



PSYCHOLOGICAL IMPACT OF THE COVID-19 PANDEMIC ON HEALTH WORKERS: LITERATURE REVIEW

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ABSTRACT

During covid-19 pandemic, health workers are the frontline in handling this case. This study aims to evaluate the impact of covid-19 on health workers psychology. Articles were collected through the ScienceDirect, PubMed, CochraneLibrary, and SpringerLink database published between 2019-2020. Keywords used Medical staff AND Covid-19 AND Psychological impact. Articles were found based on keywords and continued with removing duplicate articles, screening titles and abstracts. Researchers only found 4 suitable and identical journals. Health workers experience psychological disorders, ranging from mild to severe. These are personal safety concerns, family worries, patient death concerns, lack of protective equipment, and fatigue due to increased working hours. Coping strategies are important for reducing stress on health workers, such as consulting with a psychiatrist, the availability of complete self-protection tools, and social support.

Keywords: covid-19; health workers; psychological

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INTRODUCTION

The new coronavirus (Covid-19) since its launch in December 2019 in Hubei province, China is spreading rapidly both locally and internationally. Within a month, the disease caused by this virus was considered a general health emergency by the World Health Organization and declared a pandemic in March 2020. The outbreak of Covid-19 as a major health care event has had a negative impact on daily life, threaten people's mental and physical health, as well as social and economic development that are endangered (Li et al., 2020; Zhu et al., 2020).

In this pandemic era, medical personnel, especially nurses, are at the forefront of handling pandemic patients because nurses must be by the patient's side for 24 hours. With this condition, nurses are at risk of longer contact with patients and more at risk of having more contact with the Covid-19 virus. Currently there are as many as 65 countries infected with the corona virus. According to WHO data as of March 2, 2020, 90,308 people were infected with Covid-19. At first the transmission of this virus could not be determined whether it could pass between humans. The number of cases continues to grow over time. In addition, there were cases of 15 medical workers being infected by one of the patients. One of these patients was suspected of being a "super spreader" case. It was finally confirmed that this pneumonia transmission can be transmitted from human to human. Until now, this virus quickly spreads, it is still a mystery and research is still ongoing due to the conclusion that transmission can be

from human to human, causing a health worker who has the possibility of contact with a positive patient infected with COVID-19 must apply stricter health protocols (Yuliana, 2020).

The obligation to carry out strict health protocols is very likely to cause stress both physically and mentally. Physical impact is a big risk but psychological impact will also cause physical immunity weakness. Immunity is resistance to disease, especially infectious diseases. In general, immunity is the body's response to foreign substances both molecularly and cellularly whose mechanisms are divided into innate immunity and adaptive immunity. The immune response is a coordinated reaction by cells and molecules against microbes or other agents. So that when the immune condition decreases, the body's defenses will decrease and the body can be susceptible to disease and then get sick (Mayasari & Pratiwi, 2009). From this statement, it is very important to know the psychological condition of health workers involved in handling COVID-19 to become evidence based for the steps needed to improve the security and safety of health workers, especially nurses. From the statement above, we intend to find out the impact of COVID-19 on the psychological status of health workers by conducting a literature review (Badahdah et al., 2021).

METHOD

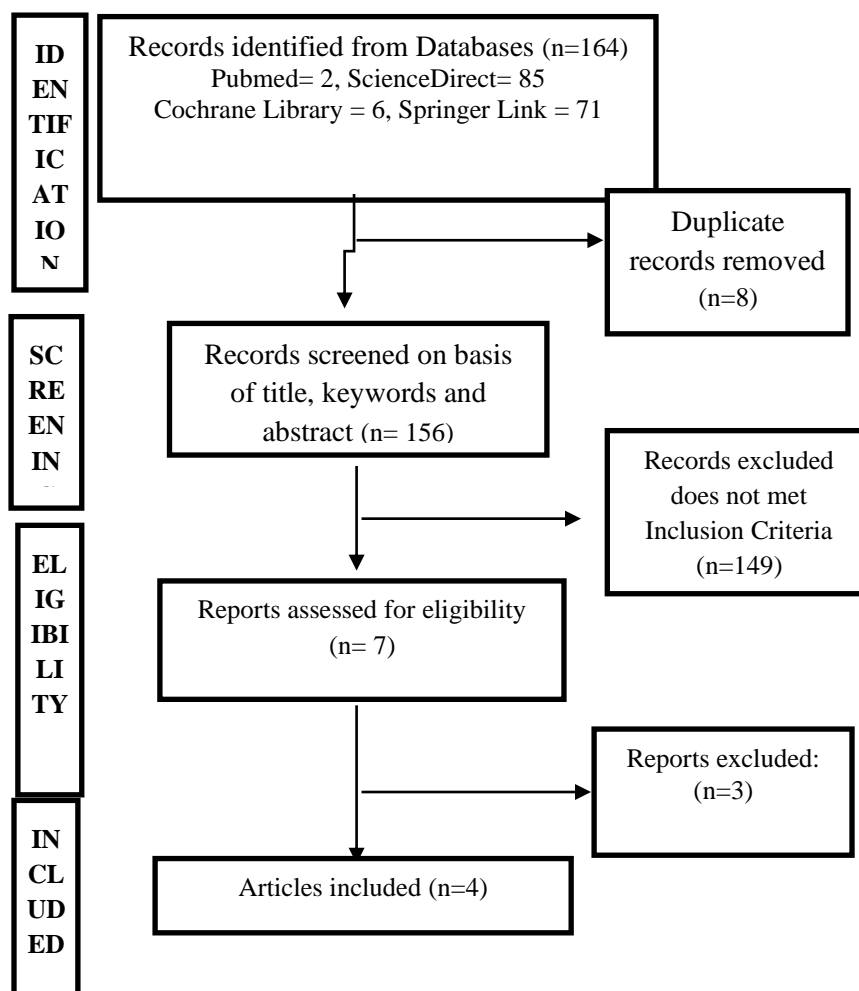


Figure 1. Literature Search Flow based on PRISMA Guideline

This study uses a literature review to obtain information related to the psychological impact caused by COVID-19 for health workers. The PICO question used in this study is "How is the impact of covid 19 on the psychology of health workers?". The keyword to represent the population is "medical staff OR health care staff". The keyword used to represent the intervention is "Covid-19 OR novel coronavirus disease 2019". The keyword to represent the outcome is "Psychological impact OR Psychological care OR mental health care". So the keywords obtained from the PICO question are Medical staff OR health care staff AND Covid-19 OR Novel coronavirus disease 2019 AND Psychological impact OR Psychological care OR mental health care. The search was limited to 2019–2020 and was written in English in four databases namely ScienceDirect, PubMed, Cochrane Library, Springer Link. The journal selection process begins with the identification of the journal title and abstract. Follow up by selecting eligible journals based on inclusion and exclusion criteria. The inclusion criteria set in the journal search were open access, quantitative, full text and medical staff. The exclusion criteria set were replication, meta analysis, and qualitative. A total of 164 articles were found based on keywords and followed by eliminating duplicate articles, screening titles and abstracts. In the end, the researcher only found 4 suitable and identical journals. To be able to see an overview of the article selection flow can be seen in Figure 1.

RESULTS

Table 1 summarizes the articles included in the review. This table shows the type of study design, sample size, instruments used, and the main findings of the 4 studies included in the review.

Table 1.
Study Characteristics

Authors	Study Design	Sampel size	Instruments used	Result
Cai, H. Tu, B. Ma, J. Chen, L. Fu, L. Jiang, Y. Zhuang, Q. (2020).	A cross-sectional observational study	534 consists of doctors, nurses, other hospital staff	Questionnaire by Lee et al, 2005	Health workers experiencing stress during the covid-19 outbreak
Cai, W. Lian, B. Song, X. Hou, T. Deng, G. Li, H. (2020).	A cross-sectional observational study	1521 health workers (147 with emergency experience, 1374 with no public health emergency experienc)	Symptom Check-List-90 (SCL-90), Chinese version of Connor-Davidson resilience scale (CD-RISC) and Social Support Rating Scale (SSRS).	Health workers without public health emergency care experience perform worse on mental health, resilience and social support, and are more likely to suffer from interpersonal psychological disorders and anxiety.
Kang, L., Ma, S., Chen, M., Yang, J., Wang, Y., Li, R., Yao,	A cross-sectional observational study	994 medical and nursing staff	Patient health questionnaire-9, Generalized Anxiety	36.9% showed symptoms of mental health disorders, 34.4% mild mental

Authors	Study Design	Sampel size	Instruments used	Result
L., Bai, H., Cai, Z., Xiang Yang, B., Hu, S., Zhang, K., Wang, G., Ma, C., & Liu, Z. (2020).			Disorder, Insomnia Severity Index & the Impact of Event Scale-Revised	health disorders, 22.4% moderate disorders, and 6.2% severe disorders.
Lai, J. (2020)	A cross-sectional observational study	1257 health workers	Patient Health Questionnaire-9, Generalized Anxiety Disorder scale, Insomnia Severity Index, & the Impact of Event Scale-Revised	50.4% reported depressive symptoms, 44.6% anxiety, 34.0% insomnia, and 71.5% reported distress.

DISCUSSION

Mental health medical staff on covid-19

The rapid spread of the virus causes increased stress, depression and anxiety for health workers in providing health services for patients with COVID-19. However, it is a sense of social and moral responsibility that drives medical personnel to continue working during the outbreak (Cai et al., 2020a). Health workers reported symptoms of depression, anxiety, insomnia, distress and mental health disorders reported from mild to severe (Cai et al., 2020a; Cai et al., 2020b; Kang et al., 2020; Lai et al., 2020).

Research in the past has shown that epidemics can cause severe and varied psychological effects on people. In the general population, this can lead to the development of new psychiatric symptoms, worsening of pre-existing diseases. Regardless of being exposed or infected people may develop fear of getting sick or dying, excessive worry/anxiety, helplessness, tendency to blame others who are sick. Psychiatric illnesses that develop in people include depression, anxiety, panic attacks, somatic symptoms, and post-traumatic stress disorder symptoms, delirium, psychosis and even suicide (Hall et al., 2008; Müller, 2015; Sim et al., 2010).

Cai et al, 2020 stated that nurses have a higher level of anxiety than medical personnel and other professions. Although nurses received more attention regarding additional financial compensation, nursing staff also felt more anxious on the ward when compared to other medical personnel (Cai et al., 2020). This result is supported by Chew et al. (2020) who found stress, anxiety, and psychological distress in health workers during an outbreak. This is also supported by studies in other epidemics, although the extent of this is different (Khalid et al., 2016). The psychological impact of the SARS outbreak was also found to be greatest for emergency nurses, followed by emergency physicians, and then for health care assistants (Wong et al., 2005).

Causes of stress on medical staff

The main factors associated with stress are anxiety for personal safety, concern for their family, and concern for the patient's death (Lai et al., 2020). Lack of protective clothing, fatigue due to increased working hours, safety of their colleagues and lack of care for Covid-19 are considered as important factors influencing severe stress on all medical staff (Cai et al., 2020a). The experience of public health emergency care was significantly associated with a reduced prevalence of psychological disorders. Experienced staff and new staff showed differences in interpersonal sensitivity, obsessive-compulsive disorder and phobic anxiety. New staff have lower levels of resilience, lack of objective support, subjective support, social support, and are also low in tenacity, strength, optimism (Cai et al., 2020b).

The safety response to infection is a major concern as medical staff have concerns that they could potentially affect their families with COVID-19. Medical staff between the ages of 31-40 have the greatest concern about transmitting the virus to their families, perhaps because most of them have young children and the elderly living in their families. This finding was also reported among medical staff during the SARS Epidemic but was less significant (Ly et al., 2007).

Response to reduce stress levels due to COVID-19

The main factor in reducing stress for medical staff is when their family is not infected and is not at risk of COVID-19 infection. A positive work environment with guaranteed personal safety while working during the covid-19 epidemic are the two main factors that may be the key to encourage medical staff to continue working-during the epidemic. The exposure felt by medical staff to COVID-19 requires mental health services that function to reduce perceived mental stress, such as access to psychological treatment (psychologist or psychiatrist), psychological material sourced from books and psychological resources that can be accessed through the media (Kang et al. , 2020). In addition, according to (Mohindra et al., 2020), positive motivation is in the form of support provided by family and colleagues, positive role models and awards given by colleagues or patients, positive treatment experiences, readiness for responsibility, knowledge and mental readiness. against the risk of infection.

Coping strategies from medical staff

The most commonly used coping strategies include strict protective measures, knowledge of virus prevention and transmission, social isolation measures, and positive self-awareness, with nurses giving the highest marks in each question. Another significant support is seeking help from family and friends (Cai et al., 2020a). As per reports, common risk factors for developing psychiatric morbidity are lack of social support, communication, maladaptive coping and lack of training (Naushad et al., 2019). Social support provided to health workers has been shown to reduce anxiety and stress levels, and increase their self-efficacy (Xiao et al., 2020).

Medical staff's coping strategies are ensured by the implementation of clear disease prevention guidelines, including hand washing, use of face masks, and protective clothing. Resilience (strength, tenacity) and social support (objective support, subjective support and availability of support) can significantly predict the mental health of staff. Endurance is considered a protective factor for mental health, because with high strength and tenacity shows greater courage and will not stop in this medical battle (Cai et al., 2020b). Good social support has reduced mean symptom severity among people in high-risk occupations (Chen et

al., 2005). Constructive peer support, mental health services, training, and social support are needed to meet the mental health needs of medical staff (Banerjee, 2020).

CONCLUSION

In this COVID-19 outbreak, many health workers experience psychological disorders including stress, increased anxiety. This happened due to several triggering factors including the concern of medical personnel about the condition of their families, about the death of Covid-19 patients, incomplete and inadequate personal protective equipment being a factor for medical personnel to experience psychological disorders. Many of them need the help of a psychiatrist to deal with all of these problems, but there are also those who with the support of their families strengthen them and reduce the stress of the problems that occur. So that they can carry out their duties and activities in peace. The completeness of medical equipment also reduces their anxiety at work. With the existence of complete personal protective equipment they can reduce the burden of worrying about the risk of disease transmission.

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