Analysis Of Factors Affecting Nurse Anxiety Levels In Covid-19 Patients At RSU Royal Prima Medan

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Abstract.
Since the emergence of the first confirmed case of Covid19 in Wuhan at the end of 2019, much attention has been focused on how the patient's health care system to the development of vaccines. However, the discussion about how the struggle of health workers, especially nurses, seems to have received less attention. Therefore, this study was conducted to find out how the anxiety level of nurses for Covid-19 patients is in terms of the influence of organizational support, social support, workload and personal resilience. The results showed that workload and personal resilience had a positive and significant effect on anxiety levels ($p < 0.005$) but organizational support and social support had no significant effect on anxiety levels ($p > 0.005$). From the results of the multivariate test, it was found that the p value was 0.000 ($p < 0.005$) which stated that together or simultaneously, the independent variables in this study had a significant influence on the dependent variable, namely the level of anxiety.

Keywords: *Anxiety, Organizational Support, Social Support, Workload, Personal Resilience.*

I. INTRODUCTION

The high level of case fatality and the rapid spread of COVID-19 led to the emergence of significant psychological reactions in the community. During this period health workers suffer from distress disorders due to high -risk, heavy workloads, which can affect sleep quality and physical as well as mental health. Regardless of the workplace, heavy workloads, feelings of inadequacy and ethical conflicts can exacerbate the stress and anxiety of health workers [1]. Recent research shows that health professionals who treat patients infected with corona virus are more likely to experience fatigue, insomnia, and headaches [2].Shanafelt et al identified that COVID-19 causes nurses to experience anxiety disorders [3]. Lack of personal protective equipment, fear of transmitting corona infection, doubts about health insurance from institutions if they are infected, fear of being placed in a ward or unit they are not familiar with have been identified as triggering factors for anxiety in nurses. If this anxiety disorder persists, it can have negative consequences on job performance and performance [4].Nurse managers have an important role in overcoming nurses' anxiety or fear of COVID-19 by providing mental, psychological, and mental health support. This can be realized through supportive measures, organizational policies, and the provision of a safe, comfortable and secure work environment. Social and organizational support, personal resilience are factors that protect individuals from difficulties and stress, which can then maintain the mental well-being and psychological health of nurses [4].

Organizational support or the extent to which the organization provides resources, encouragement and communication to individuals to do their work effectively plays an important role that contributes to the success of the organization. High organizational support can reduce the impact of stressors in different workplaces and can serve as a protector of stress and anxiety factors caused by disasters or infectious diseases [5].Social support obtained from co-workers, managers, friends and family can be defined as the help and protection provided to others. It is considered important for nurses to be able to cope and deal with different stressors in the work environment effectively. Adequate social support also helps health workers manage stress, disaster events and disease outbreaks effectively [6].The workload received by the nurse if it is not proportional to the physical ability, expertise and experience as well as the time available, can cause anxiety in nurses. Each nurse has different abilities in completing the tasks assigned to her. High workloads can cause physical work stress and emotional and psychological reactions [7].Personal resilience or a

person's capacity and ability to rise and recover from stressful situations can help nurses deal effectively with the burden caused by stressors. In research conducted by Larague, Hammad, et al. and Duncan [8], it was explained that the protective role of personal resilience in nurses during disasters and disease outbreaks can be strengthened by increasing nurse resilience. This can help them manage and deal with stressful situations effectively [9]. In this study, we will discuss how the influence of organizational support and social support on the anxiety level of nurses for COVID-19 patients with personal resilience as an intervening variable.

From the background that has been described, the formulation of the problem is as follows:

1. Does organizational support affect the anxiety level of nurses for COVID-19 patients at RSU Royal Prima Medan?
2. Does social support affect the anxiety level of nurses for COVID-19 patients at RSU Royal Prima Medan?
3. Does workload affect the anxiety level of nurses for COVID-19 patients at RSU Royal Prima Medan?
4. Does personal resilience affect the anxiety level of nurses for COVID-19 patients at RSU Royal Prima Medan?

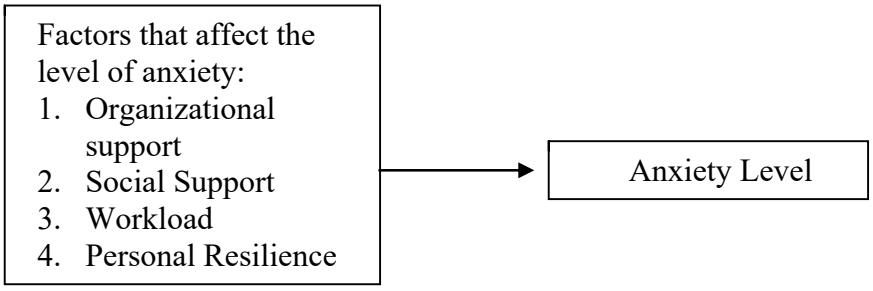

Fig 1. Research Concept Framework

The hypothesis is a temporary answer to the research, until it is proven through the collected data. The hypotheses of this study are:

1. H1 : Organizational support has a significant effect on Nurse Anxiety Levels for COVID-19 patients at RSU Royal Prima Medan.
2. H2 : Social Support has a significant effect on the Anxiety Level of Nurses for COVID-19 patients at Royal Prima Hospital Medan.
3. H3 : Workload has a significant effect on Nurse Anxiety Levels for COVID-19 patients at RSU Royal Prima Medan
4. H4 : Personal Resilience has a significant effect on the Anxiety Level of Nurses for COVID-19 patients at RSU Royal Prima Medan.

II. METHODS

This research was conducted at the Royal Prima General Hospital Medan. This research was conducted in June 2022. The population in this study were nurses who had treated COVID19 patients at RSU Royal Prima Medan in March – September 2020. The sample in this study were nurses who treated COVID19 patients who met the inclusion and exclusion criteria. The technique of determining the sample using the Slovin formula. The slovin formula for calculating the minimum number of samples [10]. Based on the results of a survey conducted, it was found that the total population of nurses who treated Covid-19 patients for the period March-September 2020 at RSU Royal Prima Medan was 581 people. The number of male nurses is 121 people and the number of female nurses is 460 people. From the results of the elaboration of the Slovin formula, it was found that the minimum population of nurses who would be the subject of this study was 237 people.

The data analysis of this research used SPSS 26th version with univariate, bivariate and multivariate analysis. Bivariate Analysis to assess the relationship of the independent variable to the dependent variable. The statistical method used is the Chi Square test if the data distribution is not normal, if the data distribution

is normal, then to test the relationship between the independent variable and the dependent variable using the Pearson correlation.Multivariate analysis to see the joint influence of the factors that affect the anxiety level of nurses for Covid19 patients at RSU Royal Prima Medan, a statistical test was carried out with multivariate analysis. If the data is normally distributed, then the statistical test is carried out using linear regression analysis, whereas if the data is not normally distributed, the statistical test used is logistic regression analysis.

III. RESULT AND DISCUSSION

Description of Nurse Characteristics

Table 3.1. Distribution of Characteristics Based on Age, Gender and Period of Nurses for Covid19 Patients at RSU Royal Prima Medan

No	Characteristicsk	Frequency	%
1.	Age		
	>25 Age	202 persons	85,2%
	< 25 Age	35 persons	14,8%
2.	Gender		
	Women	168 persons	70,9%
	Man	69 persons	29,1%
3.	Long Keeping Covid Patients		
	<6 mounth	39 persons	16,5%
	>6 mounth	198 persons	83,5%

Based on table 3,1 it can be seen that most of the nurses who had treated Covid 19 patients at RSU Royal Prima were over 25 years old, which were 202 people with a frequency of 85.2%. Meanwhile, for the gender variable, nurses who have treated Covid-19 patients are mostly female with a total of 168 people with a frequency of 70.89%. The length of time for keeping Covid 19 patients ranged from 5 months to 12 months, with an average of 7 months, grouped into 2 categories, namely 6 months and < 6 months.

Description of Nurse Anxiety Level

Table 3.2. Distribution of Nurse Anxiety Levels for Covid19 Patients at RSU Royal Prima Medan

Anxiety Llevel	Frequency	%
High (> 26)	148 persons	62,4%
Low (≤ 26)	89 persons	37,6 %
Total	237 persons	100 %

In table 3.2 above, it can be seen that nurses with high anxiety levels amounted to 1489 people (62.4%) and low anxiety levels amounted to 89 people (37.6%). In this table it is known that nurses with high anxiety levels are more than nurses with low anxiety levels**.**

Description of Nursing Organizational Support

Table 3.3. Distribution of Covid19 Patient Nurse Organization Support at RSU Royal Prima Medan

Organization Support	Frequency	%
High (> 25)	113 persons	47,6 %
Low (≤ 25)	124 persons	52,4 %
Total	237 persons	100 %

In table 3.3 above, it can be seen that nurses with high organizational support amounted to 145 people (47.6%) and low organizational support amounted to 124 people (52.4%). This table shows that there are fewer nurses with high organizational support than nurses with low organizational support.

Description of Nurse Social Support

Table 3.4. Distribution of Social Support for Covid-19 Patient Nurses at RSU Royal Prima Medan

Social Support	Frequency	%
High (> 25)	119 Persons	50,2 %
Low (≤ 25)	118 Persons	49,8 %
Total	237 Persons	100 %

In table 3.4 above, it can be seen that nurses with high social support amounted to 119 people (50.2%) and low social support amounted to 118 people (49.8%). In this table it is known that nurses with high social support are more than nurses with low social support

Description of Nurse Workload

Table 3.5. Distribution of Covid19 Patient Nurse Workload at RSU Royal Prima Medan

Work Load	Frequency	%
High (> 25)	124 persons	52,3 %
Low (≤ 25)	113 persons	47,7 %
Total	237 persons	100 %

In table 3.5 above, it can be seen that nurses with high workloads amounted to 124 people (52.3%), and low workloads amounted to 113 people (47.7%). In this table it is known that nurses with high workloads are more than nurses with low workloads

Description of Covid19 Patient Nurse Personal Resilience at RSU Royal Prima Medan

Table 3.6. Distribution of COVID-19 Patient Nurse Personal Resilience at RSU Royal

Personal Resilience	Frequency	%
High (> 25)	139 persons	58,6 %
Low (≤ 25)	98 persons	41,4 %
Total	237 persons	100 %

In table 3.6 above, it can be seen that nurses with high personal resilience amounted to 139 people (58.6%) and low personal resilience amounted to 113 people (47.7%). In this table, it is known that there are more nurses with high personal resilience than nurses with low personal resilience

Bivariate Test Results

The Effect of Organizational Support on Anxiety Levels

Table 3.7. The Effect of Organizational Support on the Anxiety Level of Nurses for Covid19 patients at RSU Royal Prima Medan

Variable	Mean	p value
Organizational Support for Anxiety Levels	25,23	0,677

From the results of the bivariate test, we can see that the mean value for this variable is 25.23, with a p value of 0.677, which means that there is no significant effect between organizational support on the anxiety level of nurses for Covid19 patients at Royal Prima Hospital Medan.

Effect of Social Support on Anxiety Levels

Table 3.8. The Effect of Social Support on the Anxiety Level of Nurses for Covid19 patients at RSU Royal Prima Medan

Variable	Mean	p value
Social Support for Anxiety Levels	25,24	0,292

From the results of the bivariate test, we can see that the mean value for this variable is 25.24, with a p value of 0.292 which means that there is no significant effect between social support on the anxiety level of nurses for Covid19 patients at RSU Royal Prima Medan.

The Effect of Workload on Anxiety Levels

Table 3.9. The Effect of Workload on the Anxiety Level of Nurses for Covid19 patients at RSU Royal Prima Medan

Variable	Mean	p value
Workload for Anxiety Levels	25,99	0,000

Table 3.9 The Effect of Workload on the Anxiety Level of Nurses for Covid19 patients at RSU Royal Prima Medan From the results of the bivariate test, we can see that the mean value of this variable is 25.33, with a p value of 0.000 which means that there is a significant effect between workload on the anxiety level of nurses for Covid19 patients at Royal Prima Hospital Medan.

The Effect of Personal Resilience on Anxiety Levels

Table 3.10. The Effect of Personal Resilience on the Anxiety Level of Nurses for Covid19 patients at RSU Royal Prima Medan

Variabel	Mean	p value
Personal Resilience for Anxiety Levels	25,99	0,000

From the results of the bivariate test, we can see that the mean value for this variable is 25.99, with a p value of 0.000, which means that there is a significant effect between personal resilience on the anxiety level of nurses for Covid19 patients at RSU Royal Prima Medan.

Multivariate Test Results

The following are the results of the multivariate test for the variables of organizational support, social support, workload and personal resilience to the Anxiety Level of nurses for Covid 19 patients at Royal Prima Hospital Medan.

Table 3.11. The Effect of Organizational Support, Social Support, Workload and Personal Resilience on the Anxiety Level of Nurses for Covid19 Patients at RSU Royal Prima Medan

	f value	p value
The Effect of Organizational Support, Social Support, Workload and Personal Resilience on Anxiety Levels	4342,287	0,000

Table 3.11 describes the results of a multivariate test on how organizational support, social support, workload and personal resilience affect anxiety levels. From the multivariate test we can see that the p value is 0.000 ($p < 0.005$) which states that together or simultaneously, the independent variables in this study have a significant influence on the dependent variable, namely the level of anxiety. To see how much influence the independent variable has on the dependent variable, it can be seen from the value of R square which can be seen in table 11 below:

Table 3.12. Coefficient of Determination

	R square
The Effect of Organizational Support, Social Support, Workload and Personal Resilience on Anxiety Levels	0,987

From table 3.12 it can be seen that the value of R square is 0.987 which means 0.987 or 98.7% of the independent variables in this study are able to explain the dependent variable. While the rest are influenced or explained by variables; others that are not included in this research model

Result

The results of this study are in line with the results of research conducted by Huo et al which states that organizational support and social support have a positive effect on work results. Positive work results can be seen from work performance, job satisfaction, work involvement, physical and mental health of nurses. It is very important to pay attention to these things because it aims to improve the elements that are applied in the workplace [11].Furthermore, the results of this study are in line with research conducted by Guo et al which states that nurses who work in hospitals have a high level of personal resilience. As personal resilience affects the performance, health and overall well-being of nurses, it is imperative to leverage these personal resources through proactive organizational measures [11].Nurses are directly involved in the care of COVID-19 patients and the delivery of health care services. It is important to implement measures to reduce anxiety levels among nurses, because anxiety levels have been identified as a strong precursor of psychological distress, depression, and other psychological disorders [12]. In this study, among the various symptoms of coronavirus anxiety, “sleep disturbance” was reported as one of the most prominent. In one study by Shevlin et al (2020), high levels of anxiety were associated with somatic symptoms such as fatigue and gastrointestinal manifestations [12].

The most important finding in this study is the significant effect of personal resilience, social support, and organizational support on the level of COVID-19 anxiety in nurses, outside of the influence of nurse characteristics. Decreased anxiety levels in nurses who score higher on the personal resilience scale indicate the protective role of personal resilience, which allows individuals to adapt positively to anxiety-provoking situations and bounce back successfully even under adverse circumstances.Adequate organizational support, or the extent to which the organization recognizes employees and values their well-being, is associated with improved performance and work commitment of nurses, both of which are needed when dealing with an epidemic. When nurses feel greater support from the organization, they are more motivated, highly satisfied and experience less stress when carrying out their duties.Social support that comes from coworkers, friends and family as an effective support system for nurses. This is very necessary when dealing with events that trigger anxiety. In this study increased social support scores were associated with lower nurses' anxiety level scores. This supports previous research suggesting the important role of social support in helping nurses achieve a positive emotional state during events such as disease outbreaks.

Furthermore, positive coping strategies and increased social support were associated with decreased psychological stress, increased self-efficacy, improved sleep quality and decreased anxiety levels among nurses [13].Maximizing the personal resilience of healthcare workers during the Covid19 crisis is considered important in helping them maintain their mental and psychological health and well-being. Skalski et al stated that personal resilience and social support contributed significantly to reducing the severity of anxiety associated with the COVID-19 virus, depression and psychological distress [5]. Higher personal resilience is associated with improved outcomes in individuals, such as improved psychological health and psychological well-being [11].According to Ilyas, a high workload can cause fatigue for nurses. Nurse fatigue occurs when nurses work more than their working hours. High workloads can cause physical and psychological work stress and emotional reactions such as headaches, indigestion and irritability. In addition to excessive workloads, workloads that are too light can also affect the quality of work of nurses. Workloads that are not suitable for rooms with patient needs will affect the performance of nurses which can cause stress [11].

IV. CONCLUSION

From the results of research that has been done, the conclusions in this study are as follows:

1. There is an insignificant effect between Organizational Support on the Anxiety Level of Nurses for Covid19 Patients at RSU Royal Prima Medan.
2. There is an insignificant effect between Social Support on the Anxiety Level of Nurses for Covid19 Patients at RSU Royal Prima Medan.
3. There is a significant effect between the workload on the anxiety level of nurses for Covid19 patients at the Royal Prima Hospital in Medan.
4. There is a significant influence between Personal Resilience on the Anxiety Level of Nurses for Covid19 Patients at RSU Royal Prima Medan.
5. There is a simultaneous significant effect between organizational support, social support, workload and personal resilience variables on the anxiety level of nurses for Covid19 patients at Royal Prima Hospital Medan.
6. Organizational support, organizational support, social support, workload and personal resilience can explain the level of anxiety as much as 98.7%. While the rest are influenced or explained by variables; others that were not included in this research model.

Suggestions

1. For Nurses

This research can provide knowledge for nurses and other health workers about the description of the anxiety level of nurses caring for Covid19 in terms of organizational support, social support, workload, and personal resilience.

2. For RSU Royal Prima

This research can be a source of reference in improving the quality of human resources, in this study nurses in order to improve the quality of service quality. In addition, hospitals need to conduct training and then provide good work management for nurses because they are not well managed such as the division of work.

3. For Further Researchers

It is hoped that further researchers will be able to further develop research on the factors that affect the anxiety level of nurses for Covid-19 patients at Royal Prima Hospital Medan. It is hoped that future researchers can use more samples so that they can represent the entire population.

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