronic databases including CINAHL, Cochrane Library, PubMed, Web of Science, Science Direct and Google Scholar, Scopus and related internet websites (WHO, ICN and APA) were used. Firstly, a comprehensive search of peer-reviewed journals were completed based on a wide range of key terms including “COVID-19”, “health security”, “mental health”, “mental problems”, “nurse”, “pandemic”, “psychological empowerment”, “psychological resilience”, “primary traumatic stress”, “secondary traumatic stress”, “burnout”, “compassion fatigue”, and “moral injury”.

The literature search was carried out between November–December 2020 and 140 academic studies were reached as a result of the searching. The data were obtained from 53 international papers and 3 different websites (WHO, ICN and APA) that address the mental problems of COVID-19 nurses and contain prevention and strengthening studies on this issue that threatens international health

safety were included in the study. In line with the results obtained from the studies, the mental problems experienced by COVID-19 nurses were grouped under five headings, and some suggestions about protect and strengthen mental health at international level were presented.

3. Nursing in the COVID-19 pandemic

Nurses are anonymous heroes, playing critical roles in disease prevention and diagnosis, and providing primary health care services including prevention, treatment, and rehabilitation [28]. They have been and continue to be at the forefront of combating infectious diseases such as COVID-19, leading the way in developing best practices in disease management and clinical security [13, 29, 30]. However, despite this obvious situation, for centuries nurses have found themselves trying to explain the importance of their profession, the reason for its existence, and its indispensability.

The World Health Assembly has announced the year 2020 as the “International Year of Nurses and Midwives” [31]. Because of the COVID-19 pandemic, the nursing profession is on the world agenda, just as it suits the name of the year, and nurses have started to show that they are “A Pioneering Voice in World Health” [32]. This year, which created a global awareness for nurses, once again emphasized the importance of necessary health security measures in harmony with the changing roles of nurses.

3.1 Changing roles of nurses in the pandemic

The high prevalence, highly contagious nature, and associated morbidity and mortality rates of COVID-19 in the general population of many countries create an unprecedented demand for health and social care services worldwide [13, 14]. This demand has transformed the role of nurses beyond patient care, which is regarded as a security boat that integrates different professions and communities to reduce the risk of the COVID-19 pandemic and ensure effective communication [13]. The addition of new ways of nursing, which is already demanding in terms of attention and care, has made working in the COVID-19 environment extremely stressful. Nurses try to adapt to new protocols to the “new normal”, beyond just experiencing an increase in the intensity of their work in this process. Concomitantly, due to the increasing number of patients, the need for more nurses in clinics, emergency rooms and intensive care units where care is provided for COVID-19, and the interruption of work due to the infection of health personnel in this process, has constituted an extra workload for all healthcare professionals [14].

Nurses who work at maximum capacity also experience various problems such as deciding which critically ill patients may be allocated to the intensive care unit and which patients can be provided with a respiratory device; they accompany the end-of-life journey of both the patient and the family in the face of deterioration faster than they are accustomed to [33–35]. At the same time, because of isolation precautions and rules, patient relatives are not able to be with the patients, which results in nurses’ providing the necessary support and establishing remote communication between the patient and relatives, giving nurses additional responsibilities [36]. Protective measures such as masks, visors, and social distancing applied in this process make interaction difficult and patients, and nurses suffer from communication problems such as not being able to see each other’s faces or hear what they are saying [5, 14].

In addition, factors such as limited resources of hospitals, lack of protective equipment, longer shifts, increased workload, new tasks and procedures, exposure to COVID-19 and risk of transmitting the infection, inadequate access to COVID-19 testing if symptoms develop, uncertainty as to whether their organization will support their needs if infection develops, support for additional needs (such as food, accommodation, transportation) as working hours increase, obligation to work in new units (such as those who are not intensive care nurses to serve in the intensive care unit), dilemmas with teammates, prioritizing care for specific patients, watching patients die alone, different pathologies seen in addition to COVID-19, neglect of personal and family needs, social distancing from loved ones, inadequate communication, and exposure to insufficient information make nurses' compliance even more difficult [8, 11, 37]. Nurses experience many complications at the same time in this process, such as inadequacy, uncertainty, fear, and change, and not only need physical but also mental support.

3.2 International health security of nurses in the pandemic

When determining innovative ways to provide an adequate workforce during the pandemic period, it is important that everything applied is safe for staff and patients [30]. The WHO called on governments and healthcare leaders to address persistent threats to the health and security of healthcare workers and patients in the COVID-19 pandemic and emphasized that no country, hospital, or clinic can keep their patients safe unless they first keep healthcare workers safe [38]. In this regard, the importance of mental security as well as physical security has been emphasized. The psychological effects of the infection itself should not be neglected for healthcare professionals.

While the COVID-19 crisis continues, situations such as the dismissal of nurses in some areas, reducing workforce and granting leaves, calling back retired nurses for help due to the growing demand for nursing services to combat the COVID-19 outbreak, or suspension of leave has made health care even more difficult [13, 35, 39]. Most of the nurses were not allowed to go home due to lack of staff: to meet their staffing needs many organizations have asked healthcare professionals treating COVID-19 patients to continue working until they show symptoms of the disease [13].

Although these different regulations made by governments are important for the protection of groups and society at risk of COVID-19 infection, it supports the stigmatization and exclusion of nurses [24, 40, 41]. Being able to report difficulties without worrying about being stigmatized or blamed is very important for both nurses and others to dare seek help [5, 14, 42]. Nurses' mental problems should be detected early, and their access to mental health services should be provided for the security of the entire society, not just nurses or healthcare professionals [35].

4. Mental problems of COVID-19 nurses

Nurses are not only exposed to physical risks, but have also faced concerns over the impact of COVID-19 on their own lives and families, as well as long working hours and work environment security [13, 19]. The susceptibility to psychiatric disorders has increased, especially in nurses who directly care for infectious patients in critical and intensive care units [7, 30]. Studies conducted in centers and units providing COVID-19 care in different parts of the world have reported that the mental health of nurses has been significantly affected and that nurses experience psychological problems [6, 15, 43–45].

It has been determined that the most common psychological effects in nurses were fear, despair, anxiety, depression, and post-traumatic stress symptoms [19–21, 37, 46, 47]. Worldwide studies on mental problems that occur as a cause or consequence of these psychiatric disorders showed that nurses are facing primary and secondary traumatic stress, job burnout, compassion fatigue and moral injury [4, 17–26]. To better understand the mental problems seen in nurses in the pandemic it is necessary to define these concepts and carry out studies within the scope of combating these problems.

4.1 Primary traumatic stress

Primary (direct) traumatic stress, stress that is directly perceived by the individual, is a threat to health security, along with time constraints, patient expectations, lack of social support, and inadequate coping [25]. Among the factors that directly lead to stress for nurses in the COVID-19 pandemic are staff shortages, lack of personal protective equipment, being in an unfamiliar environment or care system, and concerns about lack of organizational support. In addition, the psychological conflict between health care workers' responsibility to care for patients and their behavior to protect themselves from a potentially deadly virus can also lead to stress [14].

Nurses who are at bedside 24 hours a day, seven days a week, have the highest occupational stress compared to other groups [14]. Studies on COVID-19 show that work-related stress is especially prominent in nurses [4, 20, 21, 24]. Work-related stress in nurses leads to decreased physical function, emotional exhaustion, desensitization, decreased personal success, low job satisfaction, and personnel transfer [25]. Although nurses seem to function in this process, they also experience accompanying physical and psychological symptoms due to background long-term stress exposure.

4.2 Secondary traumatic stress

Secondary (indirect) traumatic stress, defined as the stress of helping people who are in pain or who were traumatized and recovered, develops without direct sensory traces because of long-term exposure of the helping individual to the traumatic event and the continuous repetition of an event with unpleasant details [25, 48]. The more traumatic the event and the greater the contact with the patient, the greater the risk of secondary traumatic stress formation [24]. It emerges due to risk factors such as the unpredictability and increased infection rate during the COVID-19 emergency, repeated exposure to trauma, and witnessing patients suffering. In addition, a more intense empathic approach to patients that causes greater vulnerability of healthcare workers also leads to secondary traumatic stress [10, 24, 40].

Secondary traumatic stress, which is considered an occupational hazard, is very common in nurses, especially those working in emergency, oncology, psychiatry, and pediatrics departments [25]. Healthcare workers who directly encountered COVID-19 patients intensive care units and in critical centers reserved for COVID-19, experienced higher secondary traumatic stress than others. [17, 18, 25]. Secondary trauma has been studied more than primary trauma. Its prevalence brings with it other serious problems such as anorexia, insomnia, fatigue, anger, apathy, unwillingness, hopelessness and depression.

4.3 Job burnout

Burnout is a psychological syndrome characterized by emotional exhaustion associated with prolonged exposure to occupational stress (depletion of emotional

resources), desensitization (developing cynical attitudes about patients), and decreased professional success (a sense of negative self-evaluation) [18, 49, 50]. The deadly and uncontrollable nature of COVID-19 with currently no known effective cure and the relatively high infection and mortality rate among healthcare workers trigger feelings of anxiety and stress. Problems such as social stigma, lack of personal protective equipment, and heavy workload pave the way for burnout in healthcare workers [49].

Recent studies report that nurses caring for COVID-19 patients experience more burnout than others [18, 19, 23, 25]. Burnout can have serious consequences for patients, healthcare professionals, and institutions. This not only results in poor physical and mental health consequences, lack of motivation, absenteeism, and low morale, but also in deterioration of the quality of care provided by the staff affected, decrease in patients' satisfaction levels, an increase in health-related infections, and high mortality among patients [18, 49].

4.4 Compassion fatigue

Compassion fatigue is seen as contextually interchangeable with secondary traumatic stress; it is generally known as a combination of secondary traumatic stress and burnout symptoms [8]. Compassion fatigue is a job-related stress response that is considered a "maintenance cost" in healthcare workers. It is closely related to professional satisfaction, personnel transfer rate, and nursing quality [7, 25]. During pandemics such as COVID-19, intensive care nurses witness patient suffering and death more frequently than before, and in addition are responsible for decisions regarding allocation and use of resources, which is why they carry a high risk of compassion fatigue [7].

Studies report that among all healthcare professionals, nurses who provide uninterrupted care to patients and who show an approach with empathy are at risk for compassion fatigue and that their health status, job performance, and professional satisfaction levels are affected [8, 25]. It was seen that nurses, who have been in contact and interacting with COVID-19 patients for a long time, also experience compassion fatigue [19, 23, 25]. Nurses experiencing compassion fatigue may use harmful coping methods such as absenteeism, leaving work, despondency, social isolation, alcohol-substance use, and overeating [7].

4.5 Moral injury

Moral injury is a concept used to describe psychological distress caused by acts that violate a person's ethical or moral rules or acts that lack said rules [8, 51]. The pandemic is a difficult time during which healthcare professionals experience dilemmas in the triage of COVID-19 patients, for instance where they must decide which of two patients will get the emergency room's only remaining ventilator. As a result of this decision the nurse may experience feelings such as guilt, shame, or remorse, which will negatively affect all aspects of life. Although the health worker tells himself/herself that he/she is following the protocol and doing his/her best, he/she will think that he/she has violated moral values [14, 52].

All healthcare workers and all frontline workers such as emergency first responders are subject to moral injury during this time [51, 52]. However, the measurement tools and studies to diagnose the painful and powerful internal struggles experienced by healthcare workers during the COVID-19 pandemic and the resulting moral injury are insufficient [52, 53], although some scales have been developed to describe this process [22, 26]. Moral injury negatively affects ability to

function and performance; it can also lead to depression and post-traumatic stress disorder [5, 52]. In addition, nurses are prone to quit their jobs if they feel that they are not sufficiently supported by organizations and the government [14].

5. Protecting and strengthening the mental health of COVID-19 nurses

The topic of focusing on the mental health of health professionals has been brought to the agenda during the COVID-19 pandemic [54]. It is necessary to have spiritual endurance to overcome this unprecedented situation: nurses have the need be supported by the employer, the team, and professional and community resources. During this time, the applause given to healthcare professionals every day of the week across Europe has been a morale boost for healthcare professionals. However, this is not a satisfactory solution. In addition to that, healthcare professionals need to feel that their needs are met and that they are safe in all environments [14]. In this regard, the development of psychological resilience of nurses through both individual, social, and organizational studies comes to the fore.

Resilience (psychological resilience) is defined as the process and result of successfully adapting to difficult life experiences through mental, emotional, and behavioral flexibility and adaptation to internal and external demands. The ways individuals see and relate to the world in the face of problems, the availability and quality of social resources, and certain coping strategies contribute to adaptation [55]. Psychological resilience, which increases the ability to cope with and resist difficulties, ensures that healthcare workers are less affected by the consequences of the stress they face and are more successful in crisis management, and it helps them recover more easily after the pandemic [56]. At the same time, resilience plays a role as a protective factor so that mental problems might not develop in all individuals exposed to high adverse effects or crisis situations [37, 57].

When all these factors are considered, it is seen that high levels of psychological resilience are important for healthcare workers to effectively combat COVID-19 infection and maintain mental health. To increase nurses' psychological resilience, needs should be determined early, initiatives should be made to reduce or eliminate factors that have negative effects on mental health, and approaches to increase mental health protective factors should be determined [15, 25, 48, 56, 58]. Taking effective psychological support measures, and removing and balancing the fear, anxiety or sadness caused by the epidemic will help healthcare professionals to feel psychologically safe. This may also improve crisis resistance, adaptation, and prevent mental disorders [43].

Studies have shown that nurses battling against the COVID-19 epidemic need mental support [4, 17–26]. It is necessary to determine and implement appropriate and effective strategies for the development of psychological resilience and mental health protection of nurses. For future epidemics like COVID-19, protective and supportive measures to protect health professionals' mental health should be taken in addition to measures to protect their physical health. Organizational, managerial, physiological, social, and psychological protective measures are needed in this regard.

5.1 Organizational support

Organizational support, or the degree to which an organization provides resources, empowerment, encouragement, and communication for an individual

to perform their functions effectively, is a vital factor that also contributes to organizational success. There is a positive relationship between higher organizational support levels, patient satisfaction in nurses, and positive outcomes [59]. Resilience intervention implemented in response to the COVID-19 epidemic, focuses on self-care, self-efficacy, and social relationships, as well as providing quick access to mental health consultation and support when needed [60]. Nine evidence-based organizational strategies are recommended to encourage participation of health system leaders and managers and to reduce burnout: acknowledging and evaluating the problem; harnessing the power of effective leadership; developing, and implementing targeted interventions; improving the community at work; using rewards and incentives wisely; aligning values and strengthening culture; promoting flexibility and work-life integration; providing resources to promote endurance and self-care; and facilitating and financing organizational science [61].

5.2 Managerial support

Providing managerial support in this period is of critical importance. Strategies must be developed so that health system leaders and managers may stay well in these turbulent and sad times, and so that organizations become able to lead the repair and revitalization of a post-COVID-19 world [61]. Nurse managers play a vital role in providing evidence-based measures, supportive organizational policies, and a safe and secure work environment to support the mental, psychological, and emotional health of nurses, thereby relieving their fears or anxieties [4, 59]. Managers should also assess the mental state of nurses and identify high risk individuals, provide psychological support and counseling, and collaborate with expert teams to provide professional psychological services when needed [43]. In this regard, managers need to adopt the issue of mental security of nurses with a holistic approach that recognizes the broader impact of the emotional distress caused by COVID-19. This will lead nurses to feel safe psychologically and will encourage them to communicate security concerns and problem-solving strategies to managers [11].

5.3 Physiological support

To eliminate psychological stress responses to the COVID-19 pandemic and to create personal resilience, it is important to implement physical measures. The working environment and daily life should be optimized to support proper nutrition, rest, sleep, and security requirements [5, 14, 60]. Also, hospitals should be careful about physical security issues in addition to meeting basic physiological needs, such as busy working times and provide protective equipment against infections [8, 61]. Ensuring physical security will help prevent symptoms such as fear, anxiety, fatigue, and exhaustion, and thereby protect mental health.

5.4 Social support

There is good evidence that social support has a stronger effect than material support and that it is often protective for mental health [48, 51]. Social and peer support has been identified as an important protective factor against trauma effect and general mental well-being [8]. Start and end of shifts create natural opportunities for interactions to develop friendship and teamwork. Social support should be developed within the team, and friend relationships of potential shift colleagues should be strengthened for them to monitor each other's

well-being [5, 14]. Social support has a positive effect on nurses' professional satisfaction, commitment to work, health, and well-being. Sufficient social support is needed for healthcare professionals for them to effectively manage stressful events, including emergencies, disasters, and infectious disease outbreaks [59]. The social isolation measures taken to minimize the transmission in the COVID-19 pandemic forces nurses to stay away from family, social circles, and team colleagues, which makes it difficult for nurses to reach the adequate support system that is very important.

5.5 Psychological support

With a few exceptions, hospitals all around the world are generally not designed or adaptable to provide continued emotional support to its staff. Despite that, there are many services that a healthcare worker can use when he or she feels in distress. However, these systems are rarely used [54]. In many countries, consultancy teams that include psychiatrists have been established to reduce the effects of COVID-19, and healthcare professionals have been provided with counseling and psychotherapy services; various mental support programs have also been developed to address the mental health problems among health professionals [33, 50].

Wuhan University RenMin Hospital and the Mental Health Center in Wuhan formed psychological intervention teams that included four groups of healthcare personnel. The first, the psychosocial response team (consisting of hospital directors and press officers), is the team that coordinates the work and promotional tasks of the management team. The second, the psychological intervention technical support team (consisting of senior psychological intervention professionals), is responsible for formulating psychological intervention materials and guidelines and providing technical guidance and supervision. The third, psychological intervention medical team, consisting mostly of psychiatrists, participate in clinical psychological intervention for healthcare professionals and patients. The fourth group, the psychological helpline team (consisting of volunteers trained in psychological assistance to cope with the COVID-19 pandemic), provides telephone guidance for dealing with mental health problems [16].

Psychiatrists have published various guidelines to prevent the development of mental problems worldwide and promote social and peer support, psychological support and resilience programs have been developed, and online and telephone mental support lines have been established [5, 14, 33, 39, 54]. In addition, consultation liaison psychiatric support was emphasized concerning the necessity for awareness studies, nutritional and exercise supplement, communication skills, stress management and relaxation skills, psychoeducational interventions, small group therapies, cognitive restructuring, yoga, music and art therapy, grief counseling, pharmacological treatment, and suicide protocols for severe cases. [41, 42].

As a result, the COVID-19 pandemic has shown us that there are numerous resilience initiatives in various forms, both those specific to COVID-19 and those more general. Digital interventions common in recent years are increasingly used to improve healthcare and outcomes. Within the scope of COVID-19 measures, it has been discovered that it is not always possible to work elbow to elbow, and the best applications can be carried out without contact are possible through online environments. It is very important to develop studies in this regard, considering their positive effect on nurses.

In **Table 1**, the causes and results of the mental problems experienced by nurses in the COVID-19 pandemic are stated, and attempts to protect and strengthen the mental health of nurses are summarized.

Mental problems	Causes	Effects	Interventions
Primary traumatic stress	<ul style="list-style-type: none">• 24 h/7d bedside presence• Staff shortage• Lack of personal protective equipment• An unusual environment• Change of maintenance system• Lack of organizational support	<ul style="list-style-type: none">• Decreased physical functions• Emotional exhaustion• Desensitization• Decline in personal success• Low job satisfaction• Personnel transfer	<ul style="list-style-type: none">• Organizational support should be provided for the effective use of resources in personal and professional terms• The mental status of nurses should be evaluated by the managers and if necessary, they should be provided with professional support• Nutrition, rest, sleep and security needs should be supported• Intensive working periods should be planned in accordance with the health safety of nurses• Adequate protective equipment should be provided• Social support within the team should be developed and friendships should be strengthened• Counseling and psychotherapy services should be provided to nurses• Social support, peer support, psychological support and resilience programs should be developed• Online and telephone mental support lines should be established• Awareness studies should be done• Communication skills, stress management and relaxation skills should be developed
Secondary traumatic stress	<ul style="list-style-type: none">• Uncertainty about COVID-19• Increasing number of cases• Repeated exposure to trauma• Witnessing patients suffering• Intense empathic approach to patients	<ul style="list-style-type: none">• Anorexia• Insomnia• Fatigue• Anger• Apathy• Unwillingness• Hopelessness• Depression	
Job burnout	<ul style="list-style-type: none">• The deadly and uncontrollable nature of COVID-19• Increasing infection and mortality rates among healthcare workers• Lack of personal protective equipment• Heavy workload• Social stigma	<ul style="list-style-type: none">• Poor physical and mental health problems• Lack of motivation• Absenteeism• Low morale• Deterioration of the quality of care service• Decrease in patients' satisfaction levels.• Increase in infections• High mortality among patients	
Compassion fatigue	<ul style="list-style-type: none">• Witnessing the suffering and death of the patient• Responsibility for decisions regarding the allocation and use of resources among patients• Providing uninterrupted care to patients• Intense empathic approach to patients• Prolonged communication and interaction with patients	<ul style="list-style-type: none">• Absenteeism• Quit job• Low morale• Social isolation• Harmful coping behaviors such as alcohol-substance use and binge eating	<ul style="list-style-type: none">• Psychoeducational interventions, small group therapies, cognitive restructuring programs should be implemented• Yoga, music and art therapy should be applied
Moral injury	<ul style="list-style-type: none">• Dilemmas in the triage of COVID-19 patients, responsibility for decisions regarding the allocation and use of resources among patients	<ul style="list-style-type: none">• Feelings of guilt, shame, or remorse.• Violate moral values• Decreased ability to function and performance• Quit job• Depression• Post-traumatic stress disorder	

Table 1.
Mental problems of COVID-19 nurses and prevention strategies.

6. Conclusion

Combating epidemics is an important responsibility that both affects all layers of society deeply and increases the physical and psychological burden of healthcare workers. Nurses caring for COVID-19 patients experience serious mental problems because they must help individuals in pain, stay with them, provide help for relatives, and perhaps witness a patient's death. Although physical security measures such as maintaining adequate protective equipment are prioritized in this process, it is observed that mental security measures are mostly ignored.

Ensuring and maintaining nurses' security is an important indicator of the effective management of the pandemic process. For this reason, it is necessary to determine the factors that may cause mental problems in nurses, diagnose these problems, provide appropriate physical and working conditions, and maintain psychosocial support. For this to happen, it is necessary to provide both emergency psychological first aid and long-term psychological assistance services and carry out follow-up studies. It is suggested that institutions and leaders follow policies on professional mental health support, initiate appropriate studies for services to be provided in the context of future crises, and create an action plan.

Focusing on supporting nurses during and after the pandemic is of great importance for the future of nursing and the security of society. It is also expected that this support for the welfare of nurses will continue when the health care system returns to pre-pandemic condition. To protect and maintain the well-being of nurses will enable them to assume their caring roles and responsibilities wherever they are located practice more effectively and competently. In this regard, that the role of nurses in the universal healthcare system involves a very important key role in meeting the care needs of the society and ensuring security, should not be forgotten.

Conflict of interest

There is no conflict of interest.


Author details

Gonca Ustun

Department of Psychiatric Nursing, Faculty of Health Sciences, Amasya University, Amasya, Turkey

*Address all correspondence to: gonca_ustun@hotmail.com

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