

Research Article

Fear of COVID-19 Among Indonesian Nurses: A Descriptive Cross-sectional Study

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Abstract.

This study aims to explore Indonesian nurses' fear of COVID-19 and the factors affecting that fear. This descriptive study selected 99 nurses from Dumai General Hospital through purposive sampling. The instrument used was the fear of COVID-19 questionnaire (FCV-19S). Chi-squared test was the primary data analysis method. The results showed that the majority of respondents are female (72.7%), Muslim (93.9%), married (64.6%), have a nursing degree diploma (69.7%), and work in the inward care unit (60.6%). The majority are nurse volunteers (75.8%) who have worked an average of 5.8 years with an average age of 31.7 years. The study results show that the majority of respondents are scared of COVID-19 (70.7%). The results also indicate that most of the nurses who are afraid of COVID-19 are women (50.5%), who have worked for less than five years (42.4%), and who provide care services in the inward unit (40.4%). However, the results indicate no relationship between gender, working unit, marital status, religion, and education with fear of COVID-19. The fear of COVID-19 among nurses is still high. However, demographic factors do not correlate with fear of COVID-19. Therefore, other factors related to the fear of COVID-19 need to be explored, and appropriate interventions should be implemented to prevent the development of mental health problems among nurses.

Keywords: mental health, nurses, COVID-19, Indonesia

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1. INTRODUCTION

Covid 19 is an emerging disease that has posed a great challenges for the global health system around the world [1]. In March 2022, the World Health Organization (WHO) declared this disease a pandemic [2]. Globally, the confirmed cases of COVID-19 have increased to more than 620 million people infected [3]. The pandemic has spread to more than 200 countries and most of them are still struggling to overcome the spreading infection through multiple means of infection control such as quarantine, public distancing and mandatory mask use [4].The symptoms range from sore throat and fever to more hazardous symptoms such as breathing difficulties and even death

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[5]. Despite the respiratory pattern of COVID-19, its novelty and highly infectious nature have also impacted the growth of psychological problems not only among patients but also among healthcare workers who directly provide patient care [6].

Nurses, as frontline health care workers, are vulnerable individual who have developed psychological problems during this pandemic. Previous research found that nurses have been overworked, doing their job for more than 100 hours in a single week [6]. In addition, the working environment also has been emotionally difficult for nurses due to uncertainty and stigmatization [7]. Furthermore, the vulnerability to disease could generate fear and anxiety among nursing staff. Therefore, it is not surprising that more nurses have been diagnosed to have stress, anxiety, depression and even insomnia related to stressful experiences [8,9]. For the frontline nurses who directly worked in the COVID-19 ward, their stress is higher as they repeatedly witness the suffering and dying of COVID-19 patients [10]. However, updated research indicates that the severity of nurses' symptoms are also determined by age, gender, specialization area, and type of activity performed [11].

Indonesia confirmed the first positive COVID-19 case in March 2020. Within 40 days cases were reported in all province in Indonesia [12]. An unprecedented outbreak of the emerging infectious disease may result in psychological distress among Indonesian's nursing staff. Previous research suggests that nursing staff working in emergency departments and COVID-19 isolation ward are more susceptible to psychological impairment [13]. An increase in mental health symptoms experienced by nurses will lead to a decline in their health status and impact their quality of life [14]. However, to the best of our knowledge, there are only a few systemic studies that have explored the fear of COVID-19 among Indonesian nurses. Understanding the fear of COVID-19 among nurses and its associated factors will enable the Indonesian government to design policies and interventions that aim to increase the mental health wellbeing of nurses. Therefore, this study aimed to explore the fear of COVID-19-among nurses as well as their associated factors.

2. MATERIALS AND METHODS

A cross sectional study approach using purposive sampling was adopted. The population of concern in this study was nurses who were directly involved in providing care for COVID-19 patients in the General Hospital Dumai, Riau Province, Indonesia. To meet the research needs, the participants were selected according to the following inclusion criteria: 1) nurses who were directly involved in handling COVID-19 patients; 2) with no

history of mental health disturbances; 3) who were willing to participate in the study. A total of 105 nurses completed the questionnaire. However, 6 questionnaires were excluded because the data were not complete. The total sample that participated was sufficient for calculating G Power. Overall. The response rate was 94.28 %.

The study was conducted in accordance with the Helsinki Declaration. Ethical approval was obtained from the Research ethics committee of Universitas Riau Indonesia (Nomor: 430/ UN.19.5.1.8/KEPK.FKp/2022). We collected the data from June to August, 2022. Participants were recruited from the emergency ward, Intensive ward, the maternity ward and the medical ward. All participants voluntarily participated and signed the informed consent before filled out the questionnaire. A self-report socio-demographic form was used to collect information about gender, age, marital status, religion, education, work placement and type of employment. To measure the fear of COVID-19, we used The Indonesian version of the Fear Of Covid-19 questionnaire (FCV-19S). Originally, the COVID-19 fear scale (FCV-19S) was developed by Ahorsu and colleagues [10]. The scale consists of 7 items which are easy to use. The FCV-19S-Indonesia version has been proven to have a good validity with cronbach alpha 0.87 [15]. A statistical analysis was performed using The SPSS Program. To describe the quantitative variables, the descriptive statistics values such as mean, minimum and maximum and standard deviation were used. To determine the influence of independent variables on fear of COVID-19, Chi-square was used.

3. RESULTS

3.1. Respondents' Characteristics

Based on this study, it was found that the majority of respondents were female (72 people, 72.7%), work in the inward care unit (60 people, 60.6%), Muslim (93 people, 93.9%), and married (64 people, 64.6%). This study also showed that 69 participates (69.7%) held a diploma and 75 (75.8) were volunteers.

The mean age of respondents was 31.7 years old. The minimum age was 23 years old and the maximum was 48 years old.

3.2. Mean length of work of nurses

The mean number of years working as a nurse in a hospital was 5.8 years. The minimum length of time was 1 year and the maximum was 17 years.

TABLE 1: Respondents' Characteristics.

No.	Respondents' Characteristics	N=99	Percentage (%)
1.	Gender Male Female	27 72	27.3 72.7
	Total	99	100
2.	Work Space Emergency Inward care unit Intensive care unit	32 60 7	32.3 60.6 7.1
	Total	99	100
3	Religion Muslim Christian	93 6	93.9 6.1
	Total	99	100
4.	Marital status Married Single Widowed	64 33 2	64.6 33.3 2.1
	Total	99	100
5.	Education Diploma Bachelor	69 30	69.7 30.3
	Total	99	100
6.	Employment status Civil servant Volunteer Honorary	19 75 5	19.2 75.8 5.1
	Total	99	100

TABLE 2: Mean Age of Respondents.

Variable	N	Mean	SD	Median	Min	Maks
Age	99	31.7	5.3	30	23	48

TABLE 3: Mean length of work of nurses.

Variable	N	Mean	SD	Median	Min	Maks
length of work	99	5.8	4.06	4	1	17

3.3. An Overview Fear of COVID-19

TABLE 4: An Overview Fear of COVID-19 among nurses.

No.	Variable	N=99	Percentage (%)
1.	Fear Of COVID-19 Yes No	70 29	70.7 29.3

Based on this study, the majority of nurses were afraid of COVID-19, with 70 (70.7%) respondents reporting such fear.

3.4. The relationship between respondent characteristics and Fear of Covid-19

Based on this study, there is no relationship between gender, religion, education, marital status, employment status, age, length of work, and fear of COVID-19 with a p-value

TABLE 5: The relationship between respondent characteristics and Fear of Covid-19.

Variable	Fear of COVID-19				Total		p value
	No		Yes		N	%	
	N	%	N	%			
Gender Male	7	25.9	20	74.1	27	100	0,496
Female	22	30.6	50	69.4	72	100	
Religion Muslim	27	29	66	71	93	100	0,694
Christian	2	33.3	4	66.7	6	100	
Education Diploma	17	33.3	52	66.7	69	100	0,616
Bachelor	6	80	24	20	30	100	
Marital Status Married	17	73.4	41	26.6	58	100	0,399
Single Widowed	12 0	36.4 0	27 2	63.6 100	39 2	100 100	
Employment status Honorary	1	20	4	80	62	100	0,325
Civil servant Volunteer	5 23	26.3 30.7	14 52	73.7 69.3	7 1	100 100	
Age 17-25	3	50	3	50	6	100	0,358
26-35 36-45 46-55	19 7 0	26.8 35 0	52 13 2	73.2 100	65 71 20 2	100 100 100	
Length of work < 5 years	20	32.3	42	67.7	62	100	0,422
Years >10 years	4 5	21.1 27.8	15 13	78.9 72.2	19 18	100 100	
Work space Inward care unit	20	33.3	40	66.7	60	100	0,021
Emergency Intensive Care	6 3	18.8 42.9	26 4	81.3 57.1	32 7	100 100	

>0.05. However, this study shows that there is a relationship between works space and fear of COVID-19 p-value < 0.05.

4. DISCUSSION

During the COVID-19 pandemic, nurses were at the forefront of caring for confirmed patients who were at high risk of being exposed to COVID-19. This is one of the stressors for nurses at work. The results of this study indicate that there is no relationship between gender and fear of COVID-19. However, more women reported being scared of covid-19 than men. This is in line with research conducted by Broche-Perez et al [16] who found

that gender has a significant relationship to fear of COVID-19 and that women have a higher fear of COVID-19 than men. The results of another study also supported this idea, when they found that women has the greater susceptibility of fear of Covid 19 than man during the COVID-19 pandemic [17, 18]. According to the authors, the fear of COVID-19 in the current condition occurs due to the government loosening regulations. This makes it difficult for health workers to identify patients with COVID-19 symptoms, and this creates feelings of fear among nurses.

The results of this study indicate that religion does not affect fear of COVID-19, although this study showed that Moslem has more scared to Covid 19 compared to other religion. This is results is contradicted with another research conducted by Mejia et al [19] that showed there is a relationship between religion and fear of COVID-19 where the people related to evangelicans religion was more scared to Covid 19. The different results may be caused of different sociodemography and culturalbetween those two countries. Particularlry, Indonesia was known as the largest moslem countries in this world. Therefore, almost all employment sectors are filled by Muslims including health care workers. Hence, it is not suprising that Moslem become the largest respondent.

This study indicates that there is no relationship between education, age, marital status, religion, length of work, and employment status with fear of COVID-19. The results of this study contradicted with other studies. Research conducted by Abid et al [20] showed, that education, age, and marital status are predictors of fear of COVID-19. We assumed that those differentiation were caysed by the special characteristic of respondent. The Indonesia culture though the people to help and support each other. Therefore, when they faced difficult time, the peer support is their main coping. Since we do not put peer support as variable in this study, the role of peer support need to be explored more in the future study.

Unexpectedly, this study indicate that there is a relationship between the working space and fear of COVID-19. This study showed that people who worked in the inward department were scared more to Covid-19 compared to another ward such as Emergency and Intensive Care ward. This results is supported by the research conducted by Kang et al [21] that proved departments or work units have a direct impact on health care worker's mental health. However, our results are not in line with previous research that shown, nursing staff who mainly work in emergency units and COVID-19 isolation rooms are more susceptible to psychological disorders [13]. Those differentiation may be caused by the different regulation and rules for each wards. In Indonesia emergency ward and intensive ward has more protective equipment than inward unit. Therefore, nurse in Emergency and Intensive ward were equipped by better protective gown and

mask compared to inward unit. Hence, it is not surprising that nurse who work in inward units has more fear of Covid-19.

5. CONCLUSION

The results of this study indicate that the department or work unit is a predictor of fear of COVID-19 in nurses at the Dumai Hospital. In this study, several socio-demography factor like age, gender, marital status had no relationship with fear of COVID-19. Therefore, the further research need to include another factors which predict fear of Covid-19 such as peer support and social support. Since the data is descriptive cross-sectional study, we cannot inferred the causal between the variables.

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CONFLICT OF INTEREST

There is no conflict of interest in this study

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