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Burnout Among Health Workers and Recommendations After the Covid-19 Pandemic

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Abstract

This study aims to analyze the ideal efforts to overcome burnout among health workers and recommendations after the Covid-19 pandemic. The research was conducted using a qualitative approach with data collection techniques in the form of documentation studies. Results The documentation study found that health workers faced various pressures during their service during the COVID-19 pandemic Burnout occurs because of an imbalance between abilities, skills and available resources with the needs and demands of the job. Burnoutis recognized as a problem in all healthcare systems. So that in addition to its adverse effects on the physical and mental health of personnel, fatigue reduces efficiency, organizational commitment, self-esteem, civic behavior, creativity, innovation, and quality of nursing services. On the other hand, it can increase the hospital's financial burden, frustration, disappointment, dissatisfaction and result in deviant, destructive behavior and turnover.

Keywords: Burnout, Covid-19, Health Workers

Abstrak

Penelitian ini bertujuan untuk menganalisis upaya ideal dalam mengatasi burnout Di Kalangan Tenaga Kesehatan Dan Rekomendasi Pasca Pandemi Covid-19. Penelitian dilakukan dengan menggunakan pendekatan kualitatif dengan teknik pengumpulan data berupa studi dokumentasi. Hasil Studi dokumentasi menemukan bahwa nakes menghadapi berbagai tekanan selama pelayanan mereka selama pandemi COVID-19. Burnout terjadi karena ketidakseimbangan antara kemampuan, keterampilan dan sumber yang tersedia dengan kebutuhan dan tuntutan pekerjaan. Burnout diakui sebagai masalah di semua sistem perawatan kesehatan. Sehingga Selain efek buruknya pada kesehatan fisik dan mental personel, kelelahan menurunkan efisiensi, komitmen organisasi, harga diri, perilaku kewarganegaraan, kreativitas, inovasi, dan kualitas layanan keperawatan. Di sisi lain dapat meningkatkan beban keuangan rumah sakit, frustrasi, kekecewaan, ketidakpuasan dan mengakibatkan perilaku menyimpang, destruktif dan turnover.

Kata Kunci: Burnout, Covid-19, Tenaga Kesehatan.

INTRODUCTION

The Covid-19 situation has put a lot of pressure on healthcare. In this context, healthcare structures and professionals are pushed to the limit. In Indonesia in particular, Health Workers (Nakes) face urgent job demands such as working longer hours, constantly racing against time and facing shortages of health materials and individual protective equipment. But, Nakes also deal with challenging psychological factors. Facing death more than usual and being separated from their loved ones are just two examples of psychological distress (Britt et al. 2021). In fact, statistically it was reported that as of March 31 2022, as many as 2,087 Indonesian Health Workers had died fighting COVID-19 with a predominance of deaths, namely Doctors, Midwives and Nurses (Laporcovid19, 2022)

 $Health workers \ who \ directly \ provide \ services \ to \ Covid-19 \ patients \ are \ more \ at \ risk \ of \ experiencing \ stress, fatigue, trauma, anxiety \ and \ depression \ compared \ to \ other \ health \ workers \ who \ do \ not \ directly$

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serve Covid-19 patients. According to existing data nationally, more than 100 doctors and hundreds of other medical personnel have died due to being infected with Covid-19, and even this data continues to grow. According to research from the Faculty of Medicine, University of Indonesia (FKUI) reports that health workers (Nakes) in Indonesia experience Medium and High levels of mental fatigue or burnout syndrome, which is 83% (Soemarko, Basrowi & Putra, 2022).

During a pandemic, the fatigue of health workers increased radically due to increased responsibility for their own safety, for the safety of co-workers, and for patient safety (Dobson et al., 2020). In general, health workers who treat Covid patients have experienced burnout syndrome, this will have an impact on the health of the health workers themselves, if this occurs for a long time, this condition will be even worse, and the quality of service to patients will decrease, which will affect hospital service.

In several other countries research on the effects of the COVID-19 pandemic on the mental health of health workers is becoming a research trend worldwide (Orrù et al., 2021). Recent research on this topic of mental health has mainly focused on understanding the relevance of the pandemic context to the mental health of health workers, such as fatigue or burnout (Batra et al., 2020; Yildirim and Solmaz 2020). However, many of these studies do not examine factors that may be associated with reduced fatigue in the current pandemic situation. Therefore, despite the growing body of evidence about the impact of outbreak situations such as the COVID-19 pandemic on fatigue levels of healthcare workers, there is still much to be learned about what factors can help address pandemic fatigue. Regarding the factors that might affect the fatigue level of health workers, there has been a great deal of research on organizational and work-related factors (Contreras et al. 2020; Zito et al. 2018). There has been little research on the role or importance of individual factors, such as personal resources (Individual factors), especially in pandemic or epidemic situations (Britt et al. 2021) and the Role of Leadership in Burnout Health Workers (Ma et.al., 2021). Fatigue of Health Workers is a major problem among Health Workers and can affect the quality of Health Services. Little is known about burnout among nurses working in intensive care units in Indonesia. The following is some relevant research on the topic of burnout among Indonesian health workers during COVID-19.

Previous research in Indonesia conducted by Sunjaya, Herawati, & Siregar, (2021) was responsible for caring for COVID-19 patients who had a higher chance of experiencing depression and burnout. Psychological well-being should be considered for high-risk Healthcare Workers. The limitation of this study is that it only examines the symptoms of depression and burnout, does not test the magnitude of the influence of the factors that cause burnout. Mahendradhata et.al (2021) Finding a model of the capacity of the Indonesian Health System to Respond to COVID-19. The limitation of this research is that it only presents descriptive data in terms of infrastructure and the psychological aspects of health workers. Sofiani, et.al (2021) This study reports that during the COVID-19 period, nurses experienced a lot of emotional stress, such as Burnout, depersonalization, and anxiety. The limitations of this study are only examining the effect of the main variables, not testing the loading dimensions and indicators. Dianto et al (2021) Reporting Fatigue of Health Workers during the COVID-19 Pandemic in Aceh, Indonesia. The limitation of this study is that it only uses descriptive analysis of the dimensions of health worker fatigue. Setiawati et.al (2021) Reported the relationship between resilience and anxiety in health workers during the COVID-19 pandemic. The results show that there is a significant correlation between the level of resilience and anxiety experienced by health workers during the COVID-19 pandemic. The lower the resilience, the higher the anxiety experienced. The limitation of this study is that it only tests the Anxiety and Health Resilience components of the impact of Covid-19 without testing in a complex and in-depth way what causes these components to be integrated. Sudrajat et.al (2021) Reported that more than a third

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of private and public hospital nurses experience high levels of burnout syndrome, with nurses in the private sector being the most affected. The limitations of this study are only testing descriptive analysis and different tests of fatigue (burnout) of health workers from government hospitals and private hospitals. Bunga, Eka & Hutasoit (2020) Report on the relationship between burnout and nurse resilience in private hospitals in Indonesia. The limitations of this study only examine the level of relationship between variables, so the researchers suggest further exploring how to increase nurses' resilience to overcome nurse fatigue.

Meanwhile, research reports in foreign contexts, namely on the topic of Burnout Among Health Workers in Japan such as Nishimura, et al., (2021) reported "Burnout of Healthcare Workers Amid the COVID-19 Pandemic" through research found the prevalence of fatigue among Healthcare Workers health during the COVID-19 pandemic over time and suggests that Healthcare workers may suffer more fatigue during spikes in Covid-19 cases. given the uncertainty of the pandemic, people are becoming more frustrated with restrictions on social interaction and the existence of negative stigma against health workers. This condition adds to the fatigue of health workers further. In addition to personal efforts to prevent burnout, intervention from hospital leadership and government support is critical to addressing a protracted public health emergency.

Research in Italy by Trumello et.al (2020) reports that an examination of the psychological adjustment of Italian professional nursing staff during the peak of the pandemic took into account a number of variables that refer to adjustments to personal and professional staff. Professional health workers are those who are directly involved in handling emergencies due to the rapid spread of Covid-19, and the high death rate for those with serious health problems. Overall, the results of the research show that professionals who work to help Covid-19 patients 19 are at high risk of experiencing stress, fatigue, secondary trauma, anxiety and depression and Health workers who work in areas most affected by Covid-19, are at risk of experiencing stress and fatigue and low satisfaction with others. Researchers also found that professional health workers who work with Covid-19 patients expect psychological support two times higher than those who work indirectly with Covid patients.

From preliminary interviews conducted with health workers who work at the Bhayangkara Hospital, Jambi, they feel that there is anxiety about the physical and psychological health of these officers, due to fatigue at work, and that has the potential to be infected with the Covid-19 virus for themselves and their families. Burnout is a psychological problem and includes emotional and physical exhaustion caused by excessive stress that can last a long time. This problem is often encountered in nurses working in hospitals in Indonesia during Covid-19. Therefore, health workers need attention and support from hospital management, so that health workers pay more attention to their needs so that services can run well.

Based on the problems found, this research will be conducted on all health workers working at the Bhayangkara Jambi hospital in 2022, with a population of all health workers working at the Bhayangkara Jambi hospital, consisting of doctors, nurses, midwives, laboratory staff, radiology officers. Samples were taken from officers working in the emergency room, isolation inpatient and general hospitalization, and polyclinic, laboratory and radiology officers. The purpose of taking and selecting the sample is to determine the antecedent factors that influence the occurrence of burnout syndrome among health workers, namely Psychological Capital, Leadership, Compensation, Organizational Justice, Working Conditions. The main contribution of this research relates to its emphasis on personal resources, especially resilience, to overcome burnout in contexts of extreme demands such as those posed by a pandemic situation. By examining resilience, this research contributes by exploring the antecedents of burnout in the

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context of the COVID-19 pandemic. Second, this research develops individual factors which are still limited to research, especially in hospitals in Jambi City rather than organizational and work resources (Contreras et al. 2020; Zito et al. 2018). Theoretically, this study contributes to the Job-Demands Resource Theory (JD-R) by Bakker & Demerouti (2007) by conceptualizing resilience as a personal resource; Furthermore, by associating resilience with burnout as a unidimensional phenomenon (Duarte et al., 2020), the Job-Demands Resource Theory (JD-R) postulates that factors related to work stress can be classified into two main categories: job demands and work resources. power. Job demands refer to the physical, psychological, social or organizational characteristics of the job that require constant effort from workers. This effort may be physical, cognitive or emotional and thus comes with a physiological and/or psychological cost. Resources, on the other hand, are all the organizational, physical, social and psychological aspects that can help workers cope with job demands and/or enable workers (Nakes) to achieve their work goals.

RESEARCHMETHOD

This study uses a qualitative approach. Qualitative research according to Moleong (2009) is research that produces analytical procedures that do not use statistical methods or other quantification methods. This approach was chosen because the research objective requires answers in the form of textual data. Furthermore, researchers used data collection techniques in the form of documentation studies. Researchers try to collect supporting data through various documents such as journals, books, reports, news, and other sources. The data analysis technique carried out refers to the views of Miles, Huberman, & Saldana (2014), which consists of condensing and presenting data, as well as drawing conclusions as part of the interpretation, description and meaning of data in the form of analysis results.

RESULTS AND DISCUSSION

Burnout Among Health Workers

Burnoutis defined as the end state of long-term chronic stress (Maslach, 2003), and is a syndrome represented by three dimensions; mental exhaustion or emotional exhaustion, negative feelings and perceptions about the people one works with or depersonalization, and decreased feelings of personal accomplishment (Maslach and Jackson, 1981). Burnout is considered by many to be a "work-related mental health disorder" (Al-Sawai, 2013), and is frequently associated with anxiety and depression (Morse et al., 2012). Burnout can not only be personally stressful (Freudenberger, 1975), but can also manifest itself in many associated physical and mental health problems (Maslach et al., 2001). Physical symptoms appear as fatigue, exhaustion and somatization, and are also associated with social withdrawal, inability to regulate emotional expression (Gorgievski and Hobfoll, 2008); absence, (Ahola et al., 2008); lower morale and reduce efficiency and performance (Taris, 2006). Some conceptualizations of burnout argue that it is unidimensional in nature, related only to fatigue (Pines and Aronson, 1988; Shirom and Melamed, 2005) and thus there are measures of burnout that examine this dimension alone. However, Maslach's three-dimensional burnout model (1982, 1993) and Maslach's Burnout Inventory are considered "ideal standards" in burnout research (Schutte et al., 2000).

Early research on the burnout phenomenon focused on employees in health care services, as these are "occupations where the goal is to provide assistance and services to people in need and which can therefore be characterized by emotional and interpersonal stress" (Bakker et al., 2014 Burnout can

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negatively affect the quality of one's work and therefore the standard of care provided to clients (Rupert et al., 2015), and is "hypothesized to generate general negative views of self and others" (Paris and Hoge, 2010) Thus, burnout is not only harmful to the employees themselves (eg, psychologists in this case), but can also have secondary harmful effects on clients and patients (Rupert et al., 2015). In particular, the depersonalization dimension of burnout can lead to a psychologist's emotional distance or detachment from their clients (Maslach and Jackson, 1981). It is this duality of concern, both for individuals and those in their care, that warrants further investigation and fatigue reviews among applied psychologists.

According to Maslach and Leiter (2005) sources of burnout include one or more of the following: workload (too much work, not enough resources); control (micromanagement, lack of influence, accountability without power); rewards (insufficient salary, recognition, or satisfaction); community (isolation, conflict, disrespect); fairness (discrimination, favoritism); and values (ethical conflicts, meaningless assignments). Burnout can occur due to a mismatch between the individual and the work environment. Tasks that require sustained physical, emotional, or cognitive effort equal to the demands of the job (Demerouti et al., 2001). If job demands remain high, a person may become burnt out, experience chronic fatigue, and even psychologically distance themselves from their job (Bakker et al., 2014).

Effects of Burnout on Health Workers and Health Systems

The first immediate effect of fatigue is, of course, on the care and safety of the healthcare workers themselves. The rate of depressive disorders among health workers is alarming when compared to the general population and is closely related to high levels of work stress. Health workers tend to hide their difficulties due to the perceived stigma associated with mental illness as well as fear of the impact on their careers (Brower, 2021). In turn, these mental states were associated with further criticality, including a 25% increased likelihood of alcohol abuse or dependence and a twofold risk of suicidal ideation. When considering extreme measures, it is noted that rates are higher among physicians than in the general population (Schernhammer, 2005). Dutheil and colleagues (2019) recently reported an overall standardized death rate for physician suicide of 1.44 with a higher rate in women of 1.99. They also found a higher risk for anesthesiologists, psychiatrists, general practitioners, and general surgeons. Although, at present, there are no data sets regarding the impact of COVID-19 on the mental health of doctors and suicide, the many stories published in newspapers in various countries about the suicide of active doctors in the pandemic leave no doubt that the situation is getting worse.

Indirect effects of fatigue can be a decrease in the quality of the health care system in terms of adherence to guidelines, poor communication, medical errors, and patient outcomes and safety (Salyers et al., 2017). However, as Tawfik and colleagues (2019) clearly state, the relationship between the two phenomena may be bidirectional: healthcare workers suffering from burnout may be unable to provide high-quality healthcare, take more unnecessary risks, pay less attention to detail, and on the other hand, exposure to side effects or recognition of poor quality of care can lead to psychological distress. The authors conclude that the true strength of the association may be less than reported and that more randomized trials with adequate power and design are needed to understand exactly how burnout and quality of care influence each other.

How to Overcome Burnout in Health Workers

Since the COVID-19 outbreak, a wealth of evidence has been generated about healthcare worker burnout, leading to extensive discussions about how to address it in this particular context. Regarding individual action, self-care is suggested as a line of defense for healthcare workers to manage COVID-19

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patient requests for assistance, especially when recovery time is short and long-term efforts are required. Physical activity, physical relaxation, balanced diet, good sleep hygiene, family support, meaningful relationships (also maintained through digital channels), job satisfaction, self-awareness through reflective practices and small group discussions are interventions reported with evidence of efficacy.

Based on a review of expert interviews, several organization-focused recommendations have been proposed to build and sustain resilience of frontline health workers exposed to COVID-19 (Rieckert et al., 2021). The author invites to support communication, even during busy periods, by: (a) adopting an error-free environment for sharing incidents, ethical issues or emergencies, and challenges and suggestions; (b) involve nurses in management decisions (to promote a sense of community and positivity where every voice has a chance to be heard); (c) allow someone to talk before, during and after a shift. In addition, they recommend establishing a multi-disciplinary team with psychologists, spiritual counselors, social professionals, occupational health and safety doctors for professional psychosocial support to health workers based on natural coping strategies (acceptance, active coping, positive framing). They also suggest creating a safe area to provide healthcare workers with the opportunity to quickly withdraw from situations of emotional stress and get peer support. The authors propose planning time limits on shift duration (distinguishing between day and night, and between light and heavy duty) and on frontline periods, alternating shifts with days off, and planning vacations even during outbreaks. Finally, they report on the importance of compensating health workers with practical support such as social services for child, elderly, or animal care.

Regarding the cultural dimension, it is noted that widely adopted short-term mood reinforcers that contribute to portraying health workers as "health heroes", while offering recognition in such a short time, can obscure the human need for support, especially in contexts where mental health is still considered a stigma in society (Wei et al., 2021). Even if some progress has been made in removing barriers to seeking psychological support in coping with work-related stress (Moutier, 2018), cultural change is still needed for stigma (Feist, 2020). In our opinion, it is important to promote the principle of co-production which also includes the involvement of patients in efforts to improve healthcare through their feedback on service quality and organization. Sharing responsibilities makes it possible to reduce work-related stress that can lead to burnout.

CONCLUSION

Burnout has been a major concern for health workers since before the COVID-19 pandemic. The current emergency context has added new social and occupational factors that increase the risk of burnout with associated effects on quality of care and system efficiency. To the best of our knowledge, this is the first work to address an emerging concept with a comprehensive view. Several actions have been suggested to prevent or mitigate this parallel epidemic calling for action at the individual, organizational or cultural level. The main recommendation is to accept the challenges posed by the emergency and to incorporate competencies in health, welfare and behavioral sciences through long-term research that is planned and rigorously reported to guide the necessary cultural change and improvement of public health systems.

REFERENCES

Al-Sawai, A. (2013). Leadership of healthcare professionals: where do we stand?. *Oman medical journal*, 28(4), 285.

Burnout Among Health Workers and Recommendations After the Covid-19 Pandemic Jasman and Fibria Indriati

- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of managerial psychology*.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD-R approach. *Annu. Rev. Organ. Psychol. Organ. Behav.*, 1(1), 389-411.
- Batra, K., Singh, T. P., Sharma, M., Batra, R., & Schvaneveldt, N. (2020). Investigating the psychological impact of COVID-19 among healthcare workers: a meta-analysis. *International journal of environmental research and public health*, *17*(23), 9096.
- Britt, T. W., Shuffler, M. L., Pegram, R. L., Xoxakos, P., Rosopa, P. J., Hirsh, E., & Jackson, W. (2021). Job demands and resources among healthcare professionals during virus pandemics: A review and examination of fluctuations in mental health strain during COVID-19. *Applied Psychology*, 70(1), 120-149.
- Bunga, E. B., Eka, N. G. A., & Hutasoit, E. O. (2020). Relationship between burnout and resilience of nurses at a private hospital in Indonesia. *Enfermería Clínica*, *30*, 49-52.
- Contreras, S., Villavicencio, H. A., Medina-Ortiz, D., Saavedra, C. P., & Olivera-Nappa, Á. (2020). Realtime estimation of Rt for supporting public-health policies against COVID-19. *Frontiers in public health*, 970.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology*, *86*(3), 499.
- Dianto, R., Kurniawan, F. D., Pamungkas, S. R., Mawarpury, M., & Zulfikar, T. (2021). Burnout among Healthcare Workers during COVID-19 Pandemic in Aceh, Indonesia.
- Dobson, H., Malpas, C. B., Burrell, A. J., Gurvich, C., Chen, L., Kulkarni, J., & Winton-Brown, T. (2021). Burnout and psychological distress amongst Australian healthcare workers during the COVID-19 pandemic. *Australasian Psychiatry*, 29(1), 26-30.
- Duarte, I., Teixeira, A., Castro, L., Marina, S., Ribeiro, C., Jácome, C., ... & Serrão, C. (2020). Burnout among Portuguese healthcare workers during the COVID-19 pandemic. *BMC public health*, 20(1), 1-10.
- Dutheil, F., Aubert, C., Pereira, B., Dambrun, M., Moustafa, F., Mermillod, M., ... & Navel, V. (2019). Suicide among physicians and health-care workers: A systematic review and meta-analysis. *PloS one*, *14*(12), e0226361.
- Freudenberger, H. J. (1975). The staff burn-out syndrome in alternative institutions. *Psychotherapy: Theory, Research & Practice, 12*(1), 73.
- Gorgievski, M., & Hobfoll, S. E. (2008). Work can burn us out and fire us up. *Handbook of stress and burnout in health care*, 7-22.
- Laporcovid19. (2022). Pusara Digital Tenaga Kesehatan. Website https://nakes.laporcovid19.org/statistik
- Leiter, M. P., & Maslach, C. (2005). *Banishing burnout: Six strategies for improving your relationship with work.* John Wiley & Sons.
- Ma, Y., Faraz, N. A., Ahmed, F., Iqbal, M. K., Saeed, U., Mughal, M. F., & Raza, A. (2021). Curbing nurses' burnout during COVID-19: The roles of servant leadership and psychological safety. *Journal of Nursing Management*, 29(8), 2383-2391.
- Mahendradhata, Y., Andayani, N. L. P. E., Hasri, E. T., Arifi, M. D., Siahaan, R. G. M., Solikha, D. A., & Ali, P. B. (2021). The capacity of the Indonesian healthcare system to respond to COVID-19. *Frontiers in public health*, *9*, 887.
- M.B. Miles, Huberman, M. & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook*. Sage Publication, Inc.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of organizational behavior*, 2(2), 99-113.
- Moleong, L. J. (2009). Metodologi Penelitian Kualitative. Bandung: PT. Remaja Rosdakarya.
- Nishimura, Y., Miyoshi, T., Hagiya, H., Kosaki, Y., & Otsuka, F. (2021). Burnout of healthcare workers amid the COVID-19 pandemic: A Japanese cross-sectional survey. *International journal of environmental research and public health*, 18(5), 2434.

Burnout Among Health Workers and Recommendations After the Covid-19 Pandemic Jasman and Fibria Indriati

- Paris, M., & Hoge, M. A. (2010). Burnout in the mental health workforce: A review. *The journal of behavioral health services & research*, *37*, 519-528.
- Pines, A., & Aronson, E. (1988). *Career burnout: Causes and cures*. Free press.
- Orrù, G., Marzetti, F., Conversano, C., Vagheggini, G., Miccoli, M., Ciacchini, R., ... & Gemignani, A. (2021). Secondary traumatic stress and burnout in healthcare workers during COVID-19 outbreak. *International journal of environmental research and public health*, 18(1), 337.
- Rieckert, A., Schuit, E., Bleijenberg, N., Ten Cate, D., De Lange, W., de Man-van Ginkel, J. M., ... & Trappenburg, J. C. (2021). How can we build and maintain the resilience of our health care professionals during COVID-19? Recommendations based on a scoping review. *BMJ open*, 11(1), e043718.
- Rupert, P. A., Miller, A. O., & Dorociak, K. E. (2015). Preventing burnout: What does the research tell us?. *Professional Psychology: Research and Practice*, 46(3), 168.
- Salyers, M. P., Bonfils, K. A., Luther, L., Firmin, R. L., White, D. A., Adams, E. L., & Rollins, A. L. (2017). The relationship between professional burnout and quality and safety in healthcare: a meta-analysis. *Journal of general internal medicine*, *32*, 475-482.
- Schernhammer, E. (2005). Taking their own lives—the high rate of physician suicide. *N Engl J Med*, 352(24), 2473-6.
- Schutte, N., Toppinen, S., Kalimo, R., & Schaufeli, W. (2000). The factorial validity of the Maslach Burnout Inventory-General Survey (MBI-GS) across occupational groups and nations. *Journal of Occupational and Organizational psychology*, 73(1), 53-66.
- Setiawati, Y., Wahyuhadi, J., Joestandari, F., Maramis, M. M., & Atika, A. (2021). Anxiety and resilience of healthcare workers during COVID-19 pandemic in Indonesia. *Journal of Multidisciplinary Healthcare*, 14, 1.
- Shirom, A., Melamed, S., Toker, S., Berliner, S., & Shapira, I. (2005). Burnout and health review: Current knowledge and future research directions. *International review of industrial and organizational psychology*, 20(1), 269-308.
- Soemarko, D., Basrowi, R., & Putra, M. (2022). Prevalence and Determinant Factors of Health Workers Burnout during COVID-19 Pandemic in Indonesia. *Safety and Health at Work, 13,* S211-S211.
- Sofiani, Y., Kamil, A. R., Muhdiana, D., Aji, P. T., Kurniati, D., & Sudrajat, D. A. (2021). Determinant of Stress and Burnout among Nurses at the Second Wave of the Indonesian COVID-19 Pandemic: A National Web-based Survey. *Open Access Macedonian Journal of Medical Sciences*, 9(E), 1127-1132.
- Sudrajat, D. A., Indrianti, T. O., Supriatin, E., Hayati, S. N., & Lindayani, L. (2021). Nurse burnout: comparing public and private hospitals in Indonesia. *British Journal of Healthcare Management*, 27(2), 1-7.
- Sunjaya, D. K., Herawati, D. M. D., & Siregar, A. Y. (2021). Depressive, anxiety, and burnout symptoms on health care personnel at a month after COVID-19 outbreak in Indonesia. *BMC public health*, 21(1), 1-8.
- Taris, T. W. (2006). Is there a relationship between burnout and objective performance? A critical review of 16 studies. *Work & Stress*, *20*(4), 316-334.
- Tawfik, D. S., Scheid, A., Profit, J., Shanafelt, T., Trockel, M., Adair, K. C., ... & Ioannidis, J. P. (2019). Evidence relating health care provider burnout and quality of care: a systematic review and meta-analysis. *Annals of internal medicine*, *171*(8), 555-567.
- Trumello, C., Bramanti, S. M., Ballarotto, G., Candelori, C., Cerniglia, L., Cimino, S., ... & Babore, A. (2020). Psychological adjustment of healthcare workers in Italy during the COVID-19 pandemic: differences in stress, anxiety, depression, burnout, secondary trauma, and compassion satisfaction between frontline and non-frontline professionals. *International journal of environmental research and public health*, *17*(22), 8358.

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- Wei, Y., Kutcher, S., Baxter, A., & Heffernan, A. (2021). The program evaluation of Go-To Educator Training'on educators' knowledge about and stigma toward mental illness in six Canadian provinces. *Early Intervention in Psychiatry*, 15(4), 922-931.
- Yıldırım, M., & Solmaz, F. (2022). COVID-19 burnout, COVID-19 stress and resilience: Initial psychometric properties of COVID-19 Burnout Scale. *Death Studies*, *46*(3), 524-532.
- Zito, M., Emanuel, F., Molino, M., Cortese, C. G., Ghislieri, C., & Colombo, L. (2018). Turnover intentions in a call center: The role of emotional dissonance, job resources, and job satisfaction. *PloS one*, *13*(2), e0192126.

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