

Impact of COVID-19 on Nurses' Mental Health: Literature Review

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In Wuhan, China, in November 2019 reported, the first case of the novel coronavirus disease (COVID-19). It first spread quickly throughout China, then became a global health emergency (World Health Organization [WHO], 2020). This pandemic quickly overcame millions of people, filling more than the hospitals' capacity and creating great psychological distress among everyone on the medical staff (Kang et al., 2020). This review analyzes how the pandemic impacted the nursing staff's mental health and will cover Wuhan, China, Saudi Arabia, and Michigan, USA.

Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study.

During the pandemic, Kang et al. (2020) explored the mental health status of 994 medical and nursing staff workers in Wuhan, China. The article (Kang et al., 2020) analyzed the efficacy, or lack thereof, of relating psychological needs to gaining psychological care. The study (Kang et al., 2020) used a survey from January 29, 2020, to February 4, 2020, with the approval of the Clinical Research Ethics Committee of Renmin Hospital of Wuhan University. The survey included "basic demographic data, mental health assessment, risks of direct and indirect exposure to COVID-19, mental healthcare services accessed, psychological needs, and self-perceived health status compared to that before the COVID-19" (Kang et al., 2020, para. 5). Kang et al. (2020) reported 31.3% of the survey pool worked in high-risk departments, 85.5% were female, and 63.4% were between the ages of 25 and 40 years old.

The study (Kang et al., 2020) found that many health care workers suffer from mental health disturbances, and those with moderate to severe disturbances wanted direct services from professionals like psychologists or psychotherapists. Kang et al. (2020) also suggest investing more into mental health tools to protect the health care providers if another pandemic occurs.

Key Points

The research study (Kang et al., 2020) used a survey of 994 doctors and nurses working in Wuhan from January 29, 2020, to February 4, 2020. The Clinical Research Ethics Committee of Renmin Hospital of Wuhan approved the questionnaire and distributed it over the internet to all workstations. A site called Wenjuanxing collected the data anonymously, and participants signed informed consent electronically before registering. The participants only took the questionnaire if the individuals chose yes, and everyone was able to quit at any time.

Kang et al. (2020) found that out of the survey pool, 36.9% had subthreshold mental health disturbances, 34.4% had mild disturbances, 22.4% had moderate disturbances, and 6.2% had severe disturbances. Additionally, the pandemic impacted young women the most in the study pool. Lastly, 36.3% of the participants had materials on mental health like books, 17.5% had participated in counseling or psychotherapy, and 50.4% had accessed resources via media like self-help coping methods. The data has a P-value of < 0.05 , indicating the data is statistically significant (Kang et al., 2020).

The authors (Kang et al., 2020) found that the pandemic has negatively impacted many health care providers' mental health. Kang et al. (2020) believe that many would benefit from better availability of mental health therapists, psychiatrists, and specialized services. Hospitals

should also invest more in mental health tools to care for and protect the employees on the front lines of disease response (Kang et al., 2020).

Assumptions

The authors (Kang et al., 2020) assume that COVID-19 has harmed most, if not all, health care providers' mental health. As discussed previously, Kang et al. (2020) believe that investing in more mental health resources for health care providers will help alleviate some of the mental health impacts of COVID-19. The research group (Kang et al., 2020) also assumed that the impact on the workers' mental health is multifaceted.

Deficit/Conclusion

This reader accepts the authors' (Kang et al., 2020) line of reasoning due to the multitude of other articles analyzing the relationship between COVID-19 and health care providers' mental health like AlAteeq et al. (2020) and Arnetz et al. (2020) studies. The article (Kang et al., 2020) states that hospitals must invest more in providing mental health resources to workers. Offering more resources to workers can help alleviate burnout and help workers be more adapted to challenging situations like the pandemic. Moreover, the hospitals would invest in the workers, increasing employee satisfaction (Kang et al., 2020).

If the nursing field fails to accept that investing in mental health services is necessary, it can create an environment where individuals are too embarrassed or ashamed to get the needed help. Nurse burnout will increase, and care will decrease with declining mental health (Lien et al., 2020).

Mental health among healthcare providers during coronavirus disease (COVID-19) outbreak in Saudi Arabia.

The study (AlAteeq et al., 2020) recognizes the stress that comes with the COVID-19 pandemic as a healthcare worker. The group “aim[s] to explore the depression and anxiety prevalence among healthcare providers during the COVID-19 outbreak in Saudi Arabia and identify their severity” (AlAteeq et al., 2020, para. 1). The healthcare providers included administrators, nurses, physicians, non-physician specialists, technicians, and pharmacists (AlAteeq et al., 2020). The Institutional Review Board at Princess Nourah Bint Abdulrahman University in Riyadh, Saudi Arabia, approved the ethics, and the participants gave informed consent for the study (AlAteeq et al., 2020).

AlAteeq et al. (2020) recommend that mental health should have more attention and implement routine checkups on the mental status of workers. The study group (AlAteeq et al., 2020) also agrees that the physical needs of healthcare workers need to be met, like sufficient sleep, protected times, and a place to rest.

Key Points

The study (AlAteeq et al., 2020) included healthcare workers living in multiple regions in Saudi Arabia, including Riyadh (28.29% of participants), Qassim (60.96% of participants), and the Eastern region (9.16% of participants), to understand the effect of the pandemic on those workers’ mental health. The participants received the online surveys via emails and phone messages during the COVID-19 outbreak in March 2020. The first survey included socio-demographic characteristics (age, level of education, gender, and living region), the second

survey included the Patient Health Questionnaire to detect depression within the past two weeks, and the third survey had the Generalized Anxiety Disorder 7 questionnaire to detect anxiety (AlAteeq et al., 2020).

Five hundred and two healthcare workers responded to all the surveys, with 68.1% male, 85.5% holding a university degree or higher, and 55.4% 30-39 years old (AlAteeq et al., 2020). AlAteeq et al. (2020) found that 55.2% of males and 51.4% of females have depression and anxiety. Female respondents, nurses, and healthcare workers aged 30-39 have a significantly higher anxiety score, and nurses and female respondents reported more severe symptoms (AlAteeq et al., 2020). About 55.2% had a depressive disorder, with 24.9% of those with mild, 14.5% with moderate, 10% with moderately severe, and 5.8% with severe depressive disorder (AlAteeq et al., 2020). Out of the 51.4% of participants with generalized anxiety disorder, 25.1% of those have a mild case, 11% have a moderate case, and 15.3% have a severe case of an anxiety disorder (AlAteeq et al., 2020). The AlAteeq et al. (2020) study has P-values of at least <0.05 for all the statistics indicating the data is statistically significant.

As mentioned previously, the authors (AlAteeq et al., 2020) believe implementing mental health checkups is essential, and periods of rest to ensure sufficient sleep for workers. The group (AlAteeq et al., 2020) believes that psychiatric and psychotherapeutic interventions may improve psychological resilience and well-being during the pandemic.

Assumptions

AlAteeq et al. (2020) assume that due to the outbreak, psychiatric symptoms and illnesses will develop from the stress and may appear during the acute phase or at later stages of the

outbreak. The researchers (AlAteeq et al., 2020) believe that there are factors that play roles in response to trauma; prior psychiatric history, coping styles, culture, and support systems. Other factors causing stress on the workers presented by the researchers (AlAteeq et al., 2020) include an overwhelming number of patients, shortages of medical equipment, and concerns about spreading the infection to family members.

Deficit/Conclusion

This reader does accept the authors' line of reasoning due to the research by Kang et al. (2020) and Arnetz et al. (2020). AlAteeq et al. (2020) suggest allotted rest times and places would help ensure workers have adequate sleep to help protect the workers' mental health. Having adequate sleep also improves the workers' ability to make decisions when under stress and allows for breaks during stressful days.

If the nursing field fails to accept this line of reasoning, the burnout for nurses will increase along with turnover rates. Also, nurses may start making risky or incorrect decisions due to the lack of sleep and increased stress. Suicide and self-harm rates could also increase if mental health is not monitored appropriately with appropriate prevention and interventions.

Personal protective equipment and mental health symptoms among nurses during the COVID-19 pandemic.

Arnetz et al. (2020) investigated nurses in Michigan and the exposure to COVID-19, access to personal protective equipment (PPE), and how those two affect nurses' mental health. The researchers (Arnetz et al., 2020) used an online questionnaire to identify factors associated with mental health symptoms. The data from the survey indicated that nurses lacking adequate

PPE were more likely to report symptoms of depression, anxiety, and post-traumatic stress disorder (PTSD) (Arnetz et al., 2020). The researchers (Arnetz et al., 2020) conclude that healthcare organizations should be more aware of the impact of mental health issues among nurses and provide adequate PPE as the pandemic continues.

Key Points

Arnetz et al. (2020) utilized an anonymous online survey in May 2020, authorized by the Institutional Review Board at Michigan State University. The researchers (Arnetz et al., 2020) recruited participants from the Michigan chapter of the American Nurses Association, the Michigan Organization of Nurse Leaders, and the Coalition of Michigan Organizations of Nursing. These organizations included 18,300 nurses and the nurses' colleagues. The researchers (Arnetz et al., 2020) emailed a survey link that remained open from May 7, 2020, to May 29, 2020, and the participants completed a consent statement and were able to withdraw participation at any time.

The Arnetz et al. (2020) survey included questions to measure depression, anxiety, and PTSD symptoms using the 7-item Generalized Anxiety Disorder questionnaire, 6-item PTSD Checklist scales, and a 9-item patient health questionnaire (depression). The categories have sub-categories, as usual, mild, moderate, and severe (Arnetz et al., 2020).

Six hundred ninety-five nurses responded to the researchers' (Arnetz et al., 2020) survey, and most are female, older than 45 years old, Caucasian, and working for more than ten years. 59.4% of the participants experienced depression, and 54.9% experienced anxiety. 9.7% of participants reported severe mental health symptoms for depression, and 8.3% reported severe

mental health symptoms for anxiety (Arnetz et al., 2020). The study (Arnetz et al., 2020) found that those with more frequent exposure to COVID-19 patients with inadequate PPE availability associated with worse mental health outcomes. Participants with a younger age had an increased risk for anxiety and PTSD, even after COVID-19 exposure and proper PPE resources (Arnetz et al., 2020). Arnetz et al. (2020) study has a P-value < 0.05 , indicating the data is statistically significant.

The researchers (Arnetz et al., 2020) concluded that proactively identifying nurses in high-risk groups for negatively impacted mental health is essential, and a strategy to do that needs forming. In addition, providing adequate PPE can improve or protect against mental health disorders in nurses impacted by the pandemic.

Assumptions

Arnetz et al. (2020) assume that poor PPE availability negatively impacts the mental health of nurses, causing anxiety, depression, and PTSD as per the hypothesis stated at the beginning of the article. Arnetz et al. (2020) also assume that providing adequate PPE will help prevent the adverse impact of COVID-19 exposure on mental health to allow nurses to feel safer about their health, patients, and loved ones.

Deficit/Conclusion

This reader does accept the authors' (Arnetz et al., 2020) line of reasoning due to the data presented from the surveys collected. This reader also understands how one might feel if there is insufficient PPE to protect nurses from COVID-19 when working with infected patients. The

authors' (Arnetz et al., 2020) solution to ensure proper PPE for all nurses to help alleviate anxiety and depression with nurses also makes logical sense to this reader.

If nurses do not accept this line of reasoning, there will be an increase in anxiety, depression, and PTSD symptoms throughout nurses. There will also be a spread of infection between individuals if there is insufficient PPE for each healthcare worker. Ensuring proper amounts of PPE for all workers is essential to providing a safe work environment for everyone.

Conclusion

All the research articles (AlAteeq et al., 2020; Arnetz et al., 2020; Kang et al., 2020) discussed above aim to understand the correlation between COVID-19 and how it has impacted nurses' mental health. Each article (AlAteeq et al., 2020; Arnetz et al., 2020; Kang et al., 2020) agrees that COVID-19 has negatively impacted the mental health of nurses, and symptoms of depression, anxiety, and PTSD are showing. Kang et al. (2020) and AlAteeq et al. (2020) recommend the facilities implement routine mental health screenings and provide mental health support to the employees to help protect the nurses' mental health during the pandemic. Arnetz et al. (2020) recommend providing enough PPE supplies for all workers to ensure the employees feel safe working with COVID-19 patients. AlAteeq et al. (2020) also recommend setting designated times and places for employees to sleep to ensure proper rest for the workers.

The information provided in the articles (AlAteeq et al., 2020; Arnetz et al., 2020; Kang et al., 2020) discussed gives good suggestions to help improve and protect nurses' mental health when coping during a pandemic. It can improve retention rates and the mental health of nurses in

the nursing practice. Furthermore, providing adequate sleep will improve the nurses' ability to make decisions in critical situations.

Providing mental health support to nurses will increase the quality of patient care. Some symptoms of depression and anxiety include irritability, angry outbursts, and difficulty concentrating (Arnetz et al., 2020). These symptoms can negatively impact nurses' ability to work and function during the pandemic. By supporting nurses and providing mental health resources, nurses will be able to intervene early or prevent these symptoms from impacting work.

Understanding the impact of COVID-19 on healthcare workers' mental health will encourage institutions to make improvements to provide better work environments. Also, this research provides a basis for further studies to find what interventions work best in providing mental health support for nurses. More studies are needed to understand how to improve healthcare workers' mental health when significant events like pandemics occur.

Mental health is an under-researched field and needs to be understood better. Without good mental health, patients will lack proper health care creating poor health outcomes for many. Mental health impacts everyone and needs to be treated like any other aspect of health to ensure that nurses feel supported and can perform as well as possible.

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