



Original Article

The effect of e-counseling to reduce stress on nurses in special wards COVID-19

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ARTICLE INFORMATION

Received: April 20, 2021

Revised: May 25, 2021

Available online: June 07, 2021

KEYWORDS

COVID-19; Anxiety Disorders; Counseling

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ABSTRACT

Background: Data on the incidence of COVID-19 is reported to be increasing day by day. It impacts the health of health workers both physically and mentally; several previous studies have found that counseling can help reduce anxiety. Other studies have also proven that remembrance therapy can reduce stress levels, but the effectiveness of e-counseling has not yet been tested.

Objectives: This study was to determine the effect of e-counseling to reduce stress on nurses in special wards COVID-19.

Method: The research design used was a quasi-experimental design with a total sample of 58 people, 29 intervention samples, and 29 control samples. Sampling using non-probability sampling and data collection using a questionnaire which was analyzed with the Independent Sample T-Test.

Result: After e-counseling therapy was carried out, the stress level of nurses could decrease significantly from 7.448 to 6.311. There were significant differences in stress levels in the intervention and control groups (69.59 ± 6.311 vs. 49.83 ± 8.824 ; $p < 0.05$).

Conclusion: E-Counseling has a very significant effect on reducing the stress level of nurses in special wards COVID-19.

INTRODUCTION

The Pandemic COVID-19 is a non-natural disaster that raises various health problems, both physical and psychological problems faced by each individual, including health workers, especially nurses special ward COVID-19.¹ The nursing staff is a component of the hospital's human resources and a member of the frontline health team that plays a role in dealing with patient health problems for 24 hours continuously.² Although nurses are a vulnerable group who can experience physical and psychological problems, various activities for handling non-natural disasters, namely the COVID-19 outbreak, cause various psychological responses for health workers who have to treat COVID-19 patients who are tasked with helping the government in handling the COVID-19 disaster, several psychological responses which arise are negative emotions such as fatigue, discomfort, and helplessness caused by

high-intensity work, fear and anxiety, and concern for the patient and family members.³

Results research, which involved 1,210 respondents from 194 cities in China. In total, 53.8% of respondents rated the psychological impact of the outbreak as moderate or severe; 16.5% reported moderate to severe depressive symptoms; 28.8% reported moderate to severe symptoms of anxiety; 8.1% reported moderate to severe stress levels.⁴ The results also showed that women are more prone to stress, anxiety, and depression. This is in line with research found that nurses who work at ZFH hospital experience stress level 75.2% higher when compared to ZGH hospital, which is only 60.5%, and 98% of them face heavy workloads, namely dealing with terminal patients who are dying.⁵ This is what makes the nurse even more stressed and eager to quit her job.

COVID-19 has a significant impact on the mental condition of medical workers. Emotional changes, such as worry,

<https://doi.org/10.30595/medisains.v19i1.9706>

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anxiety, and stress, are common responses when faced with a pandemic situation, but they disturb the individual's psychological condition, such as experiencing depression.⁶ The high incidence of stress on nurses who work during the COVID-19 pandemic will automatically impact the services performed in the inpatient room either on the quality and intensity of the patient.⁷

Various alternatives must be done to anticipate excessive stress levels⁸; several methods to reduce the stress that has been applied are psychological therapy,^{9,3} progressive relaxation therapy¹⁰, optimization of individual coping^{11,12}, social support, and spiritual intelligence¹³. Considering several concepts of COVID-19 prevention, one of which is physical distancing, e-counseling becomes an option in reducing the stress level of nurses. E-counseling research has been applied in dealing with bullying of school children, and it is effective.¹⁴ Likewise, the results of a dissertation study on the difference between the application of e-counseling and direct counseling prove that there is no significant difference between the two methods.¹⁵ Based on these data, the purpose of the study to analyze the effect of e-counseling to reduce stress on nurses in special wards COVID-19.

METHOD

Research Design

This is a quasi-experimental research with pre-test and post-test control group design.

Setting and Respondent

The research was conducted at the COVID-19 Service Facility in Pekanbaru City, the population of which is all nurses who provide nursing services in the COVID-19 room with a population of 68 respondents then calculated using the Slovin formula so that the number of samples of 58 respondents is known, then divided based on a 1:1 proportion, 29 treatment samples given e-counseling and 29 samples with standard nursing care treatment, the sampling technique used was simple random sampling which met the inclusion criteria of male and female nurses who had treated COVID-19 patients, were in the study location, had a threshold Relatively the same stress, willing to accept e-counseling for treatment and insurance for control and willing to fill out a google form. The exclusion criteria were that all respondents who stopped participating in the study had different levels of stress.

Experimental Procedure

The experimental procedure was carried out starting with measuring the stress level of respondents both e-counseling and standard nursing care. Then for the intervention group, e-counseling was carried out using zoom media three times, zooming in groups based on the workplace

using the brainstorming method with psycho religious material by a psychologist for 30 minutes. Meanwhile, the control group was only given standard nursing care. After that, the stress level of the intervention group and control group was then measured again.

The Variable, Instrumen, and Measurement

The variable in this study is the stress level. The E-Counseling intervention uses a psychologist to provide intervention in psycho religious material by using a zoom applied only to the treatment group. At the same time, for variables, the stress level is measured by adopting the Zung Self's anxiety rating scale, namely the Zung Self-rating Anxiety Scale (ZSAS) with classification; Score 20-44: Normal / no anxiety, Score 45-59: mild anxiety, Score 60-74: moderate anxiety and Score 75-80: severe anxiety.

Data Analysis

Data analysis begins with univariate data analysis, both respondent characteristics and stress level variables. In contrast, bivariate analysis is carried out to test the effectiveness of e-counseling on the stress level of nurses by comparing intervention groups and control groups. Data were analyzed through the Independent Sample T-Test.

Ethical Consideration

This research has received approval from the Ethics test team of Stikes Hangtuah Pekanbaru with registration number 164 / KEPK / STIKes-HTP / IV / 2020.

RESULTS

The Average age of the respondents was 35.41 ± 6.210 . The average education of the respondents was Diploma (53.4%), the average gender of the respondents was female (69%). The average respondent's workplace in the hospital (78%) and the average stress level of respondents in the normal category was 65.5%) (Table 1).

Table 1. Characteristics of Respondent (n=58)

Variable	Results
Age	
Mean±SD	35.41±6.210
Min-Max	27-53
CI 95%	33.78-37.05
Education	
Diploma	31 (53.4%)
Bachelor	27 (46.6%)
Gender	
Male	18 (31%)
Female	41 (69%)
Workplace	
Hospital	45 (78%)
Community Health Center	13 (22%)
Stress Level	
Normal	38 (65.5%)
Light	15 (25.9%)
Medium	5(8.6%)

Table 2. Differences in Stress Level

Group	Mean±SD	Mean Diff (95% CI)	t	p-value	Effect Size
Intervention Group	69.59±6.311	7.448(15.723-23.794)	9.808	0.0019	5.804
Control Group	49.83±8.824				

The Independent T-Test results showed that there were differences in the stress level in the intervention group and the control group ($p < 0.05$). The intervention group was given e-counseling, while the control group was only given nursing care standards to deal with stress. Hence, the average stress level in the intervention group was lower than the control group (Table 2).

DISCUSSION

Stress a condition in which the burden a person feels is not commensurate with the ability to cope with the burden.¹⁶ Stress can produce physiological and biochemical responses unique to each person, depending on the intensity and duration of stress. Psychophysiological responses to stress can activate the hypothalamus, pituitary, adrenal and sympathetic nervous systems, which are characterized by changes in hemodynamic examinations. Changes that arise from a stress response such as an increase in heart rate, blood pressure, peripheral pulse rate, and heart output, and an increase in workload on the cardiovascular system may be life-threatening.¹⁷

Counseling can be an alternative to reduce stress levels through the counseling process built into the approach.¹⁸ This counseling aims to provide encouragement, motivation, and enthusiasm so that the patient does not feel hopeless and has confidence that he can overcome the psychological stressors he faces.¹⁹

Accordingly, guided imagery is a relaxation method to imagine places and events related to a pleasant sense of relaxation. The delusion allows the client to enter into a state or experience of relaxation.²⁰ Guided imagery uses a person's imagination in a specially designed manner to achieve specific positive effects. Imagination is an individual in which the individual creates a mental image of himself or is guided. Many imagination techniques involve visual imagination, but these techniques also use the senses of hearing, taste, and smell.²¹

Counseling has a significant effect on nurses' stress; the study results prove that there is a significant difference between before and after counseling on the stress level of nurses. This study follows Arifah's research, based on research conducted with the title of the effectiveness of psycho religious therapy to reduce depression levels in the elderly at the Tresna Werdha Abiyoso Social Home, Sleman Yogyakarta. The study results showed that the experimental group with the Wilcoxon test data analysis obtained a Z score of -4.638, and a p-value of 0.001. This means

that psycho-religious therapy is effective in reducing stress.²²

The research results that the researchers found correlated with findings in empirical studies in the world of counseling. Academics and their practice have always carried out empirical studies on religiosity in counseling in the last decades. They even emphasized the importance of conducting an in-depth and continuous exploration of issues of religious spirituality for counseling purposes.²³

In principle, the application of e-counseling is the same as face-to-face consoling; the difference is the media used because e-counseling uses digitalized media in the form of video conferencing, which allows the therapist and patient to face directly via zoom so that the results are not possible. Therefore, it will be much different from face to face in person. Religious counseling is counseling with religious nuances that help individuals/clients understand themselves, namely getting to know themselves, establishing goals and meaning in life, forming values that hold life, and developing optimal potential. Therefore, efforts to re-function Spirituality for a person to achieve a healthy psychological condition can be made by applying religious-based remembrance therapy because dhikr contains practical psychotherapeutic elements, not only from the mind but also from mental, physical health. This dhikr is the inculcation of tauhidiah values in a person.^{24,25}

This research is also supported by research that proves that several e-counseling platforms in religious ad-vocational are internet-based.²⁶ Various e-counseling approaches, including a behavioristic approach, are still dominant in counseling and psychotherapy.¹⁸ Likewise, spiritual religion effectively reduces mental problems such as stress, depression, and anxiety.²⁷ This study is also in line with the results of research that prove that psychological and educational counseling impacts a person's anxiety level when applied by the concept.²⁸ This online counseling service has also considered the role of psychological processes and fear that can cause further damage due to the COVID-19 pandemic with balanced medical health care program.²⁶

A study also showed that his research found that most 74 clients when receiving psychotherapy and individual counseling, believed that religious spirituality was an appropriate topic for therapy. They showed a preference to discuss it in every counseling session. This study found the fact that some clients prefer or expect that their therapist will use religious intervention during counseling treatment.²⁹

Other researchers have also found that many counseling and psychotherapy professionals consider religious spirituality a clinically relevant issue for their counselor (client). Based on some of the research above, it becomes clear that the counselee (client) and the counselor or therapist have viewed that treatment using religious spirituality is very important for achieving the goals of the counseling process. Miller supports the importance of including religious spirituality in counseling; since 1980, it has been emphasized that ignoring the religious beliefs of the counselee (client) can reduce the efficacy of counseling and increase premature discontinuation. Miller has underlined the importance of religious spirituality in the examination of counseling for the health benefit of the counselee (client) in order to arrive at functional abilities, inner peace, comfort feeling, and optimism.³⁰

Therefore, support counseling for nursing personnel is essential because, in addition to preventing excessive stress events even to the level of depression, it will also affect performance at work; thus, it can be concluded that counseling can be applied to all cases of mental disorders, including pregnant women. The weakness of e-counseling compared to direct face-to-face counseling is the cost aspect because it requires a large amount of money to purchase and make applications; however, it is more effective to use e-counseling from a time perspective a pandemic can reduce COVID-19 transmission.^{31,32}

CONCLUSIONS AND RECOMMENDATION

E-Counseling effectively reduces the stress level of nursing personnel dealing with COVID-19, so it can be used as an alternative to non-pharmacological efforts to overcome stress disorder.

Acknowledgment

We are grateful that PP Muhammadiyah Diktilitbang Council was funded, and Financing supported this research funded by the Batch 4 Research Grant Program.

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