

# Psychological Problems and Coping Strategies of Health Workers in Caring for Covid-19 Patients: A Qualitative Study

Ayu Pratiwi<sup>(区)</sup>, Meynur Rohmah, and Yunike Edmaningsih

Universitas Yatsi Madani, Tangerang, Indonesia ayupratiwi@uym.ac.id

**Abstract.** Individual coping includes psychological and life adjustments, altruistic actions, team support, and rational cognition. Health workers need coping strategies as a way to control themselves against stressors. Coping strategies can help health workers in reducing anxiety and psychological impact. The purpose of this study was to describe psychological problems and coping strategies for health workers in treating COVID-19 patients. The research method used a descriptive qualitative design with a total of eight participants living in Tangerang City and its surroundings through purposive sampling. Data analysis used thematic analysis. The results of the study produced four themes, namely: (1) anxiety, (2) growth under pressure, (3) emotional-focused coping (4) efforts to reduce the risk of infection. Conclusions: The need for interventions and approaches that will support health workers' feelings include concern about health personnel, fear of carrying infection and transmitting it to family members or others, isolation, feelings of uncertainty, social stigmatization, and feeling insecure when providing care and health services to COVID-19 patients.

Keywords: Covid-19 · Psychological Problems · Health Workers

## 1 Introduction

Acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a newly discovered ribonucleic acid coronavirus isolated and identified from a patient with unexplained pneumonia in Wuhan, China [1, 2]. The new virus is called 2019-nCoV. Furthermore, experts from the International Committee on Virus Taxonomy (ICTV: International Committee on Virus Taxonomy) called it the SARS-CoV-2 virus because it is very similar to the cause of the SARS outbreak (SARS-CoVs). Symptoms range from mild self-limiting illness to severe pneumonia, acute respiratory distress syndrome, septic shock, and multiple systemic organ failure syndromes. Asymptomatically infected patients can also be a source of infection, mainly through aerosols from the respiratory tract but also through direct contact. Currently, there is no specific cure for this disease. Primary care professionals include antiviral and traditional medicine, isolation, symptom support, and close monitoring of disease progression.

Ethical Clearance:040/LPPM YATSI/VII/2022

Fifty-two countries in the world have confirmed cases of COVID-19, of which around 94% are in China. Including in Indonesia, with updated data on October 25, 2020, the total number of cases was 385,980. Cases - newly reported in the last 24 h were 4070, totally died were 13,205, and Deaths - newly reported in the last 24 h were 128 [3]. As the leading force in the fight against the coronavirus pandemic, health workers have an enormous task. Many health workers have sacrificed their well-being and contracted or died, causing increased psychological stress. According to Rahman (2020), research conducted in India involving 34 psychiatrists, 33 doctors, and health workers found that 33 participants (97%) experienced stress with details of 33 doctors and health workers experiencing mild stress. Research in Turkey on 442 health workers showed that 182 health workers experienced stress (42%) due to psychiatric disorders they had experienced and high working hours [4]. At the same time, health workers will be in a state of physical and mental stress and feel isolated and powerless in the face of health threats and pressures from high-intensity work caused by health emergencies that occur in the community. Due to the sudden outbreak of the epidemic, health workers had to provide care for COVID-19 patients and only underwent brief training on COVID-19. Psychological Impact of Stress in a Response to the COVID-19 Pandemic Anxiety and restlessness are normal reactions to threatening and unexpected situations such as the coronavirus pandemic. Possible stress-related reactions in response to the coronavirus pandemic may include altered concentration, irritability, anxiety, insomnia, diminished productivity, and interpersonal conflict, but these are particularly true for groups directly affected (e.g., healthcare professionals). Apart from the threat of the virus itself, there is no doubt that quarantine measures, which are being carried out in many countries, have a negative psychological effect, further increasing the symptoms of stress. The seriousness of symptoms depends in part on the intensity and length of quarantine, feelings of remoteness, fear of contamination, insufficient information, and stigmatization of more vulnerable groups, including the mentally ill, health workers, and people with low socioeconomic status [5]. The resilience of Healthcare Professionals works during the pandemic. It must be acknowledged that many health workers are on the front lines of the coronavirus outbreak. It is necessary to pay attention to health professionals who work in emergency units or intensive care workers with heavier and more stressful workloads than usual because those being treated are COVID-19 patients [6–9]. Health professionals will experience more severe psychiatric conditions, separation from family, unfamiliar situations, increased exposure to the coronavirus, fear of contagion, and feelings of failure in the face of poor prognosis and insufficient technical means to assist patients. For healthcare workers, it can be a struggle to stay mentally healthy in this rapidly evolving situation and minimize the risk of depression, anxiety, or burnout. Psychological Disorders of Health Workers COVID-19 has caused a global health crisis with increasing numbers of people being infected and dying every day. Various countries have tried to control its spread by applying the basic principles of grouping and social testing. Health professionals have become frontline workers globally in dealing with pandemic preparation and management [10, 11]. It is evident that mental health for health workers needs to be considered. Therefore, researchers want to develop a sustainable research plan to be able to educate health workers on stress management and coping strategies that health workers can use. However, this research roadmap begins with an analysis of psychological problems and coping strategies for health workers in treating COVID-19 patients.

## 2 Methods

The research method was a descriptive qualitative approach where this approach was one of the methods in qualitative approach that aimed to provide a clear and detailed description of the situation or social phenomenon about what was happening in the community [12]. The study design used the Colaizzi phenomenological method to qualitatively analyze the psychological experiences of health workers who treat patients with COVID-19. Colaizzi's phenomenological method focuses on the experiences and feelings of the participants and finds the research theme. This scientific approach guarantees the authenticity of the experiences collected by participants to comply with scientific standards. The selection of subjects in this study was carried out by purposive sampling, namely the sampling technique of data sources with specific considerations, namely specializing in subjects who had a phenomenon under study or occurred where this research does not intend to generalize [13]. The selection of research subjects was not forced but based on the willingness of the research subjects to become research subjects. The sampling technique is a source of data by specializing in subjects who experience the phenomenon or event under study. Characters for the research subjects were: 1) Willing to participate in research, 2) Health workers who treat patients suspected of Covid-19, Minimum working period of 6 months. Researchers took a sample of nine participants because it had reached saturation in the seventh participant. The thing that made attention was not the number of research subjects as quantitative research requires it, but rather the depth and quality of the information obtained and how much information could be obtained from the research subjects [14]. Data collection by in-depth interview technique for 30-60 min was used to collect data, and a probing technique was used to ask questions to obtain detailed information about their experiences, which were recorded using a voice recorder. The purpose of the study was explained to each participant, and they signed a consent form to ensure their anonymity and confidentiality. The participants had the option to leave the study at any time. Data analysis consists of the following steps: Bracketing, intuiting, and analyzing process involves identifying the essence and describing.

## **3** Result

Analysis of in-depth interviews with participants revealed four themes: Anxiety, Responsibility or professional identity of health workers, Emotion-focused coping, and Efforts to reduce the risk of infection.

Theme 1: Anxiety

"...Fear must be there. Yes, we are afraid of being infected, afraid to bring home a child and a parent's husband.." (Participant 1).

"At the beginning, I was afraid. I did not know what Covid was like..." (Participant

5)

Theme 2: Growth Under Pressure

Most health workers reported themselves psychologically under pressure such as a sense of responsibility as professionals and self-reflection. Health workers took part in self-reflection of their values and find positive strengths such as expressing more appreciation for health and family. Consistent is a sense of responsibility carried out by health workers in a professional manner in treating Covid-19 patients, encouraging them to participate in their duties as healthcare professionals actively, and enhancing their professional identity and pride. The following statement explains this:

"...Responsibility, yes, if that's the case, right, we've been assigned, so our responsibility means we have to live it. We also work at the hospital. We can't refuse either.." (Participant 5)

"..we knew beforehand that from diseases from outside there were a few we were afraid of just coming back again because oh I turned out to be health workers and our duties as professions, yes, we accept that we carry out.." (Participant 3)

Theme 3: Emotion-Focused Coping

Health workers tried to deal with stress by regulating emotional responses to adjust to the impact caused by a stressful condition or situation, especially during the COVID-19 pandemic. Health workers assumed that they were not involved in problems and were aware of their responsibilities while on duty at the hospital. The following statement explains this:

"If I'm honest, I never think about anything that incriminates myself, so everything I face, I just take it easy, just deal with it without any worries, without any suspicion, so I just do everything if I'm like that, so I just entertain myself" (Participant 4)

"...The feeling is that at the beginning of dealing with covid, we were directly involved but now we have been given basic training before handling it, which we have from the Ministry of Health..." (Participant 3)

"..hospital is responsible if we are treated.." (Participant 8)

"... we are given a bonus as long as we treat covid patients, although sometimes the bonus is late but I am grateful.." (Participant 7)

Theme 4: efforts to reduce the risk of infection

Personal protective equipment always available in hospitals helped increasing the confidence of health workers in treating patients suspected of Covid-19. Health workers felt safe and protected after wearing full PPE. The following statement explains this:

".. As long as we have complete PPE, there is no fear, except if we don't wear PPE, I am afraid." (Partisipan 5)

"...Eat nutritious food and maintain cleanliness by washing hands using a hand sanitizer and wearing a mask.." (Participant 7)

This study explored the experience or psychoanalysis of coping strategies for health workers who treat patients with COVID-19 using phenomenological methods and found four themes: anxiety, responsibility or professional identity of health workers, coping that focuses on emotions, and Efforts to Reduce the Risk of Contagion.

## 4 Discussion

#### 4.1 Anxiety

Health workers, as the majority of respondents, expressed anxiety in treating patients suspected of Covid-19. Health workers are still filled with anxiety if they are infected or infect their families and others. Therefore, early psychological intervention is crucial for health workers treating COVID-19 patients. It is best to conduct an anxiety assessment, screen health personnel, and provide professional, flexible, and sustainable psychological interventions [15, 16].

#### 4.2 Self-development Under Pressure

If intrinsic motivation is done well, the performance of health workers will also increase. If intrinsic motivation is done poorly, it will reduce the level of performance of health workers. Intrinsic motivation includes the existence of responsibility, recognition, and development of health workers. In contrast, an extrinsic motivation that supports respondents to continue to carry out their obligations as health workers is supported from the agency where they work, such as rewards in the form of additional incentive money, additional food, certificates from professional organization for health workers who treat patients in the Covid-19 isolation room, support from other people, and adequate personal protective equipment [17].

Many studies have shown that epidemic outbreaks can cause psychological trauma to health workers [18]. On the other hand, our results showed that most healthcare professionals grow up psychologically under stress. Health workers reflected on their values and found positive strengths, such as expressing more appreciation for health and family and gratitude for social support, which was consistent. Therefore, actively guiding and inspiring health workers to realize their psychological growth during the epidemic can play a positive role in psychological adjustment.

#### 4.3 Coping Focuses on Emotions

Excessive stress can threaten a person's ability to deal with the environment and in the end, will interfere with the implementation of his duties or work [19]. Work stress can be seen in other signs and symptoms, such as unstable emotions. Coping strategies, cognitive evaluation, and social support are stress mediators. Studies have shown that psychological adaptation and social support play an intermediary role in psychological rehabilitation during a pandemic. Epidemic pressures can encourage health workers to use their medical and psychological knowledge to actively or passively make psychological adjustments. In this study, health workers adopting avoidance, isolation, speculation, humor, self-awareness, and other psychological defenses to adjust psychologically to situations can reduce stress and improve mental health.

The results of present study found that there were positive emotions in health workers, such as self-confidence, calm, relaxation, and happiness, which simultaneously or gradually appeared with negative emotions, in contrast to the results of several studies which only described the presence of a large number of negative emotions. Emotions during a pandemic [7]. The existence of awards or rewards from work units is also an important supporting factor. Health professionals generally believe positive emotions are associated with multidimensional support from patients, family members, team members, government, social groups, and others. Therefore, social support is very important for health workers in fighting the covid pandemic. Health workers in this study have been able to adapt gradually. Research has shown that positive emotions play an essential role in recovering and adjusting psychological problems for health professionals. Therefore, to overcome psychological problems, health workers need support, evaluate positive coping styles, and create positive emotions to improve their psychological health of health workers.

## 4.4 Efforts to Reduce the Risk of Contagion

The existence of the risk of getting the disease made all respondents make several attempts to reduce the risk of contracting the disease. The majority of respondents used personal protective equipment as completely as possible. Personal protective equipment that is provided in hospitals helps increase the confidence of health workers in dealing with patients suspected of Covid-19. Health workers feel safe and protected after wearing complete Personal Protective Equipment (PPE) clothing. The use of Personal Protective Equipment (PPE) is essential to use when it comes to working in hospitals. The use of PPE must be in conformance with Standard Operating Procedures (SOP). To prevent occupational accident problems or hazard risks that can arise while working in the hospital [20]. Personal Protective Equipment (PPE) is used for protection against the transmission of viruses, especially Covid-19. Health workers who perfom high-risk health care activites such as surgery or other procedures have a high risk of transmission, and health workers must use Personal Protective Equipment (PPE) that has met both quality and safety standards [21]. Compliance of health workers in implementing safe work behavior use of Personal Protective Equipment (PPE) is one of the main components of personal precaution as standard precautions in carrying out an action for health workers in an isolation room. The Majority of Respondents still think that patients are the source of infection, so they continue to apply precautions during contact with patients. Some minimize direct contact with patients. Standard precautions are a milestone that must be applied in all healthcare facilities providing safe health services for all patients and reducing the risk of further infection.

## 5 Conclusion

It is necessary to do interventions and approaches that will support feelings, concerns about personal health, fear of carrying infection and transmitting it to family members or others, isolation, feelings of uncertainty, social stigmatization, and feeling unsafe when providing care and health services to COVID-19 patients. Acknowledgement. Research implementation for health workers can run well thanks to the cooperation and support from all parties. The authors would like to thank Kemenristekdikti, the Yatsi Madani University in 2022, the leadership, and the staff of cooperation partners. The Institute for Research and Community Service (LPPM) Yatsi Madani University University, Nursing Department who have helped with the smooth running of the event, and all participants who have actively participated during this time.

## References

- Zhu N, Zhang D, Wang W, et al. A novel coronavirus from patients with pneumonia in China, 2019. N Engl J Med 382, 727–733.
- Zhu, Z. Xu, Wang, Liu, Wu, Li, Miao, Zhang, Yang, Sun, Zhu, Fan, Hu, Liu, and Wang. COVID-19 in Wuhan: Immediate Psychological Impact on 5062 Health Workers. *medRxiv* https://doi.org/10.1101/2020.02.20.20025338.
- 3. WHO, World Health Organization. Information about Covid-19.
- R Elbay, Selim Arpacioğlu, Karadere. Depression, anxiety, stress levels of physicians and associated factors in Covid-19 pandemics. *Psychiatry Research* 290, 113–130.
- Brooks, S., Amlôt, R., Rubin, G. J., & Greenberg, N. Psychological resilience and posttraumatic growth in disaster-exposed organisations: overview of the literature. *BMJ Mil Health* 166, 52–56.
- Guo, T., Shen, Q., Guo, W., He, W., Li, J., et al. Clinical Characteristics of Elderly Patients with COVID-19 in Hunan Province, China: A Multicenter, Retrospective Study. *Gerontology* 66, 467–475.
- 7. Kang, L., Li, Y., Hu, S., Chen, M., Yang, C., Yang, B. X., . . . Liu, Z. The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. *The lancet. Psychiatry* **7**,.
- Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L., . . Li, X. Mental health care for medical staff in China during the COVID-19 outbreak. *The Lancet Psychiatry* 7, e15–e16.
- Chew, N. W. S., Lee, G. K. H., Tan, B. Y. Q., Jing, M., Goh, Y., Ngiam, N. J. H., ... Sharma, V. K. A multinational, multicentre study on the psychological outcomes and associated physical symptoms amongst healthcare workers during COVID-19 outbreak. *Brain, behavior, and immunity* **S0889–159**, 30523–30527.
- El-Hage, W., Hingray, C., Lemogne, C., Yrondi, A., Brunault, P., Bienvenu, T., ... Aouizerate, B. Health professionals facing the coronavirus disease 2019 (COVID-19) pandemic: What are the mental health risks? *L'Encephale* **S0013-700**, 30076–30072.
- Iqbal, M. R., & Chaudhuri, A. COVID-19: Results of a national survey of United Kingdom healthcare professionals' perceptions of current management strategy - A crosssectional questionnaire study. *International journal of surgery (London, England)* 79, 156–161.
- 12. Yati Afiyanti & Imami Nur Rachmawati. *Metodologi Penelitian Kualitatif Dalam Riset Keperawatan*. (Rajawali Press, 2014).
- 13. Sugiyono. Metode Penelitian Kuantitatif, Kualitatif, dan R&D. (Alfabeta, 2017).
- 14. Creswell W. John. *Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed*. (Pustaka Pelajar, 2013).
- 15. Nekouei M, Langari M, Tella S, Smith N-J, Ma H, Turunen H. Self-Assessment of Patient Safety Competence: A Questionnaire Survey of Final Year British and Finnish Pre-Registration Nursing Students. *Int J Caring* **10**, 1212–23.
- Tanne, J. H., Hayasaki, E., Zastrow, M., Pulla, P., Smith, P., & Rada AG. Covid-19: how doctors and healthcare systems are tackling coronavirus worldwide. *BMJ Mil Health* 368, m1090 (2020).

A. Pratiwi et al.

- 17. Suhardi. The Science of Motivation (Kitab Motivasi). (PT Gramedia, 2013).
- Xiang, Y. T. Li, Zhang, Qinge Cheung A, H C. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *The Lancet Psychiatry* (2019).
- 19. Wibowo, I.G.P. Pengaruh Stres Kerja Terhadap Kepuasan Kerja Dan Komitmen Organisasional Karyawan UD. Ulam Sari Denpasar. *Pascasarjana Universitas Udayana Denpasar* (2014).
- I. B. Hubungan Perilaku Perawat dengan Kepatuhan Menggunakan Alat Pelindung Diri (APD) Sesuai Standard Operating Procedure (SOP) di ruang Rawat Inap Badan Layanan Umum Daerah (BLUD) Rumah Sakit Konawe Tahun 2015. *Universitas Haluoleo* (2015).
- 21. Kementrian Kesehatan RI. Pedoman Dukungan Kesehatan Jiwa dan Psikososial pada Pandemi Covid 19. (2020).

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

