Prevalence Mental Health Status of Frontline Nurses Handling Covid-19 in Indonesia

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Abstract. The impact of Corona Virus Disease 2019 (Covid-19) is not only on physical health but also on mental health. Nurses are one of the vanguards in handling Covid-19 which is at risk of experiencing mental health problems. This study aims to identify the mental health status of the foremost nurses in handling Covid-19. The method used with a quantitative approach is descriptive survey research. The sample in this study were 2156 nurses working in public health centers or hospitals throughout Indonesia. The survey was conducted using the 20 items Self-Reporting Questionnaire (SRQ-20) instrument. The results showed as many as 55% (1185 nurses) experienced anxiety and depression due to conditions as the vanguard of handling Covid-19. With the most experiencing signs and symptoms of Feeling anxious, tense, and worried 70.3% (1515). The results show the mental health status of frontline nurses needs to be considered. Promotion and prevention efforts towards the mental health status of frontline nurses in handling Covid-19 are needed for the mental health conditions of nurses to continue to serve patients well and not to become a more serious problem.

Keywords: Covid-19 · Mental health status · Frontline nurses · Anxiety · Depression

1 Introduction

Pandemic Corona Virus Disease 2019 (Covid-19) is a health problem that is currently sweeping the world including Indonesia, until March 2020, there were 1,528 confirmed cases of COVID-19 in Indonesia and 136 deaths related to this disease [1]. The increase in the number of Covid-19 cases continues to increase every day, the total cases in June 2020 became 34,316 cases and there were 1,959 deaths [2].

The number of Covid-19 cases that continues to increase is due to the nature of the virus that is easily contagious, it lives in the individual's body even though it does not

show infectious symptoms. The high morbidity and mortality rates have made health workers vulnerable to contracting the virus. Nurses are at the forefront of care for Covid-19 patients, both hospitals and health centers, work harder than before but must continue to maintain stamina and manage stress so as not to contract the virus. In similar outbreaks that have occurred, nurses have the highest level of work stress and produce work pressure compared to other professions [3–5].

Nurses work under stressful conditions during the Covid-19 pandemic, namely the lack of availability of antigen or antibody tests for most front line staff, the discomfort and fatigue resulting from long shifts spent wearing full personal protective equipment (PPE), barriers to communication with colleagues and patients when wearing complete PPE, nurses often cannot hear the patient, and patients also have difficulty because they cannot see the nurse's face or hear what the nurse is saying [6]. Nurses also experience a dilemma at work, namely managing insufficient resources for patients who both need them, balancing physical and mental health needs between themselves and patients, how to adjust their desires and duties with patients or family or friends and provide appropriate care. Maximum, for all patients with limited or inadequate resources. Nurses also experience stigma in society, namely being considered a threat to the safety of others and as carriers of disease [7–9].

Nurses who experience this situation will find it difficult not to have a strong emotional reaction to the Covid-19 virus and its impact on work, namely fear, anger, frustration, worry. The fear and anxiety and feelings that arise when nurses feel unable to care for patients as they should have done before in the Covid-19 pandemic condition are normal but must still be managed properly so that nurses can still provide professional services and prevent mental and physical health problems so that nurses can contribute to better disease control [6].

Several research results related to mental health problems experienced by health workers when handling Covid-19 cases, showed that health workers who handle emergencies directly, have unpleasant experiences in the early stages of emotions, panic and anxiety caused by stress responses [10]. The results of other studies show that health workers experience symptoms of anxiety, especially those who have direct clinical contact with infected patients, health workers who work in worst-affected areas and health workers infected with Covid-19 [9]. Another study found that nurses caring for patients with Covid-19 had a high risk of experiencing anxiety and depression [11]. This study aims to identify the mental health status of the frontline nurses in handling Covid 19.

2 Method

This research used descriptive analysis survey research method with a quantitative approach. Data was collected through an online survey using a google form which was distributed to nurses who work in health centers and hospitals for Covid-19 services throughout Indonesia. As for the categories of treatment used in this study, nurses caring for Covid-19 patients were categorized as people under surveillance, patients under surveillance, and patients who were positive for Covid-19. The survey was distributed using the WhatsApp social media application which started on April 6, 2020- June 7, 2020. The sampling method used was non-probability sampling, namely purposive sampling. Each nurse can participate in the survey after receiving the survey form.

This survey research has been approved by the ethics committee of Universitas Indonesia with number: SK-190 / UN2.F12.D1.2.1 / ETIK2020. In the research that has been conducted, all respondents voluntarily take part in surveys that have been received through social media. The objectives of the survey and the approval to participate in the survey are explained at the beginning of the survey. Data confidentiality for respondents in the survey will be maintained. All procedures in the survey will comply with the established research ethics. The instrument used in this study was the 20-item Self-Reporting Questionnaire (SRQ-20) [12] which was adapted in Indonesian. Funds were analyzed using SPSS and seen the frequency distribution data of each question item in the questionnaire.

3   Result and Discussion

Result

Demographic Characteristics

In this study, among 2156 nurses from all over Indonesia (West to Eastern Indonesia) who served in various health services both hospital and community based (Puskesmas) were asked to participate. All respondents completed the survey well. Of the 2156 participants who answered, as many as 6.5% (141 people) caring for positive patients in the Intensive Care Unit (ICU) or ordinary inpatient rooms, 16% (345 people) treated positive patients with Covid-19 in isolation rooms, 17.5% (378 people) cared for Patients Under Supervision (PDP), 18.5% (399 people) cared for People Under Supervision (ODP), the rest were nurses who served in hospitals or Puskesmas where Covid-19 services were located. A total of 1514 nurses who filled out the survey were married (70.2%). Of all the nurses who have had families, there are 107 (4.9%) nurses who had contact with their families once while serving in the frontline and 378 nurses who had contact within 2–5 times (17.5%) people.

Results of Measurements

This situation has changed many things, one of which is how to treat patients with Covid 19. This is evidenced by the large amount of information that nurses have not received the necessary information to calm themselves in their care. The mode of transmission of Covid 19 itself interferes with the psychosocial well-being of nurses, where nurses as the largest health personnel in handling Covid-19 need to pay attention to their psychological and social welfare conditions.

The author thinks that this can disturb the mental status of the nurse, there are many negative effects that the nurse has to receive from her life and that most of her social life has changed. The research team conducted a survey to determine the psychological and social welfare conditions of the nurses. This survey uses the Self-Reporting Question (SRQ) measurement tool to assess conditions of anxiety (anxiety) and depression, by asking how nurses have felt during the last 30 days or since Covid-19 cases began to increase (n = 2156). It was found that 55% (1185 nurses) experienced anxiety and depression, with the descriptions in Table 1.

Table 1. Score of measurements of Mental Status

Pernyataan	Score of %	Score of peoples
Feeling Headache	31.4%	676
Feeling loss of appetite	13%	280
Sleep disturbed/not soundly	42.5%	916
It's easy to get scared	44.9%	969
Feeling anxious, tense, and worried	70.3%	1515
Feeling tired easily	53.7%	1157
Feeling bad in the stomach	23.8%	512
Experiencing indigestion	22.1%	477
Crying more often	17.6%	380
Feeling unable to play a role in this life	13.2%	285
Feeling worthless	8%	172
Having thoughts of ending life/suicide	1.3%	29
Feeling unhappy	29.6%	639

Discussion

The mental health status of avant-garde nurses showed that 55% (1185 nurses) experienced anxiety and depression. This is in line with previous research where there was an outbreak of severe acute respiratory syndrome (SARS) which was similar to the Covid-19 pandemic, where the pandemic condition also put a psychological burden on health workers such as anxiety, depression, panic attacks, and some even experiencing psychotic symptoms [13]. In addition, the health crisis during the Covid-19 pandemic caused psychological changes such as fear, anxiety, depression or insecurity. This disorder is not only felt by health workers or all people who work in the medical field, but also all citizens [14].

The analysis of the results of the questionnaire items showed that there were several answers with a high percentage, namely feeling anxious, tense and worried (70.3%), feeling easily tired (53.7%), easily feeling scared (44.9%), and sleeping. Disturbed / not soundly (42.5%). This is in line with research [8] said that the fear experienced by health workers is caused by an increased risk of being exposed, infected and the possibility of infecting their loved ones is also greater. This becomes a burden in itself for health workers. In addition, this is a difficult decision to isolate yourself from family and closest people even if you don't experience Covid-19 and can cause a significant psychological burden on frontline health workers in handling Covid-19 [8].

In addition, concerns about the transmission of Covid-19 are very reasonable, one of which is due to the lack of supplies of personal protective equipment (PPE) in several health services at the start of the pandemic, careless use of PPE can also potentially become a way for the virus to enter. From the literature, the use of PPE can still pose a risk of transmission of the corona virus through droplets or aerosols from patients who are

in the air and enter through gaps formed accidentally by health workers when correcting positions, starting positions, wiping sweat or occurring when opening protective clothing [15].

Several other conditions such as intense media and public attention, long, massive, and perhaps unprecedented work durations for some health professionals have additional implications for triggering negative psychological effects including emotional distress, depression, stress, low mood, irritability, panic attacks, phobias, symptoms, insomnia, anger, and emotional exhaustion [16]. In addition, the stigmatization received by health workers where they are labeled as if they are carriers of the virus is an attitude that can trigger psychological disorders in health workers, especially frontline nurses [17] Massive efforts related to the psychological condition of nurses need to be considered so that the mental health conditions of the frontline nurses are good.

4   Conclusion

In conclusion, Based on the results of the study, 55% (1185 nurses) experienced anxiety and depression. Therefore, it is important to conduct a survey regarding the mental health status of the frontline nurses in handling Covid-19. In addition, it is also necessary to conduct a survey related to protective factors to determine the ability of nurses to solve problems experienced. As well as risk factors to find out what mental health conditions have arisen as a result of being at the forefront of handling Covid-19. Thus, interventions can be given in accordance with the needs of frontline nurses in providing services.

References

1. Setiati, S., & Azwar, M. K. (2020). COVID-19 and Indonesia. Acta Medica Indonesiana, 52(1), 84–89.
2. Badan Nasional Penanggulangan Bencana, BNPB. (2020). Kasus Positif COVID-19 Melesat Naik 1.241, Total 34.316. Tim Komunikasi Publik Gugus Tugas Nasional. https://bnpb.go.id (diakses Juni 12, 2020).
3. Maunder, R. G., Lancee, W. J., Balderson, K. E., Bennett, J. P., Borgundvaag, B., Evans, S., … Wasylenki, D. A. (2006). Long-term psychological and occupational effects of providing hospital healthcare during SARS outbreak. Emerg Infect Dis, 12(12), 1924–1932. doi: https://doi.org/10.3201/eid1212.060584
4. Nickell, L. A., Crighton, E. J., Tracy, C. S., Al-Enazy, H., Bolaji, Y., Hanjrah, S., … Upshur, R. E. (2004). Psychosocial effects of SARS on hospital staff: survey of a large tertiary care institution. CMAJ, 170(5), 793–798. doi: https://doi.org/10.1503/cmaj.1031077
5. Poon, E., Liu, K. S., Cheong, D. L., Lee, C. K., Yam, L. Y., & Tang, W. N. (2004). Impact of severe respiratory syndrome on anxiety levels of front-line health care workers. Hong Kong Med J, 10(5), 325–330.

6. Maben, J., & Bridges, J. (2020). Covid-19: Supporting nurses' psychological and mental health. Journal of Clinical Nursing, n/a(n/a). doi: https://doi.org/10.1111/jocn.15307

7. Greenberg, N., Docherty, M., Gnanapragasam, S., & Wessely, S. (2020). Managing mental health challenges faced by healthcare workers during covid-19 pandemic. BMJ, 368, m1211. doi: https://doi.org/10.1136/bmj.m1211

8. Kang, L., Li, Y., Hu, S., Chen, M., Yang, C., Yang, B. X., Liu, Z. (2020). The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. The Lancet Psychiatry, 7(3), e14. doi: https://doi.org/10.1016/S2215-0366(20)30047-X

9. Liu, C.-Y., Yang, Y.-Z., Zhang, X.-M., Xu, X., Dou, Q.-L., Zhang, W.-W., & Cheng, A. S. K. (2020). The prevalence and influencing factors in anxiety in medical workers fighting COVID-19 in China: a cross-sectional survey. Epidemiology and infection, 148, e98. doi: https://doi.org/10.1017/s0950268820001107. (Accession No. 32430088)

10. Huang, J. Z., Han, M. F., Luo, T. D., Ren, A. K., & Zhou, X. P. (2020). Mental health survey of medical staff in a tertiary infectious disease hospital for COVID-19. Chinese journal of industrial hygiene and occupational diseases, 38(3), 192–195. doi: https://doi.org/10.3760/cma.j.cn121094-20200219-00063

11. Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., … Hu, S. (2020). Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. JAMA Netw Open, 3(3), e203976. doi: https://doi.org/10.1001/jamanetworkopen.2020.3976

12. World Health Organization, W. (1994). A user's guide to the Self Reporting Questionnaire (SRQ). Geneva: World Health Organization, 1–84.

13. Xiang, Y. T. Li, Zhang, Qinge Cheung, and Chee H (2020) Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed, The Lancet Psychiatry. doi: https://doi.org/10.1016/S2215-0366(20)30046-8.

14. Zhang, J. Huipeng, Haiping, Shining, Qifeng, Tingyun and Baoguo (2020) „The differential psychological distress of populations affected by the COVID-19 pandemic", Brain, Behavior, and Immunity. doi: https://doi.org/10.1016/j.bbi.2020.04.031.

15. Atmojo JT, Sudaryanto WT, Widiyanto A, Ernawati, Arradini D. (2020). Telemedicine, Cost Effectiveness, and Patients Satisfaction: A Systematic Review. Journal of Health Policy and Management (2020), 5(2): 103–107. doi.org/https://doi.org/10.26911/thejhpm.2020.05.02.02.

16. Brooks, S K, Webster, RK, Smith, L E. Woodland, L, Wessely, S, Greenberg, N, and Rubin, GJ (2020) The psychological impact of quarantine and how to reduce it: rapid review of the evidence, The Lancet. doi: https://doi.org/10.1016/S0140-6736(20)30460-8.

17. Tsamakis, K. Chaidou, Spandidos, Fotis, Economou, and Rizos, (2020) COVID-19 related stress exacerbates common physical and mental pathologies and affects treatment (Review), Experimental and Therapeutic Medicine, pp. 159–162. doi: https://doi.org/10.3892/etm.2020.8671.