



THE EFFECT OF PSYCHOEDUCATION ON REDUCING ANXIETY IN ELDERLY WITH HYPERTENSION

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ABSTRACT

Anxiety is a common issue among elderly individuals with hypertension, which can negatively impact their overall well-being. Psychoeducation is considered an effective intervention to reduce anxiety levels. Objective: This study aims to examine the effect of psychoeducation on reducing anxiety in elderly individuals with hypertension. Method: A pre-experimental study with a one-group pre-test and post-test design was conducted. The study used purposive sampling, involving 10 respondents who experienced anxiety. Data were analyzed using the Wilcoxon test Results: The findings indicate a significant difference in anxiety levels between the pre-test and post-test, with a p-value of 0.003 ($p < 0.05$). Conclusions: Psychoeducation has a significant effect on reducing anxiety in elderly individuals with hypertension.

Keywords: anxiety; elderly; hypertension; psychoeducation

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INTRODUCTION

Hypertension is a non-communicable disease that is the leading cause of death worldwide (Amukti et al., 2024). The high mortality rate caused by hypertension is largely related to unhealthy lifestyle factors (Santi & Fahdhienie, 2024). A healthy lifestyle is essential in preventing hypertension, as many lifestyle factors contribute to increased blood pressure. Thus, maintaining a healthy lifestyle can help keep blood pressure within normal limits and reduce the risk of hypertension (Ria et al., 2024). Hypertension is often referred to as "the silent killer" because it occurs without clear signs and symptoms (W. S. Putri et al., 2024). Hypertension often presents without symptoms and is only realized when it has caused organ dysfunction, such as heart problems or stroke (Arief & Amin, 2024). In many cases, hypertension is discovered incidentally during routine health check-ups or when patients seek medical attention for other complaints. The risk of developing hypertension increases with age. This is due to the aging process, which leads to a decline in the function of various organs, including the cardiovascular system, specifically the heart and blood vessels (Fabanyo et al., 2024). Blood vessels become narrower, and arterial walls lose their elasticity, leading to increased blood pressure. In the elderly, large arteries lose flexibility and become stiff, forcing the heart to push blood through narrower vessels, resulting in elevated blood pressure (Nainggolan & Sitompul, 2024).

In many cases of hypertension in society, young to middle-aged men and postmenopausal women are more susceptible to hypertension. This is because young men are more likely to consume alcohol and be active smokers, making hypertension more prevalent among this group (Pauzana et al., 2024). Additionally, postmenopausal women frequently experience hypertension due to hormonal changes and physiological factors occurring during this phase, making hypertension more common in postmenopausal women (F. Putri et al., 2025).

Increased fat and salt accumulation in the body leads to fat buildup and weight gain, contributing to the rise in hypertension cases among postmenopausal women. Various biological, psychological, and social changes in the elderly can lead to difficulties in social activities and daily life. The prevalence of elderly individuals in Sraten Village, Gatak District, Sukoharjo, is 394 people, with 204 having undergone health screenings. From these screenings, 82 elderly individuals (40.02%) were found to have hypertension. The results of screening and detection using the Hamilton Anxiety Rating Scale (HARS) on 16 elderly individuals revealed that 1 had severe anxiety, 5 had moderate anxiety, 4 had mild anxiety, and 6 had no anxiety. Some elderly individuals expressed concern about their health conditions.

Excessive anxiety can weaken the immune system, making individuals more susceptible to diseases. Anxiety in the elderly can be triggered by several factors, such as physical health problems, the loss of a loved one, changes in social or economic status, and fear of the future (Savitri et al., 2024). The anxiety experienced by the elderly requires significant support from their families, which plays a crucial role in reducing anxiety levels. One approach to improving the mental health of elderly individuals experiencing anxiety is psychoeducational therapy. Psychoeducational therapy involves providing information and education through therapeutic communication processes, ranging from knowledge management to stress management (Tanaya & Yuniartika, 2023). Stress management techniques, such as progressive muscle relaxation, are used to help reduce anxiety in the elderly (Moghadam & Ganji, 2019). The objectives of this study are to analyze the prevalence of hypertension among the elderly in Sraten Village, Gatak District, Sukoharjo, and identify the contributing factors, including lifestyle and physiological changes. Additionally, this study aims to examine the relationship between anxiety levels and hypertension in elderly individuals and evaluate the role of family support in reducing anxiety. Furthermore, this research seeks to assess the effectiveness of psychoeducational therapy, particularly stress management techniques, in alleviating anxiety among elderly individuals with hypertension.

METHOD

This study employs a pre-experimental design with a one-group pre-test and post-test approach. The population consists of elderly individuals with hypertension and varying levels of anxiety, including mild, moderate, severe, and very severe anxiety. The sampling method used is purposive sampling, with a total of 10 respondents experiencing anxiety. The psychoeducational intervention was conducted on February 16, 2025, in Sraten Village, Gatak District, Sukoharjo. The instrument used in this study is the Hamilton Anxiety Rating Scale (HARS) questionnaire, which has been widely validated with high reliability, typically ranging from 0.80 to 0.92 in previous studies. The questionnaire was administered before the psychoeducational intervention, identifying 10 respondents experiencing anxiety out of 16 elderly participants. The psychoeducation session was conducted once and included several stages: problem identification, knowledge management through education about hypertension and anxiety, stress management through progressive muscle relaxation, and evaluation. After the intervention, a post-test was conducted. Data analysis was performed using the Wilcoxon statistical test to determine the effectiveness of the intervention.

RESULT

Tabel 1 shows that the age of all respondents is >60 years, namely 10 respondents or 100%. The table above shows that all respondents who received the intervention were female, namely 10 respondents or 100%. The table above shows that the majority have primary school education, 4 respondents or 40%. Based on the table above, it shows that the majority of respondents work as housewives, namely 6 respondents or 60%.

Table 1.
Respondent characteristics (n= 10)

Characteristics of the elderly	f	%
Age		
>60 years	10	100,0
Gender		
Female	10	100,0
Education		
Elementary School	4	40,0
Junior High School	2	20,0
Senior High School	3	30,0
College	1	10,0
Employment		
Self-employed	4	40,0
Housewife (IRT)	6	60,0

Table 2 shows the statistical results, indicating that the average anxiety level before the psychoeducational therapy was 2.70. After the therapy, the average anxiety level decreased to 1.50. The Wilcoxon test results in this table show a p-value of 0.003. Since $p = 0.003 < \alpha = 0.05$, it can be concluded that there is a significant difference in anxiety levels between the pre-test and post-test measurements.

Table 2.

Kuesioner	n	Mean	Std. Deviation	Z	P
Pre-test		2,70	0,675		
	10			-2,972	0,003
Post-test		1,50	0,707		

DISCUSSION

Hypertension arises due to several influencing factors such as age, gender, education and work. In table 1, the elderly are aged >60 years, namely 10 respondents or 100%. Age is one of the main factors that influences hypertension, this is caused by natural changes in the body in the heart, blood vessels and hormones (Nurhayati & Andry Ariyanto, 2023). The gender of all respondents was female with 10 respondents or 100%. Gender is one of the factors that influence blood pressure that cannot be changed. Men have a higher level than women, however, men have a lower level of awareness of hypertension than women. Because women who have not yet gone through menopause are protected by the hormone estrogen which plays a role in increasing High Density Lipoprotein (HDL) levels. The levels of the estrogen hormone will decrease when women enter old age (menopause), so that women become more susceptible to hypertension (Aulia et al., 2023). In table 1 it can be seen that of the 10 elderly respondents who had hypertension, there were 6 respondents who worked as housewives or 60%. Women who do not work are more at risk of experiencing hypertension compared to people who work outside the home. This happens because women who do not work more often lead an unhealthy lifestyle with little physical activity. So the risk of developing hypertension becomes greater. Apart from that, people don't use existing health services so they don't get good treatment when they experience hypertension (Ramdhika et al., 2023).

Based on the results of the first session, which focused on identifying the issues causing anxiety, it was found that elderly participants felt fear and worry about their health, the necessity of regularly taking medication, and undergoing routine treatment. They also reported experiencing difficulty sleeping at night, frequent worries about various things, and a tendency to keep their feelings and physical conditions to themselves. The elderly preferred not to share their experiences to prevent their children or relatives from worrying about them. The second session involved knowledge management by providing education on hypertension and anxiety in the elderly. The third session focused on stress management, where the benefits

and purpose of progressive muscle relaxation were explained. During this session, all elderly participants performed progressive muscle relaxation exercises to reduce their anxiety. The fourth session was an evaluation, during which the elderly shared their feelings after the stress management session. The data showed that they felt more relaxed and calm after performing progressive muscle relaxation. After completing all sessions, a post-test was conducted to measure the elderly participants' anxiety levels. Table 2 shows a difference in anxiety levels before and after the psychoeducational intervention. The Wilcoxon test results indicated a p-value of $< \alpha = 0.05$, leading to the conclusion that there was a significant effect on anxiety levels between the pre-test and post-test ($p = 0.003$).

This study aligns with research conducted by Vionna et al. (2023), which found a difference in diabetes distress levels in the intervention group before and after psychoeducation, with a p-value of 0.000 (< 0.05), compared to the control group that did not receive psychoeducation. Anxiety is a psychological factor that reflects emotions and bodily responses to thoughts that trigger anxiety (Ghanbari et al., 2021). Similarly, a study by (Setyowibowo et al., 2022) found a significant relationship between psychoeducation and reduced anxiety, as well as improved quality of life for breast cancer patients, although psychoeducation did not enhance adherence to diagnostic procedures and treatments. Psychoeducation is an approach that helps individuals better understand their health conditions and develop anxiety management strategies. It can also involve family members to enhance their ability to contribute to problem-solving within the family. The goal of psychoeducation is to help individuals recognize their illness, make appropriate decisions for their needs, address their problems, take necessary actions based on what has been taught, and create a supportive environment when facing challenges.

In the stress management session, progressive muscle relaxation was used to reduce anxiety in elderly participants. Progressive muscle relaxation is a non-pharmacological therapy commonly applied to alleviate anxiety (Alvionita et al., 2022). This technique involves systematically tensing and relaxing different muscle groups throughout the body (Yanti, 2025). The purpose of progressive muscle relaxation is to help individuals distinguish between tension and relaxation in their bodies and to enable them to perform relaxation independently. Psychoeducation helps seniors develop skills to manage stress, depression, and anxiety that often accompany the aging process. By learning progressive muscle relaxation techniques, seniors become better able to cope with emotional stress. This psychoeducation strengthens seniors' psychological well-being, provides a greater sense of control over their lives, and improves sleep and mood. (Tama & Cherina, 2024).

CONCLUSION

Based on the results of the study, the Wilcoxon test showed a p-value of 0.003. Since $p = 0.003 < \alpha = 0.05$, it can be concluded that psychoeducation has an effect on reducing anxiety levels in elderly individuals with hypertension

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