

Online Culture-Based Stress Management for Nurses in Isolation Room of COVID-19

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Keywords:

Nurses, Covid-19, Stress management, Culture

ABSTRACT

The incidence of Covid19 patients in Indonesia has not yet experienced a graph of decline so that it has an impact on service facilities in hospitals. This study also impacts health workers, especially nurses who help in handling patients infected with the Covid19 virus. This study aims to determine the effectiveness of online-based stress management interventions on the stress levels of nurses in isolation rooms. The method used in this research is quantitative research with a pre-experimental approach. The sample selection by using purposive sampling technique, with a sample size of 20 respondents. The sample consisted of nurses who worked caring for COVID-19 patients. The results obtained in this study are the stress level of nurses before being given intervention is moderate stress with the min-max value results (33-45). After being given the intervention to stress nurses, mild stress results obtain with a min-max value (28-37). Based on the value before and after the intervention received p-value <0.001. The application of online-based stress management interventions in isolation rooms can apply to minimize the incidence of stress on nurses. This stress event can be at risk of decreasing the quality of nursing care for patients and impacting the quality of patient satisfaction.



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1. INTRODUCTION

The graph of the spread of COVID-19 has not shown a downward trend. Still, the government has issued a policy of implementing a new normal, both in the office, industry, and trade sectors, and giving authority to 102 green zones to implement the new normal scenario. This condition makes the public face a dilemma between economic interests and fears of increasing COVID-19 transmission, while public discipline towards health protocols is still low [12]. The low level of the public domain can continue to improve the spread of COVID-19 and the increasing number of confirmed COVID-19 patients treated in hospitals. Data from the Jember Regency Government on September 20, 2020, at 1:00 p.m. WIB showed that the number of positive patients who were still treat was 79 or 10.49% of the total positive patients (753 people) with 50 suspected cases.

Meanwhile, there are 273 people with close contacts who are still monitoring. The trend of increasing patients

who are always treated can make hospitals experience health service management changes [2]. Nursing, which is an integral part of health services and a profession that provides services to patients for 24 hours, is also affected by increased patient cases, especially for nurses who work in the COVID-19 particular room. Meanwhile, nursing is one of the determinants of the quality of health services. The community's increasingly critical demands make health services, including nursing services, improve themselves to provide the best service. The service quality assurance program must be carried out on an ongoing basis to realize professional services. Based on the research results in 2018, nurse satisfaction was still not maximal [8]. If this satisfaction is still not maximal and coupled with the COVID-19 pandemic, nurses can potentially experience work stress and even burnout. Various research results abroad during the COVID-19 pandemic show that many nurses are experiencing stress. This stress is caused by workload, fear of being infected with COVID-19, and the negative stigma of carrying the virus, being away from family [5].

The existence of various factors, both from the nurse and patient/community side, makes nurses feel burdened. This high load can lead to stress during work and burnout syndrome. A person with high work stress will lose satisfaction with life, lose professionalism in carrying out activities, sympathize with others, and lose sensitivity to feel other people's emotions. Nurses with high work stress will impact patient care, such as health care uncertainty, poor interpersonal relationships, inability to work with patients [7]. If the nurse experiences a psychological crisis to stress, this situation can affect the quality of nursing services. The psychological turmoil in nurses caused by the COVID 19 pandemic requires intervention programs to reduce psychological stress. In times of health crisis and changes in work pressure, programs such as routine trauma healing can provide psychological refreshment for health workers [3]. Limitations in intervention programs that require face-to-face meetings give rise to innovation to implement online. The use of technology to reduce interactions also needs to be considered to prevent transmission and reduce fatigue in health workers [5].

1.1 Methods

This study using a pre-experimental qualitative approach. The sample selection by using purposive sampling technique, with a minimum sample size of 20 respondents. The sample consisted of nurses who worked caring for COVID-19 patients. Samples were taken from several hospitals in the Jember district. There are two variables in this study: the independent variable (online culture-based program) and the dependent variable (stress nurse). The research mechanism carried out can be seen from the following figure 1.

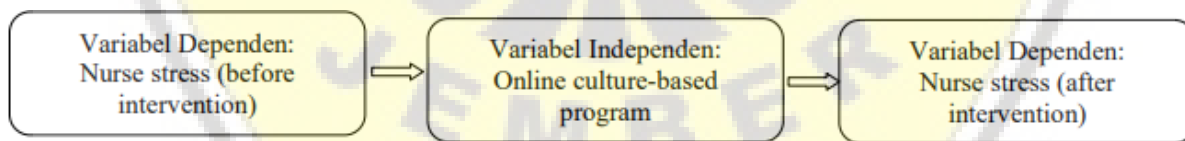


Figure 1 Conceptual framework

The first independent variable, namely the online culture-based program, has several stages in its application: knowledge of stress, first aid to stress, creating a comfortable environment, and keeping the environment comfortable. The following table describes the explanation of the first independent variable. As shown in Table 1.

Table 1 Online Cultural-Based Stress Management Program for Covid-19 Isolation Room Nurses

No	Module	Content
1	Stress definition	<ol style="list-style-type: none"> 1. The psychobiological basis of stress and its consequences 2. Become familiar with the keys to effective stress management
2	First Aid	<ol style="list-style-type: none"> 1. Short-term strategy by listening to music you like

		2. Implement short-term strategies in everyday life
3	Creating interpersonalRoom	1. Effective time management 2. Build resources in recreational efforts 3. Engage in online musical activities as a recreational effort
4	Maintain self-balance	Integrating recreation with music in everyday life

The dependent variable is the work stress of nurses who work in isolation rooms or patients' rooms to confirm Covid19 measured by a nurse work stress questionnaire from Jusnimar's research [6]. This questionnaire consists of 16 question items that cover indicators of nurse-dependent work fatigue and nurse-independent work fatigue. This questionnaire has been tested for validity and has been declared valid and reliable. This study was approved by the Health Research Ethics Committee of the Faculty of Nursing with No. No.39/UN25.1.14/KEPK/2021.

2. Findings And Discussion

2.1 The Characteristic of Respondents

The Respondents of the study were the nurse in an isolation room. A total of 20 nurses participated in this study. As shown in Table 2 and Table 3, most of the respondents were nurses in the diploma degree's formal education. There were diploma degrees (65%) than bachelor degree (35%). The majority of a position of the nurse were associate nurse (80 %) and Primary Nurse (20%), for work experience for the nurse (40%) work more than five years and (50%) between 1 – 5 years.

Table 2. Characteristics of the respondents age

Age	Mean	Min-Max
	28.75	22 - 36

Table 3 Characteristics of the respondents

Characteristics of the respondents	f(%)
Formal Education:	
Diploma	13
Bachelor	7
Position in Room:	
Associate nurse	16
Primary nurse	4
Head Nurse	-
Work experience:	
< 1 Year	2
1-5 Years	10
>5 Years	8

2.2 Implementation of Online Cultural-Based Stress Management Program for Covid-19 Isolation Room Nurses

The results obtained in this study are the stress level of nurses before being given intervention is moderate stress with the min-max value results (33-45). After being given the intervention to stress nurses, mild stress results obtain with a min-max value (28-37). Based on the value before and after the intervention received p-value <0.001, as shown in Table 4.

Table 4 Implementation of Online Cultural-Based Stress Management Program for Covid-19 Isolation Room Nurses

Variable	Median	Min	Max	Q1	Q3	p
Stress level before intervention	36	33	45	34	40	<0.001
Stress levels after intervention	33	28	37	31	35	

*Wilcoxon test at sig=0.05

2.3 Stress Level Analysis based on Respondent Characteristics

Table 5. showed that there were significant differences in work stress level during intervention for nurse. After the treatment was given, there were significant differences in education, position in room and nursing experience. The data show that work stress level during intervention were increase for mild to moderate.

Table 5 Stress Level Analysis based on Respondent Characteristics (n=20)

Variables	Work Stress Level during Intervention			
	Before		After	
	Mild	Moderate	Mild	Moderate
Education				
Nursing Diploma	0	13	3	10
Nursing Profession	0	7	4	3
Position in room				
Associate nurse	0	16	3	13
Primary nurse	0	4	4	0
Nursing experience				
< 1 year	0	2	0	2
1-5 years	0	10	2	8
> 5 years	0	8	5	3

3. Discussion

The use of online cultural-based stress management has its advantages for its users. In this study, it is proven that this program's use can reduce nurses' work stress caused by a reasonably dense performance. According to research [10], implementing an internet program in providing interventions can improve employees' quality of work. Work stress itself can be interpreted as a human response to stimuli that come from outside or within, which can be interpreted as a coping mechanism that humans accept. High work humans get the incidence of burnout syndrome in nurses, which results in decreased performance of nurses. According to [9], [1], work stress can lead to burnout syndrome, which can affect the surrounding work environment, such as the environment. physical work and physical work and non-physical work environment.

The online cultural-based stress management program's application has four stages; each stage lasts about 5-10 minutes, except for the last step, which can be longer, adjusting each individual to each. In the first stage, understanding stress emphasizes the impact of stress and understanding the concept of stress. In the second stage, namely how to provide first aid to people experiencing stress, several short-term ways or strategies are introduced to deal with stress. In the third stage, namely, more focus on creating interpersonal spaces that can build resources within oneself to be optimal. Time management is essential at this stage; the hope is that it can effectively deal with stress in a short time. In the fourth stage or the final stage, integrate recreation with listening to music in everyday life. The hope is that this activity can reduce stress on nurses who continue to work, especially caring for patients who confirm Covid19, the work stressor will be higher.

This study finds that nurses' work stress before being given online cultural-based stress management action resulted in the min-max value (33-45), which means that they tend to experience moderate stress. After the measurement carry, online cultural-based stress management was implemented twice within one week, then re-measured. After implementation, the results obtained the min-max value (28-37), which means that the respondent experienced light stress. It means there are different results from before intervention and after an intervention. According to Fanani's research [4], providing an activity to nurses during their performance will increase nurses' self-achievement and reduce the risk of nurse's burnout syndrome, which can cause severe stress. Besides, this study's results showed changes, although not significant, in the stress level of nurses. The nurses themselves do not do stress management according to the standard, and there is still a lot of work done by nurses at the hospital so that nurses still feel stress when working. All respondents who participated in this study were nurses who served in isolation rooms; most patients treated had confirmed Covid19. Nurses' situations can affect nurses' stress level at work so that it can have an impact on decreasing the quality of nursing care carried out. In addition to these factors, it could also be because nurses have reached physical fatigue to reduce their concentration and decrease the quality of service. This decrease in the quality of services can lead to the risk of dissatisfaction from families and patients, impacting reducing the number of visits and trust in the hospital. This decrease can result in inadequate income and funds for the hospital and will ultimately impact the welfare of nurses who work at the hospital to lead to work stress.

4. Conclusion

Reducing work stress on nurses can be done with internet-based technology. It does not reduce the efficiency of time, and without meeting in person because during the Covid19 pandemic, it can be risky if you have to meet in person. Reducing work stress is very important to improve the quality of nursing care services, which will increase patient satisfaction with the hospital. This increased satisfaction is in line with the aspirations of all hospitals to achieve complete accreditation.

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