

THE RELATIONSHIP BETWEEN SELF-EFFICACY AND STRESS IN ELDERLY HYPERTENSION PATIENTS

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ABSTRACT

Background: Elderly individuals with hypertension often face high stress levels, which can worsen their physical and psychological health. Self-efficacy, the belief in one's ability to manage challenges, plays a crucial role in coping with chronic illness. Research suggests that higher self-efficacy is linked to better stress management and improved health outcomes. In hypertensive elderly, strong self-efficacy may help reduce stress by promoting confidence in handling daily tasks and medical routines. Understanding this relationship is essential for developing effective interventions to support elderly patients and enhance their quality of life. The purpose of this study was to determine the relationship between self-efficacy and stress levels in elderly people with hypertension.

Methods: This research design is correlational analytic using a cross-sectional approach; the instruments in this study were the Self-efficacy to Manage Hypertension-Five Item Scale and the Perceived Stress Scale (PSS). The sample in this study consists of 65 respondents, all of whom are elderly individuals diagnosed with hypertension

Results: 12 (18,5%) elderly experienced low self-efficacy, and 5 (7,7%) elderly had severe stress. There is a negative relationship between self-efficacy and stress in the elderly, with a p value <0.000 (<0.05), with a correlation of -.580**.

Conclusion: This means that the higher the self-efficacy possessed by the elderly, the lower the stress that arises. Self-efficacy plays an important role in reducing stress in the elderly, especially those who suffer from hypertension. The elderly are recommended to increase their self-efficacy through several complementary therapies.

Keywords: elderly, hypertension, self-efficacy, stress

INTRODUCTION

Ageing causes a person to experience changes that lead to regressive changes, namely a gradual decline in physical, biological, psychological, and social functions (Kurnianto, 2015). The ageing process is characterised by a person's failure to maintain balance in the face of physiological stress. This failure is related to a decline in the ability to survive and an increase in individual sensitivity (Laka et al., 2018). According to Government Regulation of the Republic of Indonesia Number 43 of 2004, an elderly person is someone who has reached the age of 60 (sixty) years and above (Ministry of Health of the Republic of Indonesia, 2017). Based on population projection data, the predicted number of elderly

people in 2020 is 27.08 million, in 2025 (33.69 million), in 2030 (40.95 million), and in 2035 (48.19 million) (Depkes RI, 2019).

Elderly need special attention is because the problems of the elderly are included in the "Big Four" geriatric sufferings, including having complex problems, no treatment. Reasons for the elderly need attention special due to problems in the elderly enter into the "Big Four" of suffering geriatric among them have complex problem, no. There is treatment simple, decline independence, and need help of others in maintenance (Lani, 2021; Novian, 2014). One of many diseases experienced by the elderly is cardiovascular disease, one of which is hypertension (Ridwan et al., 2017). World Health Organisation (WHO) data estimates there are 1.5 billion people who will be caught with hypertension in 2025, and an estimated 9.4 million people will die from it every year due to hypertension and its complications. The South-East Asia region itself has as many as 1.5 million souls die because of hypertension. (Fadila & Solihah, 2022). Hypertension, also known as high blood pressure, is a condition characterised by blood pressure readings systolic ≥ 120 mmHg and diastolic ≥ 90 mmHg. High blood pressure can trigger the occurrence of stroke and coronary heart disease, which can cause death. Sufferers of hypertension are more commonly found in elderly people. Lots of changes happen in physiological or psychological aspects, which can affect their physical health (Lani, 2021).

The body condition of elderly people who experience hypertension can improve and become stable, but psychological factors in the elderly are very influential regarding the handling process of the problem of hypertension. Complications of hypertension can cause coronary heart disease, heart infarction, stroke and kidney failure. Complications of hypertension can cause high mortality. The impact of disease hypertension in the elderly can trigger the occurrence of heart attack, stroke, heart failure, and kidney failure. (Tapia, 2020). Meanwhile, according to Wahdah (2017), continuous pressure increases blood pressure, resulting in excessive heart burden, which triggers damage to blood vessels, kidney failure, heart failure, blindness and cognitive impairment disorders in the elderly. Elderly without existing complaints, so that sufferers do not realise that they suffer from hypertension or have experienced hypertension after complications. Target organ damage may occur if complications happen, including hypertension, which will depend on the size, pressure, and duration of conditions that are not treated (Depkes RI, 2019). Some complaints felt sufferers had hypertension, including Sick headache, dizziness, weakness, fatigue, shortness of breath, restlessness, nausea, vomiting, epistaxis, and decreased consciousness. Complaints when not handled properly can cause complications in the form of stroke, kidney disease, heart disease, and even a critical condition in the patient, requiring emergency care (Sarwono & Suwaryo, 2021).

Sufferers of hypertension must have great self-efficacy so that they can grow in motivation as well as trust in themselves, so that they can achieve the ideal life. The definition of self-efficacy is a feeling or atmosphere related to hearts with hope towards others, especially in the functional character or perception that is sustainable related to behaviour in demand of the individual (Weiner et al., 2020). There is also self-care management, namely, evaluating whether or not change is needed from signals physical, emotional, and indications, so that the required action can be taken to handle disturbances

from symptoms that appear (Priesack & Alcock, 2015). Self-efficacy is useful for sufferers of hypertension because it can help apply healthy lifestyle behaviours, which have implications for increasing quality of life. On the contrary, patients who do not have a pattern of healthy life also mean not having awareness of self-efficacy (Kim, D. H., Bassett, S. M., So, S., & Voisin, 2019).

A change in cognitive function causes negative emotions in the elderly. Cognitive function includes the learning process, perception, understanding, comprehension, attention, and others, which result in slower behaviour in the elderly. According to cognitive theory, self-efficacy plays a role in A cognitive mechanism that can help someone face pressure or a problem. This is based on the fact that self-efficacy places greater emphasis on the belief in oneself in one's ability to face and resolve a problem. Self-efficacy is the evaluation of someone's ability to reach something that is desired. Self-efficacy can influence functional man among them, including cognitive, motivational processes, affective functions, and selection processes. Affective process is the belief that somebody has the ability to overcome stress and depression that they experience in conditions that threaten or are difficult; self-efficacy is also used to control stress. Someone with high self-efficacy will be stronger in facing problems. On the contrary, somebody with low self-efficacy will more easily give up on existing problems.

Change in life in patients with hypertension is one of the triggers of stress. Limitations: physical problems experienced by the elderly, sometimes they experience stress because of various diseases they suffer. No visit heals, even worsening, so that hope for healing becomes a little. Things like this are what it is in the end, causing the elderly to experience a disturbance, a psychic stress. Stress alone is interpreted as a response of physiological, psychological and behavioural changes in human beings who try to adapt to existing stressors. Stressors are events, situations seen as elements that give rise to stress and cause a stress reaction as a result (Moderator: et al., 2020). Stress that occurs in the elderly relates to death, a partner, low social status, low economic status, accompanying physical disease, isolation, and spiritual isolation. This research is a type of study with Technology Readiness Level (TKT) 1.

RESEARCH METHOD

Research methodology in this research is using an analytical correlational design with a cross-sectional approach. The instrument used is Self-efficacy to Manage Hypertension-Five (David Williamsa, 2019) and the Perceived Stress Scale (PSS) instrument (Amirah Masani & Rahman, 2024). Validity and reliability testing were conducted using item-total correlation and Cronbach's alpha. The sampling technique used was purposive sampling with a sample size of 65 respondents. All data collection procedures adhered to research ethics principles, with ethical clearance granted Approval by the Ethics Committee of Universitas Kusuma Husada Surakarta with the No. 2812/UKH.L.02/EC/IV/2025), The research proses in this study were applying for ethical permission, then permission was obtained from the village, community health center and elderly integrated health post, after permission was obtained the researcher determined the inclusion and exclusion criteria,

submitted informed consent, after the data was collected the data was processed using SPSS with bivariate analysis spearman correlation test.

RESULT

As presented in Table 1, the sample consists of 33 men (50,8%). In terms of education, the highest proportion is among those with no formal schooling, totalling 29 individuals (44,6%), while the lowest is among those with a bachelor's degree, with only 3 individuals (4,6%).

Table 1. Distribution Respondent Characteristics

Gender	Frequency	Percentage
Woman	32	49.2
Man	33	50.8
Education	Frequency	Percentage
No school	29	44.6
Elementary School	27	41.5
Junior High School	3	4.6
Senior High School	3	4.6
Bachelor	3	4.6
Self-Efficacy	Frequency	Percentage
Not enough	12	18.5
Enough	14	21.5
Good	39	60.0
Stres	Frequency	Percentage
Low	48	73.8
Currently	12	18.5
Heavy	5	7.7

A total of 12 elderly individuals (18,5%) were found to have low self-efficacy, and 5 elderly individuals (7,7%) experienced severe stress. As presented in Table 2, the results test statistics nonparametric using SPSS with mark significance (p) in the correlation test Spearman Rank, indicating a negative relationship between self-efficacy and stress in the elderly, with a p value <0.000 (<0.05) with correlation -.580**. This is mean that the higher self-efficacy possessed by the elderly, then the stress that appears will also the lower.

Table 2. The Relationship of Self-Efficacy with elderly stress

	Self-efficacy	Stres
Pearson Correlation	1	-.580 **
Sig. (2-tailed)		.000
N	65	65

DISCUSSION

Self-efficacy refers to an individual's belief in their ability to organize and perform actions necessary to achieve desired outcomes in specific situations (Tan et al., 2021; Weiner et al., 2020). For the elderly, self-efficacy is particularly important, as they face various complex physical, psychological, and social changes, such as cognitive decline, mobility limitations, shifts in social roles, and the loss of loved ones. These challenges are significant sources of stress, which can negatively impact both their mental and physical

health. Stress in older adults is not just a reaction to external pressures but is closely related to their subjective perception of their ability to control and manage these challenges (Jean-Baptiste et al., 2020). Elderly individuals with high self-efficacy are more likely to have a positive view of their ability to cope with difficulties, which leads to reduced stress. On the other hand, those with low self-efficacy may feel helpless, increasing their risk of chronic stress (Kotwal et al., 2020).

Research shows a negative relationship between self-efficacy and stress among elderly individuals, particularly those with hypertension, with a p-value < 0.000 and a correlation coefficient of $r = -0.580^{**}$. This suggests that higher self-efficacy in the elderly results in lower levels of stress.

Recent studies have shown that self-efficacy acts as a mediator between life stressors and the psychological well-being of older adults. For example, (Lee, H., Kim, J., & Choi, 2020) conducted a longitudinal study that found a strong self-efficacy helped older adults maintain emotional balance and alleviate symptoms of anxiety and depression caused by chronic stress. The role of self-efficacy in reducing stress is facilitated through the adoption of adaptive coping strategies such as problem-focused coping and cognitive restructuring (Jang, Y., Kwak, M., & Kim, 2022). With a high sense of self-efficacy, elderly individuals are more motivated to actively seek solutions, stay socially engaged, and maintain better self-care practices, all of which contribute to lower stress perceptions (Chao, M. M., & Wu, 2019).

Moreover, self-efficacy plays a role in regulating physiological stress responses. Neuropsychological studies indicate that individuals with higher self-efficacy exhibit more stable cortisol levels during stress, which helps reduce the risk of stress-related health problems (Thoma, M. V., La Marca, R., Brönnimann, R., & Finkel, 2021).

Interventions to Improve Self-Efficacy and Reduce Stress in Older Adults Psychosocial interventions aimed at boosting self-efficacy have proven effective in lowering stress among the elderly. Techniques such as stress management training, customised physical activities, and social empowerment programs have been shown to enhance self-efficacy (Nguyen, TH, Nguyen, KT, & Vo, 2022). For example, Kim and Park (2019) conducted an experimental study that demonstrated how a 12-week program involving relaxation exercises and regular physical activity significantly improved self-efficacy and reduced stress in elderly participants.

Additionally, community-based interventions promote social interactions, which strengthen social support another key factor in enhancing self-efficacy and reducing stress (Wang, Y., Chen, Z., & Lin, 2023). Improving self-efficacy in elderly populations not only benefits mental health but also helps alleviate the strain on public health systems caused by stress-related disorders and age-related diseases. Thus, integrating self-efficacy improvement programs into elderly care services, such as rehabilitation centers, nursing homes, and community programs, should be a key priority for healthcare systems (World Health Organization, 2022).

CONCLUSION

Self-efficacy plays an important role in reducing stress in the elderly, especially those suffering from hypertension. Elderly individuals with a high level of self-efficacy tend to have better abilities in managing stress through adaptive coping strategies and demonstrate more stable physiological responses to stress. Therefore, interventions aimed at increasing self-efficacy, such as stress management training and physical activity, can be effective. The elderly may also benefit from therapies such as horticultural therapy, supportive therapy, or other complementary treatments to help reduce stress levels. Enhancing self-efficacy should become a primary focus in elderly healthcare services to support their well-being. This study provides additional insights for nursing science, particularly in geriatric nursing.

RECOMMENDATIONS

Furthermore, studies can develop and test the effectiveness of psychosocial intervention programs, such as coping skills training, to increase the self-efficacy of the elderly and reduce their stress they, as well as evaluate the impact on their quality of life.

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