The Psychosocial Responses among Clinical Nurses for Caring Patients of COVID-19: A Literature Review

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ABSTRACT

Coronavirus Disease 2019 (COVID-19) had an impact on a health crisis, thus posing a major threat to the health of nurses. Nurses was at risk for psychosocial problems while caring for COVID-19 patients. The aims of this study was to analyzed the psychosocial aspects that occured to nurses when caring for COVID-19 patients during the pandemic. Searching articles used five databases such as Google Scholar, Proquest, ScienceDirect, PubMed, and Taylor & Francis Online. Research designs used cross-sectional and qualitative. The findings in this study were divided into two themes, namely the form of nurses psychosocial responses when caring for COVID-19 patients such as viral contamination, abnormal separation, decreased immunity, social pressure, and uncertainty and strategies for nurses' psychosocial handling efforts when caring for patients COVID-19 such as social support, participation in training, support groups, calming activities, and improving the quality of resources. The condition of psychosocial problems experienced by nurses when caring for COVID-19 patients will be expected to be able to carry out effective coping strategies such as promotive, preventive, curative, and rehabilitative so that nurses are able to adapt during pandemic to improve the quality of effective services.

Keywords: COVID-19, nurses, psychosocial

INTRODUCTION

Coronavirus Disease 2019 (COVID-19) was a disease that spreads very quickly, causing health crises in various parts of the world (Kackin et al., 2020). The COVID-19 disease outbreak first appeared in Wuhan, China which continued to spread rapidly throughout the world, so that at different intervals COVID-19 attacked various countries in a short time (Kackin et al., 2020). The high risk of transmission poses a major threat to the health of nurses and other medical personnel (Huang et al., 2020). The spread of COVID-19 causes the number of cases of COVID-19 to increase rapidly, this has an impact on the accumulation of COVID-19 patients so that the demand for health services in hospitals was increasing.

The COVID-19 pandemic shows the number of cases that continues to grow every day in international health. The latest report citing Worldometers data, on October 23, 2020 the number of cases of COVID-19 had infected as many as 41,932,514 people worldwide, with the first rank being the United States (Satuan Tugas Penanganan, 2020). Positive cases in Indonesia on February 24, 2021 have reached 1,306,141 cases, with a total death toll of 35,254 cases (Satuan Tugas Penanganan, 2020). In Hubei Province, 12.5% (64 of 512) health workers experienced psychosocial stress which had a more severe impact on health workers who had direct contact with infected patients (Liu et al., 2020; Cabarkapa et al., 2020).

Psychosocial was a mental or emotional health condition of nurses related to social conditions or conditions of the work environment (Lubis, 2020). Health workers who work at the forefront are vulnerable to psychosocial stress and belong to a high-risk group (Dubey et al., 2020). In a developing country like India, the healthcare system is already overburdened, as the rise in COVID-19 cases tends to trigger psychological stress among doctors and nurses (Dubey et al., 2020). This psychological reaction was a normal reaction during a pandemic, but the widespread and rapid spread of COVID-19, unclear treatment, infected health workers, increased workload.

Majority of current research focuses on the epidemiology and characteristics of spreading and infected COVID-19 cases. Nurses play a role in comprehensive nursing care both during the pandemic and before the pandemic. The role of

nurses when caring for COVID-19 patients is to identify, treat, monitor, and evaluate patients who are confirmed positive for COVID-19. Work with high frequency and intensity, increased workload, continuous use of personal protective equipment, increased working time, and close contact with patients result in occupational hazards and the mental quality of nurses. Current conditions will further increase the psychosocial pressure of nurses so that it affects the psychological well-being of nurses and the social environment of nurses which leads to barriers to the quality of care provided to patients. Therefore, it is necessary to summarize the literature that aims to identify the form of nurses' psychosocial responses and strategies for nurses' psychosocial handling efforts when treating COVID-19 patients. Thus, it can be seen the current condition of nurses so that they can restore the form of nurse services to patients more effectively, minimize the increase in the number of cases of nurse welfare and increase the responsibility of nurses in caring for COVID-19 patients. The aim of this study was to analyzed the psychosocial aspects that occur to nurses when caring for COVID-19 patients during the pandemic.

METHOD

Research Design and Article Criteria

The type of literature review research design used is narrative literature review or narrative literature review. Inclusion criteria include: a) The population in the article to be analyzed is nurses who treat COVID-19 patients. b) The design of the research articles analyzed using a quantitative approach includes descriptive, survey, quasi-experimental study, case control study and cross-sectional and qualitative approaches include survey descriptive, descriptive qualitative, descriptive phenomenological, and meta-ethnography. c) The topic of the article discusses the psychosocial response of nurses who are caring for COVID-19 patients. d) The articles used are from abroad and domestically in English or Indonesian. e) The year of publication of the article 2019. f) The article used is full-text. While the exclusion criteria include: a) Health workers who do not treat COVID-19 patients. b) Types of literature review articles and systematic reviews. c) Unopenable paid articles. The literature search in this literature review uses five databases, namely overseas and domestic. Overseas databases are ProQuest, PubMed, Taylor & Francis Online, and ScienceDirect. While the domestic database is Google Scholar. The five databases are used to further expand the search and the depth of the topics taken. The search for articles was carried out in April – May 2021.

Literature Search Strategy

Searching published articles in several databases requires appropriate keywords based on Medical Subject Headings (MeSH) and combining them with Boolean Operators including "AND", "OR", or "NOT" (Halim & Hawlader, 2017). The following are literature keywords compiled based on PICOS using MeSH. The English keywords listed are "Psychosocial" OR "Psychosocial Factors" AND "Nurses" OR "Nursing Care" AND "Patients" OR "Clients" AND "COVID-19 Virus Disease" OR "2019 Novel Coronavirus Disease" AND "Handling " OR "Overcome" AND "Hospitals". While the Indonesian keywords listed are "Psikososial" OR "Faktor Psikososial" AND "Perawat" OR "Keperawatan" AND "Pasien" OR "Klien" AND "COVID-19 Virus Disease" OR "2019 Novel Coronavirus Disease" AND "Penanganan " OR "Mengatasi" AND "Rumah Sakit".
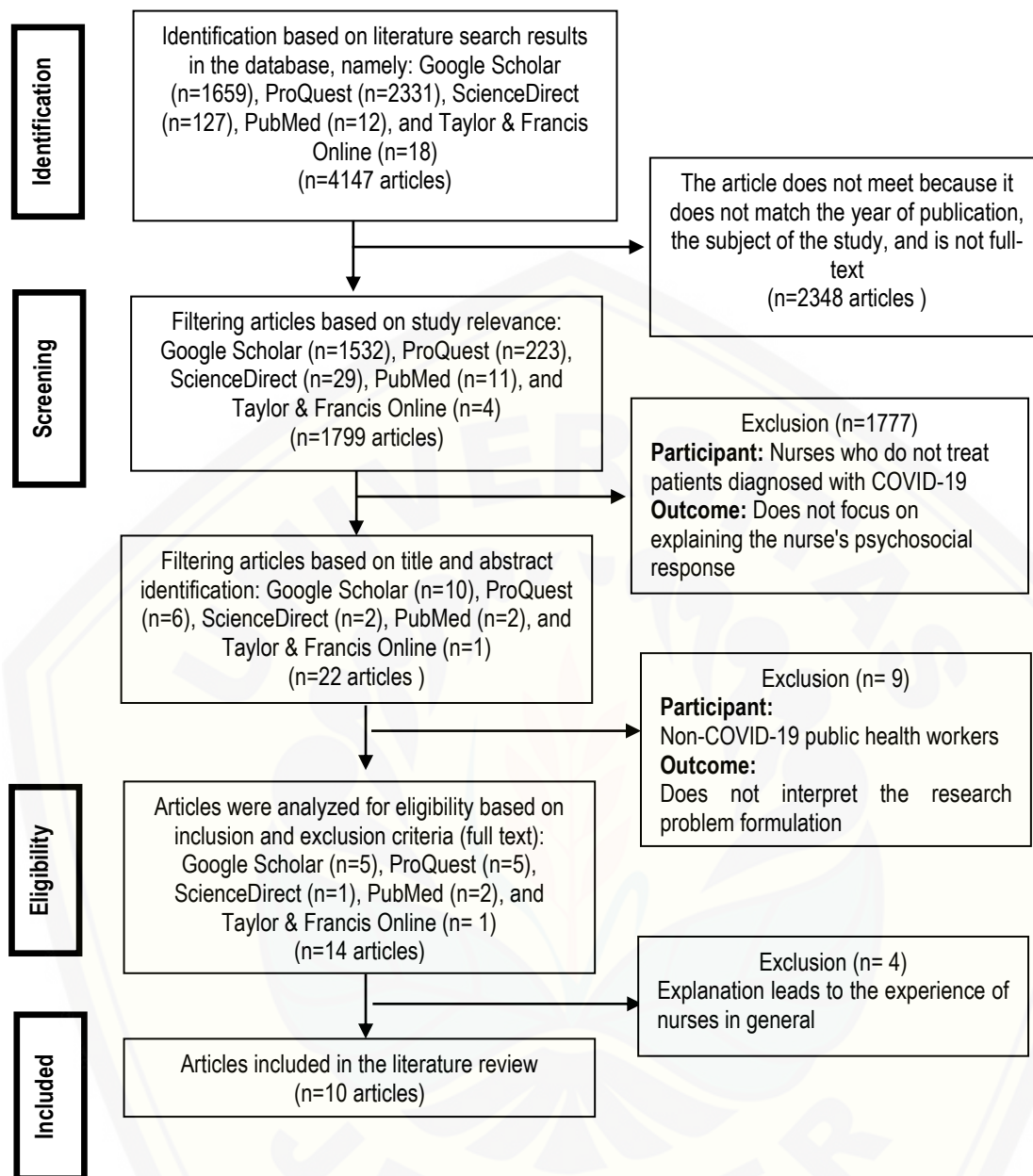
Figure 1. Flow Chart

The flow chart stages and boxes read:

Identification

Identification based on literature search results in the database, namely: Google Scholar (n=1659), ProQuest (n=2331), ScienceDirect (n=127), PubMed (n=12), and Taylor & Francis Online (n=18)
(n=4147 articles)

→ The article does not meet because it does not match the year of publication, the subject of the study, and is not full-text
(n=2348 articles)

Screening

Filtering articles based on study relevance: Google Scholar (n=1532), ProQuest (n=223), ScienceDirect (n=29), PubMed (n=11), and Taylor & Francis Online (n=4)
(n=1799 articles)

→ Exclusion (n=1777)
Participant: Nurses who do not treat patients diagnosed with COVID-19
Outcome: Does not focus on explaining the nurse's psychosocial response

Filtering articles based on title and abstract identification: Google Scholar (n=10), ProQuest (n=6), ScienceDirect (n=2), PubMed (n=2), and Taylor & Francis Online (n=1)
(n=22 articles)

→ Exclusion (n= 9)
Participant:
Non-COVID-19 public health workers
Outcome:
Does not interpret the research problem formulation

Eligibility

Articles were analyzed for eligibility based on inclusion and exclusion criteria (full text): Google Scholar (n=5), ProQuest (n=5), ScienceDirect (n=1), PubMed (n=2), and Taylor & Francis Online (n= 1)
(n=14 articles)

→ Exclusion (n= 4)
Explanation leads to the experience of nurses in general

Included

Articles included in the literature review
(n=10 articles)

RESULT

The results of the literature search amounted to 10 articles obtained from a library search. Article searches were conducted on five databases, namely Google Scholar, ProQuest, ScienceDirect, PubMed, and Taylor & Francis Online. The selected articles are new articles published during the COVID-19 pandemic so that the publication year sought is 2019. The research design uses qualitative and quantitative methods. The following are general characteristics of research:

Table 1. General Characteristics of Study Selectors (n=10)

Category	n	%
Publication year:		
2019	0	0
2020	8	80
2021	2	20
Total	10	100
Research design:		
Cross-Sectional	2	20
Qualitative	8	80
Total	10	100

Forms of Nurse Psychosocial Response Patient's Care of COVID-19

One of the health care professionals serving COVID-19 patients is a nurse. Nurses are given the responsibility to care for COVID-19 patients while in hospital. Nurses are faced with this critical condition and are at risk of experiencing psychosocial problems while caring for COVID-19 patients.

Table 2. Forms of Nurse Psychosocial Responses Patients's Care of COVID-19

Forms of Nurse Psychosocial Responses Patients's Care of COVID-19	Main Empirical Sources
Risk of viral contamination: Anxiety about infecting family members, fear of infecting others, fear of infection, anxiety due to lack of knowledge, anxiety due to the patient's disease condition, and feeling threatened.	Cui et al., 2020; Galehdar et al., 2020; Kackin et al., 2020; Karimi et al., 2020; Mekonen et al., 2020; Sun et al., 2020.
Abnormal separation: Fear of many deaths in COVID-19 treatment centers, quarantine, self-isolation, and anxiety due to fear of burial.	Galehdar et al., 2020; Karimi et al., 2020.
Decreased immune system: Feelings of stress, anxiety, depression, emotional exhaustion, obsessive thoughts, feelings of guilt, receiving negative feedback from family and friends, and loss of trust.	Cui et al., 2020; Jahan et al., 2021; Kackin et al., 2020; Karimi et al., 2020; Mekonen et al., 2020.
Social pressures: negative societal stigma, discomfort with the environment, the presence of strangers, changes in relationships with patients and relatives, decreased closeness to other relatives, fear of being stigmatized by others, and injustice.	Alizadeh et al., 2020; Kackin et al., 2020; Sun et al., 2020; Kreh et al., 2021.
Uncertainty: Changes in work patterns, heavy work and difficulties in communicating with patients, new roles or tasks and broken routines, and uncertainty about future conditions.	Cui et al., 2020; Kackin et al., 2020; Kreh et al., 2021.

Study Zhang et al (2020) stated that nurses who work to treat COVID-19 patients undergo a process of change at work into three stages, namely the initial stage (ambivalence), the middle stage (emotional exhaustion), and the next stage (energy renewal). At each stage, nurses have different psychological characteristics.

Study Jahan et al (2021) stated that nurses' anxiety under normal conditions was 144 (70.2%), mild 36 (17.6%), moderate 13 (6.3%), severe 10 (4.9%), very severe 2 (1%) . Nurse stress in normal conditions was 64 (31.2%), mild 30 (14.6%), moderate 63 (30.7%), severe 23 (11.2%), very severe 25 (12.2%) . Nurse depression under normal conditions was 108 (52.7%), mild 33 (16.1%), moderate 48 (23.4%), severe 10 (4.9%), very severe 6 (2.9%) . This shows that the majority of nurses feel in normal conditions.

Study Mekonen et al (2020) stated that the prevalence of anxiety, stress, depression among nurses working at the Northwest Amhara Region Referral Hospital, Ethiopia (n=293) was as follows: Anxiety got yes (69.6%) and no (30.4%), stress got . yes (20.5%) and no (79.5%), depression obtained yes (53.3%) and no (44.7%).

Study Karimi et al (2020) states that pNurses working at COVID-19 service centers experience high mental demands, which can damage the quality of care provided to patients. Mental conditions experienced by nurses, namely anxiety and stress, as well as fear, have a significant impact on the care of COVID-19 patients.

Study Cui et al (2020) stated that five nurses reported that they lacked experience in caring for patients with respiratory diseases because the procedures and environmental conditions were unfamiliar to some nurses. In addition, language differences are also a significant obstacle for nurses in establishing close relationships with patients. Ten participants described feeling nervous and worried about the high exposure risk when they entered the isolation ward. Two of the participants stated that they witnessed the death of a COVID-19 patient in a critical care isolation unit. Seven of the participants reported varying degrees of sleep disturbance, including difficulty falling asleep and waking up and having more dreams than usual.

Study Sun et al (2020) stated that all participants (n=20) expressed their fear, which peaked upon entering the room. The majority of nurses (n=15) felt different levels of anxiety. As many as 50% of nurses said they experienced anxiety. Although most nurses have negative emotions such as fear, anxiety, and worry, positive emotions also appear synchronously or progressively. After a week, nurses' positive emotions dominated up to 70%.

Study Galehdar et al (2020) stated that nurses revealed that the death of patients, especially young patients, was very painful for them. One of the nurses was worried because of the relatively high mortality rate in COVID-19 patients. In addition, nurses feel responsible for their parents and worry about transmitting it to the family.

Study Kreh et al (2021) stated that emotionally, the fear of being infected and subsequently infecting family and friends is a common feeling. However, many health workers do not return to their homes because they do not want to infect their own families. Broken routines and lack of opportunities for social exchange are other common stressors. In addition, high temperatures, the use of uncomfortable clothing, and other health problems are some of the factors that interfere with the performance of nurses.

Study Kackin et al (2020) stated that nurses' opinions about the psychosocial problems they experienced were collected into three themes, namely: 1) The effects of the epidemic which included working conditions, psychological effects, and social influences. 2) Short-term coping strategies that include normalization, refusal to think about experiences, avoidance, expression of feelings, and distraction. 3) Needs include psychosocial support and management resources.

Study Alizadeh et al (2020) stated that participants fell into two general categories that contributed to the psychological distress of health care personnel. The first category, job demands with three sub-categories: nature of the disease, organizational demands and social demands. The second category, resources include personal support and social support.

Strategy for Psychosocial Handling of Nurses in Patients Care of COVID-19

The psychosocial pressure felt by nurses has a significant impact on the quality of nursing services to COVID-19 patients, so a strategy for handling nurses in the care of COVID-19 patients is needed.

Table 3. Strategies for Nursing Handling Efforts in the Care of COVID-19 Patients

Strategies for Handling Nurses in Patient's Care of COVID-19	Main Empirical Sources
Social support: Get support from family members or other friends, increase affection and feelings of gratitude among team members, team cohesiveness and solidarity, teamwork, support between family and friends, and appreciation for nurses, as well as support for personal resources .	Alizadeh et al., 2020; Cui et al., 2020; Jahan et al., 2021; Kackin et al., 2020; Sun et al., 2020; Kreh et al., 2021.
Participation in training: Protection training, infection prevention training, mental health training programs (psychosocial counseling), as well as training programs in anxiety management.	Zhang et al., 2020; Cui et al., 2020
Formation of support groups: Formation of support groups, harmonious interpersonal relationships and seeking support with the team through gathering together	Cui et al., 2020; Sun et al., 2020;
Self-calming activities: Regulate sleep patterns, psychological comfort, distraction, listening to music, exercising, spirituality and journaling.	Kackin et al., 2020; Zhang et al., 2020; Jahan et al., 2021
Improving the fulfillment of the quality of resources: Shift adjustments, fairness in the division of tasks and resources, preparation of room facilities,	Zhang et al., 2020

Study Zhang et al (2020) stated that the support provided by nursing managers such as protection training, shift adjustments, psychological comfort, also helped nurses relieve physical and psychological stress. And Study Jahan et al (2021)stated that the personal coping strategy used a questionnaire by a professional group. The highest value of coping strategies for nurses who choose "Yes" is talking to family members or spending time helping friends get a score of 124 (60.5%) while regulating sleep patterns makes them more relaxed getting a score of 121 (59%).

The research of Cui et al (2020) states thatFamily support is an important factor influencing nurses to join the front line to fight the epidemic. Before entering the isolation ward, they underwent a series of training programs. Six participants reported that they initiated positive actions to cope with stress and negative emotions. For example, they exercise, listen to music, and keep a journal. Ten participants stated that they had strong support from family, colleagues and the government, which enabled their work to prevent and control the epidemic to run more smoothly.

Study Sun et al (2020)stated that all nurses (n=20) used psychological defense mechanisms including: speculation, isolation, depression, distraction, self-awareness, humor, and rationalization. Most nurses (n=14) chose to adjust their sleep when stressed with work. During times of stress, nurses (n=13) cared about and helped each other and showed support for stress relief. Family and team support makes nurses feel happier. In addition, the hospital also has a reward and welfare system to support and motivate nurses' happiness.

Study Kreh et al (2021) stated that health workers find new ways to interact and support one another during the beginning or end of a shift or during training sessions as well as during shifts while working in pairs. External support by leadership, coworkers, and mental health professionals has proven to be of utmost importance. From an organizational point of view, strong and trusted operational leadership, supported by management staff providing strategic support and guidance, is considered the most valuable support.

Study Kackin et al (2020) states that short-term coping strategies that include normalization, refusal to think about experiences, avoidance, expression of feelings, and distraction. Needs include psychosocial support and management resources. And then, Study Alizadeh et al (2020) states that there are five categories of supporting resources, namely: orientation coping, love satisfaction, spirituality, personality traits, and social support.

DISCUSSION

The present study was reviewed to regarding the COVID-19 pandemic had an impact on the mental and psychosocial problems health conditions of every front-line health worker, especially nurses. COVID-19 patients had increased every day, this made nurses who treated COVID-19 patients work continuously causing psychosocial problems.

Forms of Nurse Psychosocial Response Patient's Care of COVID-19
Some forms of nurses' psychosocial responses when treating COVID-19 patients include the following:
1. Virus Contamination Risk
   In another study Galehdar et al (2020) reported a fear of contracting the COVID-19 virus, this fear increased the anxiety and stress of health workers working on the front lines. StudyJahan et al (2021) also reported that health workers in primary care, while working on the front lines make them vulnerable to anxiety and stress due to fear of infection.
2. Abnormal Farewell
   according to Galehdar et al (2020) and Jahan et al (2021) nurses experience anxiety and stress due to the death of a COVID-19 patient. Death anxiety is a multidimensional construct involving cognitive, emotional, and experience aspects of nurses. In some cases, the death of these patients can have a negative impact on the psychological condition of nurses. This condition triggers nurses' thoughts about the perceived threat of becoming more anxious due to the deteriorating condition of the patients being treated and the increasing deaths of COVID-19 patients during the treatment process.
3. Decreased Endurance
   During the COVID-19 outbreak, healthcare institutions are high-risk workplaces, where nurses are more susceptible to exposure. Conditions like this are prone to nurses to experience anxiety, stress, depression, fatigue, and decreased endurance. In addition, researchSun et al (2020) found that positive emotions coexist with negative emotions, as well as psychological adjustment and growth under stress. Therefore, the situation of nurses when caring for COVID-19 patients will be accompanied by positive emotions and gradually nurses will also feel negative emotions.

4. Social Pressure

Frontline nurses are even stigmatized because they are considered a threat to the safety of others and are often referred to as carriers of the virus. This situation causes a dilemma, which leads to psychological distress or moral injury. During the COVID-19 outbreak, nurses experienced stress while caring for patients whose health conditions were rapidly deteriorating and providing end-of-life care (Cui et al., 2020). In researchKackin et al (2020) nurses reported that they moved away from the social environment because of the risk of stigmatization by society and transmission of disease, so nurses felt isolated and lonely.

5. Uncertainty

The experience of nurses when caring for COVID-19 patients is faced with various pressures (Zhang et al., 2020). Nurses must deal with unfamiliar environments, complex workflows, and the dangers posed by exposure to COVID-19 patients. In line with these findings, other studies Galehdar et al (2020) and Cui et al (2020) also reported the high psychological stress felt by nurses during the pandemic and ambiguous disease status, uncertainty regarding COVID-19 treatment, high nurse workloads and care policies added to pressure on nurses, which affected the quality of nursing care.

Strategy for Psychosocial Handling of Nurses in Patient's Care of COVID-19

Some strategy of nurses' psychosocial when treating COVID-19 patients include the following:

1. Social Support

Social support can increase nurses' sense of self-efficacy, give a sense of confidence in their ability to do a good job and increase job satisfaction and reduce nurses' job burnout.

2. Training Participation

Training can help to understand the nature of the disease, standardize protective measures, increase self-confidence, and increase adherence to infection control measures, thereby reducing the risk of developing stress. The Mental Health Training Program for the Corona Virus has been established to provide psychosocial counseling services (by telephone or online system) and mental support to individuals at risk, who are negatively impacted by COVID-19, especially health care professionals (Kackin et al., 2020).

3. Formation of Support Group

On research Alizadeh et al (2020) strengthen the teamwork and unity of medical staff, who are in quarantine to help staff get rich social support resources to deal with the coronavirus. The gradual formation of interpersonal relationships at the epicenter provides a pleasant working relationship (Zhang et al., 2020). Study Cui et al (2020) also reported that health workers need teamwork, with peer support giving nurses a strong strength so they don't feel lonely and increasing their confidence in overcoming this pandemic situation.

4. Self Calming Activities

Some of the other actions reported by the study Alizadeh et al (2020), Kackin et al (2020), and Jahan et al (2021) reported that exercise, listening to music, spirituality, and journaling were stress relief methods applied by nurses. Research has shown that music and yoga are effective in reducing stress and music can be very helpful in managing stress.

5. Resource Quality Improvement

On research Alizadeh et al (2020) to reduce symptoms of psychological disorders and better management of COVID-19 outbreak conditions, strategies such as improving facilities and resources, fostering accountable management with good relations with employees, and fairness in the division of tasks and resources, adequate and timely payments, and taking into account the particular psychological and physical condition of each employee is also recommended, strategies such as a preparation room with adequate facilities such as proper nutrition, pleasant smells, relaxation equipment, visual and auditory beauty. This condition can help nurses in reducing emotional disturbances experienced during the pandemic.

Nursing Implications

The form of the nurse's psychosocial response must be treated early and need treatment until evaluation. These handling efforts can be carried out in the form of promotive, preventive, curative, and rehabilitative which can support nurses to overcome psychosocial disorders experienced.

Promotive efforts are the preparatory stage in the fulfillment plan needs and reflect on the needs of officers. On condition promotive, nurses are expected to know the source of pressure for themselves and know the coping strategies to manage the pressure that may be faced. There are various things that can be done in promotive efforts, including: carry out regular health checks such as physical and mental examinations and examinations of nurses who are at risk of

exposure to COVID-19, provide effective and timely feedback, appreciate the acknowledgment and appreciation of nurses' sacrifices to broaden nurses' perspectives and plans that lead to increased self-confidence, autonomy and a sense of empowerment in caring for COVID-19 patients, forming a support group in the work unit (support group) to monitor mental and physical health among staff, especially nurses who treat COVID-19 patients, organize relaxing and fun activities that are interactive but still adhere to health protocols such as online classes on sports, skills, and spirituality, and formation of interpersonal relationships to provide a pleasant working relationship.

Preventive efforts are preventive measures taken to prevent the occurrence or worsening of a problem at hand. As for the various things that can be done in preventive efforts, among others: train staff to become peer counselors, provide a system for individual counseling, either face-to-face or virtually, and practice staff inside periodic health checks.

Curative efforts are conditions where it is possible that some health workers on their way to work then encounter problems psychosocial. Support that can be provided in this case is access to treatment required and the protection of their privacy. As for various things What can be done in curative efforts are: provide a system of psychosocial support services for nurses, both face-to-face and virtually including the provision of sufficient human resources.

Rehabilitative efforts are efforts to prepare to be active again or the process carried out to restore someone who has been healthy so that can interact normally in the social environment. As for the various things that can be done in rehabilitative efforts, including evaluate and rearrange the work schedule according to the ability of the officer, strengthen the teamwork and unity of medical staff, who are in quarantine to help staff gain rich social support resources to deal with COVID-19, and improvement of facilities and resources as well as fostering accountable management with good relations with employees.

Study Limits

Especially in ScienceDirect, the author cannot perform a search according to the specified keywords, so the author changes the search keyword to *"Psychosocial" OR "Psychosocial Factors" AND "Nurses" OR "Nursing Care" AND "Patients COVID-19 Virus Disease" OR "Clients*2019 Novel Coronavirus Disease" AND "Handling" OR "*Overcome" AND "Hospitals".*The keywords were changed due to limited Boolean operators or a maximum of 8. Then during the article screening process, the author found a search limit on each database, so that scientific article filtering could only be accessed as many as 1000 articles.

CONCLUSION

The forms of psychosocial responses experienced by nurses when caring for COVID-19 patients include: the risk of viral contamination, abnormal separation, decreased immunity, social pressure, and uncertainty. Strategies for handling psychosocial nurses in treating COVID-19 patients include: social support, participation in face-to-face and online trainings,the formation of a support group in the work unit (support group), holding calm and fun activities and increasing support resources.

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