

Improving Quality of Life of the Elderly Hypertension with a Family Empowerment Approach: A Quasi-Experimental Method Study

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KEYWORDS

Family Empowerment;
Quality of Life; Elderly
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ABSTRACT

Introduction: Elderly with hypertension not only face risks to their physical health but also often experience far-reaching impacts on psychological and social aspects that can lower their overall quality of life. Active family involvement is needed in the care of the elderly, so that the health of the elderly can be more optimal

Objectives: This study explored the influence of family empowerment on the quality of life of the elderly with hypertension.

Methods: A quantitative approach aimed at exploring the influence of family empowerment on the quality of life of the elderly with hypertension. The design used in this study is quasi-experiment with one group pre-test-post test. The study Population focuses on elderly with hypertension in Indonesia within the age range of 60-90 years. The number of samples of 56 respondents was selected by purposive sampling. Data collection took place before and after one month of families caring for the elderly with hypertension were given family empowerment. The instruments used are Quality of Life, which is measured by the Older People Quality Of Life (OPQOL-Brief). Data analysis was conducted using the Wilcoxon test in S.P.S.S. software version 27

Results: The statistical results show that Z is calculated as -4,889 and sig is 0.000, so it can be concluded that there is a difference in quality of life before and after family empowerment.

Conclusions:

The study confirms a difference in the quality of life for older adults with hypertension before and after being given family empowerment

1. Introduction

One of the most frequent and common cardiovascular diseases carried by the public is Hypertension¹. 2 also estimates that worldwide, 1 in 5 women suffer from hypertension. Larger than males by a ratio of 1 in 4. Blood pressure in elderly people tends to be higher than that of young people. The changes that will be felt by the elderly, especially physiologically, are decreasing various organ functions both due to natural and disease. Some health disorders are thought by the elderly, such as the cardiovascular system. The prevalence of hypertension increases with age, regardless of gender, affecting 70% of the general Population over the age of 80².

The ageing process of the Population certainly has an impact on various aspects of life, both social, economic, and especially health, because, with age, the function of body organs will decrease both due to natural factors and due to disease and an increase in the Old Age Ratio Dependency³. According to WHO, the elderly who live together with their families with the disease experience a decrease in their quality of life. The quality of life of older people is estimated to be good at around 40% of the total number and poor at 60%⁴

The elderly with hypertension not only face risks to their physical health but also often experience far-reaching impacts on psychological and social aspects that can lower their overall quality of life. The main factor that causes a decrease in quality of life is the presence of chronic diseases that often cause disabilities so that the elderly cannot carry out daily activities or Activities of Daily Living (A.D.L.s), such as eating, bathing, going to the toilet, cleaning the room and Instrumental Activities of Daily Living (I.A.D.L.s) such as going shopping and preparing food. The prevalence of disability increases according to age, and women experience disabilities 2 times greater than men. Chronic diseases as originators are heart disease, hypertension, diabetes, chronic obstructive pulmonary

disease (C.O.P.D.), osteoarthritis, pelvic bone fractures, cognitive impairment, dementia, depression, cancer, and visual impairment ⁵.

Family support is important in improving the quality of life of the elderly with hypertension, especially in maintaining adherence to treatment, optimal blood pressure control, and daily diet. The family is a system in which if one family member has a problem, it will affect the systems of other family members and vice versa ⁶.

2. Objectives

This study explored the influence of family empowerment on the quality of life of the elderly with hypertension.

3. Methods

The research methodology employed in this study is a quantitative approach aimed at exploring the influence of family empowerment on the quality of life of the elderly with hypertension. The design used in this study is a quasi-experiment with one group pre-test-post test. The study Population focuses on elderly with hypertension in Indonesia within the age range of 60-90 years. Inclusion criteria involve elderly people with hypertension living in the same house with a family, elderly aged more than or equal to 60 years, family aged greater than or equal to 18 years old, the elderly, and families who can communicate well. The sample was selected using a purposive sampling approach, where patients meeting the criteria were invited to participate, resulting in 56 respondents.

Data collection took place before and after one month, and families caring for the elderly with hypertension were given a family empowerment module. The family empowerment module material consists of hypertension knowledge, family support for the elderly, and hypertension management.

The instruments used are Quality of Life, measured by the Older People's Quality Of Life (OPQOL-Brief). OPQOL-Brief are structured questionnaires that have undergone validity testing ($p > 0.05$) and reliability testing (Cronbach's alpha $p > 0.876$). The questionnaire contains 13 items and uses four dimensions: physical, psychological, social relationships, and environment. All questions are based on a five-point Likert scale (1-5) and five answer choices. Questions 1 and 2 are about overall quality of life, while the other are questions from each domain. Researchers guided respondents to ensure a clear understanding of the questions and minimise bias in questionnaire completion.

The collected data will be analysed using the Wilcoxon test in the S.P.S.S. statistical software version 27. The Wilcoxon test was chosen because it was suitable for comparing two groups of paired samples, samples with an ordinal data scale, and the number of samples in both groups being the same.

The study has obtained ethical clearance with number 132.6/II.3.AU/F/KEPK/V/2023 and received permission from the local health authorities. All information provided by respondents is kept confidential.

4. Results

Table 1. Characteristic Respondent (n=56)

	n	%
Family Respondent		
Sex		
Male	4	7.1
Female	52	92.9
Education		
Elementary School	14	25
Middle High School	13	23.2

Senior High School	26	46.4
College	3	5.4
Length of care elderly		
1-3 years	48	85.7
4-6 years	8	14.3
Relationship with elderly		
Husband	4	7.1
Wife	22	39.3
Child	30	5.36
Elderly Respondent		
Sex		
Male	2	3.6
Female	54	96.4
Age		
60-74 years Old	52	92.9
75-90 years old	4	7.1

Table 2. Quality of life of the elderly with hypertension before and after being given family empowerment (n=56)

	Pre		Post	
	n	%	n	%
Low Quality of Life	25	44,5	1	1,8
High Quality of Life	31	55,4	55	98,2

Table 3. Quasi-experimental analysis test results (n=56)

	Z	Asymp.Sig. (2-tailed)
Quality of life of the elderly after being given family empowerment - Quality of life of the elderly before being given family empowerment	-4.889	.000

Women are generally directly involved in the care of their sick families, especially in the elderly who suffer from hypertension. Especially for children or wives of the elderly who suffer from hypertension. In this study, women and wives dominated in the role of caring for the elderly who suffer from hypertension, as evidenced by the data presented in Table 1.

A high quality of life is owned by the average elderly who suffer from hypertension either before or after being given family empowerment after 1 month, as shown in Table 2. The statistical results

show that Z is calculated as -4,889 and sig is 0.000, so it can be concluded that there is a difference in the quality of life before and after family empowerment, as illustrated in Table 3

5. Discussion

Data shows that women play a greater role in the care of the elderly who suffer from hypertension. Research conducted ⁷ elucidates that gender significantly influences the caregiving of the elderly by family members. Women frequently assume the position of primary carers for older relatives, and their experiences in this capacity typically differ from those of males. Men engaged in aging care typically employ a more systematic and task-orientated methodology.

The study's data indicates that the majority of older individuals with hypertension are women. Research conducted by ⁸ in the American Journal of Hypertension indicates that women are more susceptible to hypertension, particularly postmenopause, due to substantial hormonal alterations. Reducing the hormone estrogen significantly impacts the preservation of blood vessel flexibility. Before menopause, males often have a greater incidence of hypertension. However, in post-menopause, the incidence in women escalates more rapidly than in males, resulting in a heightened danger for women in advanced age. These hormonal fluctuations also influence blood pressure management and the susceptibility to cardiovascular disease in women.

The statistical test findings indicated a significant value of 0.000 regarding the quality of life of older individuals with hypertension before and after family empowerment, concluding that a difference exists in the quality of life pre- and post-empowerment. Numerous studies demonstrate the significance of familial engagement in enhancing the quality of life and medication compliance among the elderly. The survey by ⁹ identifies that family empowerment-based education significantly influences hypertension management in the elderly, allowing family members to offer more effective health assistance through enhanced knowledge. A study of ¹⁰ was undertaken. Interventions centered on family support have effectively improved the quality of life for hypertensive old individuals within the community, demonstrating that a nurturing family environment may directly influence the physical and psychological well-being of the elderly.

Empowering families in the care of older individuals with hypertension can provide social support and contribute to the improvement of their quality of life. Emotional and practical family support has been demonstrated to enhance pharmaceutical and lifestyle therapy adherence among the elderly while also alleviating psychological distress ¹¹ Research by ¹² indicates that the family-based empowerment paradigm markedly improves the quality of life in hypertension patients. This strategy underscores the need for familial education in hypertension control, oversight, and enduring moral support. The family empowerment method aligns with Therapeutic Lifestyle Changes (TLC), demonstrating beneficial outcomes in enhancing the well-being of the elderly. ¹³ assert that the adoption of a healthy lifestyle, bolstered by familial support, including a low-salt diet and regular exercise, significantly influences blood pressure and the quality of life in hypertensive senior individuals. Robust family support enhances the life satisfaction of the elderly, diminishes recurrence rates, and prolongs life expectancy ¹⁴

Additional research by ¹⁵ indicates that a nursing care approach incorporating family involvement can enhance hypertension management in the elderly. Conversely, the study conducted by ¹⁶ emphasizing the significance of family dynamics in reducing anxiety and improving the quality of life among hypertensive old individuals in low-income neighborhoods indicates that familial support can mitigate the psychological obstacles encountered by the elderly. The elderly's attitude toward antihypertensive medication is frequently shaped by familial support. This assistance encompasses oversight in following a treatment regimen and comprehension of the significance of medicine and a healthy lifestyle. Familial engagement can enhance the well-being of the elderly ¹⁷

A study indicated that elderly adults from healthy family backgrounds were nine times likelier to report a high quality of life than those from dysfunctional homes¹⁸. Family functioning is favourably associated with mental health, which subsequently influences the quality of life, underscoring the need for emotional support¹⁶

Separate research by¹⁹ families that actively assist older individuals with hypertension would encourage them to adhere to medication and maintain a healthy lifestyle. This method centred on family empowerment, enhances the resilience of the elderly while also improving their quality of life and effectively managing hypertension. A study by²⁰ indicates that robust family support and the adoption of self-care activities directly influence medication adherence and hypertension treatment. Supportive families significantly enhance the motivation of the elderly to adopt a healthy lifestyle, including dietary management and physical exercise, thereby enhancing their overall quality of life. The findings of this study provide a deeper understanding of the comparison of the quality of life of the elderly who suffer from hypertension before and after being given family empowerment. These findings are relevant in public health and have practical implications for the planning and implementation of more effective hypertension treatment programs for the elderly.

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