

The Effects of Psychoeducation Intervention with Progressive Muscle Relaxation Video Therapy on Anxiety Levels in Elderly with Hypertension in Salem Village

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ABSTRACT

Background: Anxiety is a common reaction to situations individuals perceive as dangerous or threatening. Prolonged anxiety can disrupt a person's thoughts and behaviors. Elderly individuals often experience anxiety, primarily related to their illnesses, with hypertension being prevalent among them. The advantage of health education using video media lies in its ability to provide effective visualization to facilitate the learning process. Method: This study employed a Pre - Experimental research design with a quantitative approach, explicitly utilizing a one-group pretest-posttest design. Sampling was conducted using random sampling, with a sample size of 54 respondents. The Hamilton Anxiety Rating Scale (HARS) was used to measure anxiety. Results: The average pre-test anxiety score before the intervention was 29.79, while the average post-test score showed a decrease of 4.00, resulting in a score of 25.79. Statistical analysis using the Wilcoxon test obtained a p-value for the pre-test and post-test of 0.000 (0.050), indicating that psychoeducation intervention with PMR video therapy affected anxiety levels in the elderly with hypertension at the Salem Village Elderly Health Post. Conclusion: Psychoeducation intervention with PMR video therapy affects anxiety levels in the elderly with hypertension in Salem Village.

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1. INTRODUCTION

Every human being will face many situations and events that can make them feel anxious. Anxiety is another reaction to situations that are considered dangerous or threatening that everyone experiences. When anxiety lasts for a long time, it will become abnormal and interfere with human thinking and behavior[1]. According to the World Health Organization (WHO), cases of anxiety disorders have increased by 25.6% worldwide[2]. An elderly person will experience anxiety disorders, especially about their illness. In general, hypertension is a disease that often occurs in the elderly [3].

Hypertension is when blood pressure is above normal. In Indonesia, hypertension is considered if the blood pressure is 140/90 mmHg or higher. [4]. Every year, the main cause of death in the world is caused by hypertension. It is estimated that 1.5 billion people will suffer from hypertension by 2025, causing 10.44 million deaths per year. The prevalence of hypertension in Indonesia was 34.11% in 2019[5] Hypertension cases in Brebes Regency rank fifth out of 35 cities and regencies in Central Java. Hypertension increases with age[6].

United Nations Department of Economic and Social Affairs said that the elderly population has reached around 962 million people, reflecting an increase of around 7%. In Indonesia, the proportion of the elderly population increased significantly in 2019 to around 25.64 million people [7]. Nursing action is needed to overcome the anxiety felt by the elderly with hypertension so that the elderly are able to manage their anxiety. One of the efforts to prevent anxiety is by providing psychoeducation. Psychoeducation is the delivery of knowledge or education through the use of a simple psychological concept approach to individuals and groups that is more efficient in time and cost and is well received by patients [8].

Psychoeducation in the community is very important to be held to solve psychosocial problems that arise due to hypertension. The psychoeducation program is a mental health care activity with an educational approach. The purpose of this psychoeducation is to help overcome psychosocial problems, increase understanding of health problems in individuals who feel anxiety, and teach them how to identify symptoms of anxiety disorders [9]. One of the media used in psychoeducation to convey information is video. The advantage of health education through video is that it provides a good visualization effect to encourage the learning process [10]. In this study, researchers created an intervention using TEROTIF video media.

The most popular videos (Progressive Muscle Relaxation Therapy) are videos that explain the various methods used to achieve a state of relaxation, where progressive methods are used together with continuous training stages. Tensing and relaxing skeletal muscles is a way to perform progressive muscle relaxation. This allows muscles to relax, reduces anxiety, and provides treatment to lower blood pressure in people with hypertension [11]. The aim of the progressive muscle relaxation video is to equip and train hypertension patients in an effort to reduce anxiety levels and maintain the mental health of the elderly in Salem Village. Based on the evidence in this background and by utilizing technological advances, researchers are interested in creating a psychoeducational intervention using TEROTIF video media (progressive muscle relaxation therapy) in Salem Village.

2. RESEARCH METHOD

This research uses quantitative methods with a pre-experimental approach. This research design is a one-group pretest-posttest design. Sampling was carried out using the random sampling method. The total sample consisted of 54 respondents. The anxiety instrument used in this research was the Hamilton Anxiety Rating Scale (HARS).

3. RESULT AND DISCUSSIONS

The research was conducted in Salem Village in June 2023. The data collection process in this study used the HARS (Hamilton Anxiety Rating Scale) questionnaire instrument. In this study, the characteristics of the respondents consisted of age, gender, history of chronic disease, and occupation. Can be seen in the table below.

3.1. Univariate

Table 1. Characteristics of Respondents (n=54)

Characteristics of Respondents	n	%
Age (Years)		
45-59	30	55,6
60-74	23	42,6
75-90	1	1,9
Characteristics of Respondents	n	%
Gender		
Female	51	94,4
Male	3	5,6
History of Chronic Disease		
There Is	11	20,4
There isn't any	43	79,6
Work		
Housewife	47	87,0
Farmer	7	13,0

Based on Table 1, the majority of respondents were aged 45–59 years, totaling 30 respondents (55.6%). By gender, the most women were 51 respondents (94.4%). Based on a history of chronic disease, 43 respondents (79.6%) had chronic disease, and 11 (20.4%) respondents did not have chronic disease. Based on the occupation of the majority of respondents, there were 47 housewives (87%), and 7 respondents (13.0%) were farmers. In line with research conducted by [12], the results of the chi-square test showed that there was a significant relationship between anxiety levels and the incidence of hypertension in the pre-elderly, with a p-value of 0.012 ($\alpha \leq 0.05$). This is because many elderly people have difficulty resting or relaxing, get irritated easily, are impatient, have difficulty calming down after something disturbing, and are easily offended.

According to gender, more women experience anxiety, in line with research conducted by [13] that the percentage of women's anxiety levels is greater (95%) than men's (5%). Compared to men, women are more likely to experience anxiety about incompetence and have a higher risk of experiencing anxiety in anticipation of an event. Meanwhile, men are more explorative and relaxed. Research conducted by [14] reports that psychological stress or anxiety can also increase the risk of developing several diseases, such as arthritis, cardiovascular disease, diabetes, and hypertension.

Based on the results of research conducted on 54 hypertensive elderly respondents who experienced anxiety at the Salem Village Elderly Posyandu, it showed that the majority of elderly people did not work, with 47 respondents (87%) and 7 respondents (13.0%). According to research by [15] work is one of the factors that influences anxiety because if respondents do not work, they will feel like they are a burden on their family and worry that they will not be able to carry out work activities ideally to meet their family's needs.

Based on the results of research conducted on 54 elderly people who experienced anxiety in Salem Village, the statistical test used the Wilcoxon test with a sig result of 0.000, less than 0.050, so the H_a hypothesis was accepted. "Thus, it can be said that there is a significant influence, namely the influence of psychoeducational intervention using TEROTIF video media, on the anxiety level of the elderly in Salem Village."

Based on the explanation above, a significant effect was found before and after the intervention was given. The effects that occur are caused by providing therapeutic interventions. Video media containing relaxing music certainly has a relaxing effect on the body and mind. There are writings and pictures on how to carry out TEROTIVE interventions, which are exemplified by researchers in sequence from eye and forehead movements to leg movements, so that respondents can see, feel muscle relaxation, and do it easily. The most optimal intervention can be carried out anywhere and with cost and space savings. This research is supported by [16] which shows that there is an effect of providing education using educational videos on the anxiety and quality of life of the elderly.

In another study entitled The Effect of Providing Information Via Audio Visual on the Anxiety Level of Preoperative Laminectomy Patients at the Orthopedic Hospital, Prof. DR. R. Soeharso Surakarta stated that providing intervention through audio-visual (video) media was more effective in reducing anxiety levels with a p-value of 0.000, and the level of anxiety before providing information via audio was in the moderate category at 68% compared to after providing information via audio-visual to mild anxiety of 68% (82%) [17].

Table 2. Anxiety Level Before and After the Given Intervention (n=71)

Variable	N	%
Before		
Light	16	29,6
Currently	12	22,2
Heavy	16	29,6
Very heavy	10	18,5
After		
Light	15	27,8
Currently	19	35,2
Heavy	16	29,6
Very heavy	2	3,7
No anxiety	2	3,7

3.2. Bivariat

Table 3. Effects Before and After the Intervention

Variable	Mean		Δ	n	Z value	p-value
	Before	After				
Anxiety	29,7	25,7	4,00	54	-3,962	0,000

The statistical test uses the Wilcoxon test with a sig result of 0.000 less than 0.050, so that the H_a hypothesis is accepted. Thus, it can be said that there is a significant influence, so the research problem formulation was also

answered, namely "There is an Effect of Psychoeducational Intervention Using TEROTIF Video on the Anxiety Level of the Elderly in Salem Village". The results of the research conducted showed that the anxiety of the elderly before being given the TEROTIF intervention had an average value of 29.7963, and after being given the intervention, it decreased by 4.00, with an average value of 25.7963.

This research is in line with research [18] where the average anxiety level of hypertensive patients before intervention was found to be 10.19. The average anxiety level of hypertensive patients after intervention was 6.94. According to research findings, a statistical test with a p-value of 0.000, a standard deviation of 0.929, and a mean standard error of 0.232 shows that there is an influence of progressive muscle relaxation techniques. This proves that anxiety levels can be reduced in hypertensive patients by using progressive muscle relaxation techniques.

4. CONCLUSION AND RECOMMENDATION

Based on the research, it can be concluded that the characteristics of the respondents in the gender variable were mostly women, with a total of 51 respondents (94.4%). Most of the elderly are aged 45–59 years; as many as 30 respondents (55.6%) Based on a history of chronic disease, 43 respondents (79.6%) had chronic disease. Based on the occupation of the majority of respondents, 47 people (87%) did not work, and 7 respondents (13.0%) worked. Before the intervention was given, the average value was 29.6, and after the intervention, it decreased to 25.7, with an average value of 4.00. The results of this study can be a means of information and alternative therapies that can be used by elderly people with hypertension who experience anxiety to help reduce anxiety.

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