

Journal Educational of Nursing (JEN)

Vol. 6 No. 2 – July – December 2023; page 127-133

p-ISSN: 2655-2418; e-ISSN: 2655-7630

journal homepage: <https://ejournal.akperrspadjakarta.ac.id>

DOI : [10.37430/jen.v6i2.172](https://doi.org/10.37430/jen.v6i2.172)

Article history:

Received: May 29th, 2023

Revised: June 17th, 2023

Accepted: July 30th, 2023

Improving Treatment Adherence through Family Support for Hypertensive Elderly in the Pati Regency Area

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Abstract

Age is a period of human growth that is prone to various health problems such as hypertension. Hypertension is also the highest incidence of non-communicable diseases (NCDs) compared to other NCDs, which is 76.5% in Central Java Province. Uncontrolled hypertension can lead to more serious health problems. Management of hypertension requires the elderly to take medication regularly. Elderly compliance is the key to success in controlling blood pressure. Family involvement in treatment certainly has a positive impact on the success of treatment therapy. Objective: to determine the relationship between family support and medication adherence in hypertensive elderly in Pati Regency. Research Method: A type of correlational descriptive quantitative research with a *cross sectional* approach. The population is all hypertensive elderly in Pati Regency and the number of samples is 44 elderly according to inclusion and exclusion criteria. Results: Seniors who received good category family support tended to be more compliant with taking medication. The results of statistical tests using the *Chi Square* test obtained a *p value* of 0.002 (<0.05). Conclusion: There is a relationship between family support and medication adherence in hypertensive elderly in Pati Regency.

Keywords. Support; Family; Elderly

Introduction

Elderly is a period of human growth that is susceptible to various physical disorders. Degenerative or decreased function in organs or body systems experienced by the elderly has an impact on the emergence of physical, mental, psychological and socioeconomic disorders in the elderly. The older a person gets, the more risk of experiencing these problems such as disorders of the cardiovascular system in the elderly resulting in a high risk of hypertension (Amarya et al., 2018).

The World Health Organization (WHO) explained that the prevalence of hypertension in 2023 will reach 23% of the total number worldwide. The prevalence of hypertension in Indonesia in 2018 reached 63,309,620 people. Data from the Health Profile of Central Java Province shows that 37.57% of all residents aged > of 15 years experienced hypertension in 2021. Hypertension is also the highest incidence of non-communicable diseases (NCDs) compared to other NCDs, which is 76.5% in Central Java Province. The increasing prevalence of hypertension is

dominated by the elderly (Central Java Provincial Health Office, 2021).

Hypertension is a disease that cannot be treated but can be controlled. Hypertension is a condition in which a person experiences an increase in blood pressure ≥ 140 MmHg (Wajngarten & Silva, 2019). Uncontrolled hypertension can lead to more serious health problems. Uncontrolled blood pressure in the long term can disrupt the working system of arteries to carry blood to the brain, heart, kidneys and eyes. Some other health problems that can arise due to hypertension such as cardiac infarction, hematuria, hypertensive retinopathy and stroke (Kućmierz et al., 2021).

Management of hypertension itself can be done by two methods, namely non-pharmacological and pharmacological methods. The pharmacology method is also a method of managing hypotension that is usually carried out by health workers to control blood pressure in hypertensive patients, but the success of this method is certainly closely related to patient compliance in taking drugs (Choudhry et al., 2022).

Some previous studies explained that there are still many hypertensive patients who are not compliant in undergoing pharmacological therapy. A study explains that adherence to taking drugs in hypertensive patients is still very low, where only 36.3% of the total 400 respondents actually routinely take antihypertensive drugs (Thirunavukkarasu et al., 2022). Another study also revealed the same thing that there were as many as 32 respondents (42.67%) who did not comply with taking antihypertensive drugs (Arindari & Suswitha, 2020).

Many factors that can be related to medication adequacy in hypertensive patients include knowledge, role of

health workers, motivation, access to health facilities, age, employment status, education level, trust, gender and family support (Borataş & Fırat Kılıç, 2018). Another study explains that there is a relationship between family support and medication adherence (Kurniawati et al., 2019; Nurannisa et al., 2022).

In theory, the elderly who experience setbacks both physically and mentally will certainly find it difficult to adapt to overcome these setbacks. The support of the closest person is an important point to be able to maintain the health of the elderly, where family support or family support is needed in maintaining the health of family members including undergoing medication therapy (Friska et al., 2020). Family involvement in treatment certainly has a positive impact on the success of treatment therapy, where it can be seen that patients who get family support are more obedient in undergoing treatment than those who do not get family support (Prihanti et al., 2020).

Family support is an effort made by the family in the form of help, encouragement, motivation and attention in the form of help to other family members. Family support is divided into four aspects, namely emotional, informational, instrumental and assessment support. Emotional support in the form of providing motivation, attention and everything related to emotional (feelings) so that family members feel loved and valued. Information support in the form of providing useful information. Instrumental support is in the form of providing direct support such as helping with homework and helping financially. Assessment support in the form of assessing whether the treatment undertaken is appropriate or not (Friedman et al., 2014).

A preliminary study conducted on

March 22, 2023 found that the number of hypertensive patients in Pati Regency was 73 people, of which 49 were elderly. The results of interviews with health workers at Puskesmas explained that hypertensive patients were given 10 antihypertensive drugs for the next 10 days, but still only less than half (40%) of the total hypertensive patients returned on time to control or take drugs again.

Method

Type of correlational descriptive quantitative research using a *cross sectional* approach design. The study will be conducted in Pati District in August 2023. The independent variable is family support and the dependent variable is medication adherence. The population of this study was 49 elderly people with hypertension who received pharmacological therapy in Pati Regency. The sampling technique is *purposive sampling*, where the inclusion criteria: elderly with hypertension who are not at home with the family and inclusion criteria: the elderly who experience a decrease in consciousness. The data collection of this study used family support questionnaire sheets adopted from research conducted by Yani Arnoldus Toulasik in 2019 years and MMAS-8 questionnaire sheets to measure medication adherence. The collected data will be tested for frequency distribution for univariate data analysis and chi square test for bivariate data analysis.

Results and Discussion

Results and discussion contains the results of research findings and discussion. Write down the findings obtained from the results of research that has been carried out and must be supported by adequate data. Research

results and findings must be able to answer the research questions or hypotheses in the introduction.

Table 1. Family Support for the Elderly with Hypertension in Pati District (n = 44)

Family Support	Frekuensi	Presentasi (%)
Less	0	0
Enough	28	63,6
Good	16	36,4
Total	44	100

The results showed that the majority of hypertensive elderly in Pati Regency received sufficient category family support, namely 28 elderly (63.6%) and no elderly received less category family support. This shows that there are still elderly who have not received optimal family support. The results of this study are supported by previous studies that hypertensive elderly who received good category support amounted to 45.3% (Widyaningrum et al., 2019).

The elderly who have experienced various limitations both physically, psychologically, and financially certainly need support from the closest people, especially family (Yuniartika & Muhammad, 2020). Family support to the elderly can be in the form of emotional support, appreciation / assessment, information and instrumental. The family functions to maintain the health of all family members starting from being able to recognize health problems, continued the ability to make the right decisions, being able to care for family members who are sick, being able to modify the environment so that family members stay healthy and the ability to utilize health facilities in the environment (Nurannisa et al., 2022).

Family support for hypertensive elderly can have a positive impact, where the elderly will feel loved, loved and appreciated and supported to continue to maintain and maintain their health. Elderly who get good support from

family such as reminding the schedule of taking medicine, buying medicine, providing motivation make the elderly feel more excited in undergoing drug therapy (Purnawinadi & Lintang, 2020).

Table 2. Adherence to Taking Medication in the Elderly with Hypertension in Pati Regency (n = 44)

Adherence to taking medication	Frekuensi	Presentasi (%)
Low	17	38,6
Keep	15	34,1
Tall	12	27,3
Total	44	100

The results showed that the most hypertensive elderly had adherence to taking low-category drugs, namely 17 elderly (38.6%) and the least adherence to taking high-category drugs, namely 12 elderly (27.3%). The results of this study show that there are still many elderly with hypertension who are not compliant in undergoing drug therapy. Previous studies have also shown the same thing that the majority of hypertensive elderly have adherence to taking low category drugs (42.8%) (Riani & Putri, 2023). Another study conducted in the target area of the Lempake Samarinda Health Center found that there are still many people with hypertension who are not compliant in taking medication (Rasyid, 2022).

Adherence to taking medication in people with hypertension is an important key in efforts to control blood pressure, but there are still many people with hypertension including the elderly who are not obedient in undergoing pharmacological therapy (Burnier et al., 2020). Hypertensive elderly are required to take antihypertensive drugs every day, which can have an impact on the emergence of boredom taking drugs, distrust of drugs and deliberately violating taboos or prohibitions from doctors to control blood pressure (Cai &

Calhoun, 2018). Preliminary studies also found that non-compliance with taking medication or routine checks to health facilities in hypertensive elderly is based on misperceptions of the elderly, where the elderly assume that the signs and symptoms they feel such as pain in the neck, fatigue, dizziness and headaches are common due to old age. The elderly will check themselves when the symptoms are getting worse and most will stop taking antihypertensive drugs if the symptoms have decreased.

Table 3. Adherence to Taking Medication in the Elderly with Hypertension in Pati Regency (n = 44)

Family Support	Adherence to taking medication						P
	Re nd ah	%	Se da ng	%	Ti ng gi	%	
Less	0	0	0	0	0	0	
Enough	15	34,1	10	22,7	3	6,8	0,002
Good	2	4,5	5	11,4	9	20,5	

The results showed that the majority of hypertensive elderly who received sufficient category family support had low category medication adherence to 15 elderly (34.1%) and the elderly who received good category family support had high category medication adherence to 9 elderly (20.5%). Statistical tests using the *Chi Square* test obtained *P value* = 0.002 (<0.05), so it was concluded that there was a relationship between family support and medication adherence in hypertensive elderly in Pati Regency. The results of this study are supported by previous studies that the elderly with hypertension tend to be more obedient to taking medication if they get support from their families (Kurniawati et al., 2019).

Family support or usually known as family social support is one of the most important factors in determining the continuity or compliance of the elderly undergoing treatment therapy. Family

support is all actions or assistance to the elderly in the form of attention, providing information, financial assistance and motivating (Sukartini et al., 2020). Family support is related to the basic functions of the family, where the family functions to guarantee / maintain the health of all family members. Seniors who get support both emotionally, informationally, instrumentally and appreciation are more likely to be obedient in undergoing drug therapy (Pan et al., 2021). Adherence in taking medication will increase when the elderly get help from family. The active involvement of the family such as acting as a supervisor of taking medicine, introducing the elderly to check to health facilities and taking drinking water for the elderly to take medicine makes the elderly more motivated to obey taking medicine. In addition, support from families who have close ties with the elderly such as husbands and children can certainly provide better emotional support, compared to support from non-family (Shahin et al., 2021; Wintariani et al., 2022).

The results also showed that there were 2 elderly people who received good category family support but were not obedient to taking medication. This is possible because there are other factors that can affect medication adherence in hypertensive elderly such as lack of knowledge, low socioeconomic and access to difficult health facilities (Pratiwi et al., 2020). Another study also explained that the lack of knowledge that the elderly have about hypertension treatment contributes to the attitudes and perceptions of the elderly, where the elderly with low knowledge have a 5 times greater tendency to not comply with taking antihypertensive drugs (Rahayu et al., 2021). Personality factors are also reported to be one of the determining factors for elderly non-compliance in

undergoing this therapy. Seniors who have an open and sociable personality may get more information than elderly with closed personalities (Langelo & Simmin, 2021).

Conclusions

This study proves that there is a relationship between the support obtained by the elderly from the family with the level of adherence to taking medication in hypertensive elderly. Cross-sector cooperation to motivate hypertensive elderly and educate the elderly and families about the importance of adherence to taking antihypertensive drugs.

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