Original Article

Relationship between Burnout Syndrome Symptoms and Demographic Characteristics among Long-Term COVID-19 Hospital Healthcare Workers in South Sumatra, Indonesia

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Abstract

Background*:** During the COVID-19 pandemic, the workload of health professionals grew significantly, particularly in the service sector. Such heavy workload, particularly for those working on the front lines, can result to burnout syndrome. ***Objective: To find the correlation between long-term COVID-19 service personnel characteristics and burnout syndrome symptoms at hospitals. ***Methods:*** This cross-sectional, analytic study was done on health workers that managed COVID-19 at Palembang Muhammadiyah Hospital and Palembang BARI Hospital in South Sumatra, Indonesia. Purposive sampling was used to sample, with 88 samples total that satisfied the inclusion and exclusion criteria. A questionnaire was filled out to collect the data. ***Results:*** Based on the research results of data sets, there was a correlation between age and burnout syndrome (p=0.000), sex and burnout syndrome (p=0.006), COVID-19 service period and burnout syndrome (p=0.002), working hours per day and burnout syndrome (p=0.014), and marital status and burnout syndrome (p=0.013). ***Conclusion:*** Long-term COVID-19 service personnel and burnout syndrome symptoms in those hospitals are directly interrelated.

Keywords: Health professionals, COVID-19 hospital, work overload, burnout syndrome, COVID-19 pandemic

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Introduction

Coronavirus Disease 2019 (COVID-19) is an infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2).[1] Covid-19 cases are increasing in number from time to time. In the world, the number of cases of COVID-19 was recorded at 198,547,026 cases with a death rate of 4,232,892 cases as of August 1, 2021. As of August 1, 2021, in Indonesia, there were 3,440,396 cases of COVID-19 with a total number of 95,723 deaths.[2] In South Sumatra Province, the number of positive cases of COVID-19 increased by 48.7% in the last week. There were 47,757 cases of COVID-19 with a death rate of 2,137 cases. In the city of Palembang, there were 25,216 COVID-19 cases and 887 deaths.[3]

The COVID-19 epidemic has increased the load on the health-care system, notably on health-care personnel. Health professionals, particularly those on the front lines, are very susceptible to catching COVID-19, putting their lives and safety at danger. Aspects of mental health, such as the possibility of mental exhaustion or burnout syndrome, can also be impacted by personal safety, infection prevention, and productivity of health worker

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services. [4] Risks to health professionals arise, and in this era of pandemics it is undoubtedly necessary to develop a policy framework for surveillance.[4]

A high rate of burnout was observed among doctors during the COVID-19 pandemic, Resulted of the burnout syndrome subscale were significantly predicted by age, job title, length of employment, and hours worked per day.[5] The purpose of this research is to analyze the relationship between the characteristics of long-term COVID-19 service workers and the symptoms of burnout syndrome in hospitals in Palembang.

Methods

Between December 2021 and January 2022, this cross-sectional, analytic study was done among healthcare workers dedicated to COVID-19 related services in Palembang Muhammadiyah Hospital and Palembang BARI Hospital in South Sumatra, Indonesia. All healthcare practitioners who work with COVID-19 are required to fill out a questionnaire regarding their qualities and burnout risk. The study's sample consisted of 88 respondents who were chosen by purposeful sampling. The inclusion criteria for the study required participants to be willing research participants and to have worked in the COVID-19 ward for at least three months. Respondents who were unwell or absent throughout the study and who did not fill out the questionnaire in its entirety were omitted from the analysis. On the basis of the research done, 88 respondents were sampled: 50 from Palembang Muhammadiyah Hospital and 38 from Palembang Hospital BARI. The statistical analysis was done using the Statistical Package for Social Sciences (SPSS) version 22.0 for Windows (SPSS Inc., Chicago, Illinois, USA). Data analysis was univariate and bivariate. Chi-square test, and alternative Kolmogorov-Smirnov test yielded P values. A P-value <0.05 was considered as statistically significant.

Results

Table 1 displays that the majority of respondents (35.2%) are between the ages of 18-35 and 36-45. Table 2 reveals that the majority of respondents are female, with 63 female respondents (71.6%), and 25 male respondents (28.4%). According to Table 3, 69 respondents are married (78.4%), whereas 19 respondents are single (21.6%). Table 4 indicates that 58.0% of respondents have a three-month working period. This equates to 51 individuals. Table 5 reveals that the greatest number of respondents with work duration >7 hours is 53 (60.2%). 18 respondents (20.5%) were diagnosed with mild burnout syndrome, 44 respondents (50%) were diagnosed with moderate burnout syndrome, and 26 respondents (29.5%) were diagnosed with severe burnout syndrome (Table 6). Table 7 shows a significant correlation between the age of COVID-19 service personnel and symptoms of burnout syndrome in Palembang hospitals. Moreover, there is a significant link between the gender and symptoms of burnout syndrome (Table 8). There is a significant link between the marital status of COVID-19 service personnel and symptoms of burnout syndrome in Palembang hospitals (Table 9). We also found a strong correlation between the service duration of COVID-19 service personnel and symptoms of burnout syndrome (Table 10). There is a significant link between COVID-19 service workers' daily working hours and symptoms of burnout syndrome (Table 11).

Table 1: Age Frequency Distribution of Health Workers (n=88)

Age years old	Amount	Percentage
18-35 (Early Adult)	31	35.2
36-45 (Late Adulthood)	31	35.2
46-60 (Elderly)	26	29.5
Total	88	100

Table 2: Gender Frequency Distribution of Health Workers (n=88)

Gender	Amount	Percentage
Man	25	28.4
Woman	63	71.6
Total	88	100

Table 3: Marital Status Frequency Distribution of Health Workers (n=88)

Marital status	Amount	Percentage
Marry	69	78.4
Not married yet	19	21.6
Total	88	100

Table 4: Service Period Frequency Distribution (n=88)

COVID-19 Service Period	Amount	Percentage
< 3 months	37	42.0
> 3 months	51	58.0
Total	88	100

Table 5: Working Hours per day Frequency Distribution (n=88)

Working Hours per day	Amount	Percentage
7 hours	35	39.8
> 7 hours	53	60.2
Total	88	100

Table 6: Burnout Syndrome Levels Frequency Distribution (n=88)

Burnout Syndrome Rate	Amount	Percentage
Light	18	20.5
Currently	44	50.0
Heavy	26	29.5
Total	88	100

Table 7. Age Relationship with Burnout Syndrome

Age (years old)	Burnout Syndrome						P value
	Light		Moderate		Heavy		
	N	%	N	%	N	%	
18-35	4	12.9	23	74.2	4	12.9	0.000
36-45	8	25.8	16	51.6	7	22.6	
46-60	6	23.1	5	19.2	15	57.7	
Total	18	14.8	44	50.0	26	29.5	

Table 8: Gender Relationship with Burnout Syndrome

Gender	Burnout Syndrome						P value
	Light		Moderate		Heavy		
	N	%	N	%	N	%	
Man	9	36.0	6	24.0	10	40.0	0.006
Woman	9	14.3	38	60.3	16	25.4	
Total	18	20.5	44	50.0	26	29.5	

Table 9: Marital Status Relationship with Burnout Syndrome

Marital status	Burnout Syndrome						P value
	Light		Moderate		Heavy		
	N	%	N	%	N	%	
Marry	8	11.6	36	52.6	25	36.2	0.013
Not married	10	52.6	8	42.1	1	5.3	
Total	18	20.5	44	55.0	26	29.5	

Table 10: COVID-19 Service Period Relationship with Burnout Syndrome

COVID-19 Service Period	Burnout Syndrome						P value
	Light		Moderate		Heavy		
	N	%	N	%	N	%	
< 3 months	14	37.8	16	43.2	7	18.9	0.002
> 3 months	4	7.8	28	54.9	19	37.3	
Total	18	20.5	44	55.0	26	29.5	

Table 11: Working Hour per Day Relationship with Burnout Syndrome

Working hours per day	Burnout Syndrome						P value
	Light		Moderate		Heavy		
	N	%	N	%	N	%	
7 hours	12	34.3	17	48.6	6	17.1	0.014
>7 hours	6	11.3	27	50.9	20	37.7	
Total	18	20.5	44	50.7	26	29.5	

Discussion

18 respondents (20.5%) had mild burnout syndrome, 44 had moderate, and 26 had severe. The service sector has a higher risk of burnout, which explains its high occurrence. During the epidemic in China, health care workers had to adapt to a new work environment, a heavier workload, a lack of personal protective equipment, and the fear of getting the disease and infecting others. Burnout syndrome is caused by feeling powerless to help a patient and managing difficult relationships.[6] Burnout syndrome (BOS) causes psychological, emotional, and physical stress. 82% of health professionals in Indonesia have had moderate burnout syndrome, and 1% with severe psychological degrees are at danger of negatively damaging their quality of life and labor efficiency in the health services.[7]

Late adults to the elderly (ages 46 to 60) exhibited a more worse form of burnout syndrome, according to the study. This may be due to the epidemic, which demands nurses to remain in constant contact with patients, causing fatigue. Senior nurses have more influence over their work and are more motivated to perform well.[8] Senior nurses' tasks are physically, emotionally, and mentally draining.

16 female responders experienced severe burnout syndrome, according to the study. Using chi-

square testing, a significant correlation was found between the sex of COVID-19 service employees and burnout syndrome symptoms in Palembang hospitals. Sari (2015) found a 0.000 p-value between nurse gender and exhaustion.[9] Women are more sensitive to depression, which is influenced by their environments, including coworker arguments, challenging patients, and the family situation. The epidemic raises nurses' stress, which affects this outcome. Working with PPE is stressful, especially when mixed with the fear of contracting a sickness and infecting family members.[10] Men who treat patients are more apathetic, thus male nurses experience less burnout.[11]

25 married respondents had significant burnout, according to observations. Married health practitioners may have more financial and social responsibilities. The Kolmogorov-Smirnov test found a p-value of 0.013 between COVID-19 service members' marital status and burnout symptoms in Palembang hospitals. Sari (2015) at Sanglah Hospital showed a significant association between marital status characteristics and burnout syndrome with a p-value of 0.015.[9] In a pandemic, health care workers with a high risk of contracting the disease may worry about infecting their family, causing stress. A married person must also support their family and attend social events. This overburdens married women with responsibilities, causing stress.

More than three months of COVID-19 service was related with significant burnout, according to the study. The statistical test found a 0.002 p-value between COVID-19 service length and burnout syndrome symptoms in Palembang hospitals. This is congruent with Sari's (2015) research, which shows a substantial connection between tenure and burnout syndrome.[9] During the COVID-19 pandemic, nurses play a critical role as the first line in conducting evaluations, decreasing difficulties with close monitoring, performing emergency actions, and addressing crisis circumstances that may result in high pressure and burnout syndrome. Physical (workload) stress causes poorer muscular performance and slower movement.[12] This scenario is caused by a combination of factors, such as a heavy workload and daily pressures.

According to the study, severe burnout was more common among those who worked more than seven hours a day. The statistical test showed a p-value of 0.014, indicating a connection between COVID-19 service professionals' daily working hours and burnout symptoms in Palembang hospitals. Sari's (2015) research on nurses at Sanglah Hospital discovered a p-value of 0.006 between workload and burnout syndrome (p-value 0.05).[9] This may be due to the long hours nurses work, which can lead to fatigue or boredom, stress, and lower job satisfaction. The absence of proven medicines and the vast number of patients contribute to the established work shifts during the COVID-19 epidemic. Extreme work stress can cause nurse burnout.[12,13]

Limitations of the study

During the data collection process, not all types of work were accounted for. The on-duty laboratory workers, radiology technicians, and physicians did not adequately reflect all sorts of healthcare workers who deal with the COVID-19 pandemics in those hospitals.

Conclusion

The findings revealed a substantial association between the characteristics of long-term COVID-19 service staff and symptoms of burnout syndrome in Palembang hospitals. It is suggested that additional research be conducted on additional aspects, such as individual effort factors, organizational effort factors, and work environment, which may lead to burnout syndrome among COVID-19 service professionals.

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