


Original Research Papers

The relationship between family support with physical activity activeness among elderly hypertension patients

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Abstract

Inactivity among the elderly increases the chance of developing non-communicable diseases like hypertension. With the help of the nearest relatives, it is possible to implement the goal of physical activity in the elderly with high blood pressure, which is the key to resolving their health issues. This study aims to ascertain the connection between family support and exercise levels in senior hypertensive patients at the Gamping I Health Center. In this study, 109 elderly residents of the Gamping I Health Center served as the sample. Data were collected via questionnaires and Spearman Rank data analysis. According to the study's findings, there is a connection between family support and physical activity activeness in elderly hypertension patients.

Keywords: family support; hypertension; physical activity activeness

1. Introduction

The elderly are the phases in which human beings have come to their age or scale of glory and have declined over time. A problem that often occurs in the elderly is hypertension. Older adults who suffer from hypertension do not know if they have increased blood pressure. In Indonesia, the highest cause of death is tuberculosis and stroke, and the third cause of death is hypertension. Therefore hypertension is said to be a silent killer disease (Komalasari et al., 2020).

Data obtained from the Ministry of Health (2016), found that the prevalence associated with the incidence of hypertension occurred by the age range in the elderly, with an incidence rate in the age range of 55-64 years there was 45.9%, in the age range of 65-74 years as much as 57.6% and % at the age of 75 years amounted to 63.8% (Wahyudi et al., 2020). In Indonesia, the third place with hypertension is found in the Special Region of Yogyakarta, with a value of 26%. Hypertension is in the top ten diseases in the Special Region of Yogyakarta and became the second rank in 2015 based on data from ISPD (Integrated Surveillance of Health center Diseases) (Dinkes Yogyakarta, 2015).

The Government of Indonesia regulates the lives of the elderly in the 1945 Constitution of the Republic of Indonesia in Article 28H Paragraph 2, which states that everyone has the right to get convenience and special treatment to obtain equal opportunities and benefits to achieve equality and justice. The year was 1998, in line with the issuance of Law Number 13 of 1998 concerning the Welfare of the Elderly. Article 5 Paragraph 3 of Law Number 39 of 1999 concerning Human Rights states that everyone, including vulnerable groups, has the right to get more treatment and protection regarding their specificity (Nugroho, 2020).



Factors of hypertension are influenced by several factors, including physical activity, diet, sleep patterns (South et al, 2014 in Sagita et al., 2019). WHO (2011), states that hypertension can be caused by other factors, namely the lack of the elderly in active physical movements. The implementation of the purpose of physical activity in the elderly with hypertension can be done with the need for support, such as getting permission from the closest family. The role of the family influences the process of monitoring, guarding, and minimizing the negative impact of hypertension while at home. Families can be decision-makers regarding the care carried out on the elderly with hypertension (Tumenggung, 2013 in Khodijah et al., 2020).

Based on data that was obtained from a preliminary study conducted on Thursday February 10, 2022, the results were received that the data on non-communicable diseases at the Gamping I Health Center in the period from January to December 2021, which ranks highest were hypertension, especially at the age with the number of cases reaching 4120 people. Lack of activity in carrying out physical activity in the elderly can cause hypertension problems. The family has a very important role in providing support to the elderly in overcoming the problem of hypertension. This study aims to determine the relationship between family support and physical activity activeness in elderly hypertension patients at the Gamping I Health Center.

2. Research Methods

In this study, 150 older people who were hypertensive and living in the Gamping I Health Center region between the ages of 55 and 69 made up the study's group in January 2022. The sample of this study was the senior hypertensive patients who fit the inclusion and exclusion criteria, namely 109 older adults. The inclusion criteria include the elderly with hypertension, the elderly aged 55-69 years, the elderly who live with family members, the elderly who can understand Indonesian, and the elderly who are willing to fill out the questionnaire. The exclusion criteria in this study include older adults with physical activity problems.

This study is quantitative and implements a collation research design. The sampling that has been used is the purposive sampling method. Research instruments using questionnaires on family support and questionnaires related to physical activity activeness. The variables in this study featured independent variables, such as family support, using an ordinal data scale, and dependent variables, like physical activity activeness, also using an ordinal data scale. Data analysis using computerized statistical tests using Spearman Rank Correlation. In this study, it has passed the ethical test with No.2132/KEP-UNISA/VI/2022.

3. Results and Discussion

3.1. Result

3.1.1.Characteristics of Respondents

The characteristics of respondents in this study can be seen in table 1 below:

Table 1. Characteristics of hypertension respondents at the Gamping Health Center 1 in July 2022

No	Characteristic	Frequency (f)	Percentage (%)
1	Gender		
	Male	41	37.6
	Female	68	62.4
2	Age		
	55-60 Tahun	30	27.5

No	Characteristic	Frequency (f)	Percentage (%)
3	61-65 Tahun	49	45
	66-69 Tahun	30	27.5
	Occupation		
3	Retired	16	8.7
	Merchants	8	4.3
	Self-employed	13	7.1
	Housewives	43	23.4
	Laborer	12	6.5
	Others	17	9.2
	Duration of hypertension		
4	1-5 Tahun	75	68.8
	6-10 Tahun	31	28.5
	11-15 Tahun	3	2.7

(Source: Primary Data 2022)

Table 1 of the results of the character study of respondents based on gender shows that most of the respondents are female, which is 68, while with the male sex, there are 41 respondents. Based on age, it shows that most of the respondents were aged 61-65 years, namely 49 respondents. Based on occupation, it shows that the status of respondents primarily work as housewives are 43 respondents. Based on the time they suffered from hypertension, most respondents were diagnosed with hypertension for 1-5 years, which is 75 respondents.

3.1.2. Family Support

Table 2. Frequency of support for senior hypertensive patients families at Gamping Health Center 1 in July 2022

Category	Frequency	Percentage (%)
Good	90	82.6
Fair	16	14.7
Low	3	2.8
Total	109	100

(Source: Primary Data 2022)

Based on table 2. The results of the family support study mostly had a good category of 90 respondents (82.6%), and the least low category was three respondents (2.8%).

3.1.3. Physical Activity

Table 3. Frequency of physical activity activeness of senior hypertensive patients at Gamping Health Center 1 in July 2022

Category	Frequency	Percentage (%)
Good	40	36.7
Moderate	64	58.7
Bad	5	4.6
Total	109	100

(Source: Primary Data 2022)

Based on table 3 of the results of physical activity activeness, most had a moderate category of 64 respondents (58.7%), while the least bad category was five (4.6%).

3.1.4. Cross-Tabulation of The Relationship of Family Support with Physical Activity Activeness

Table 4. Cross-Tabulation of family support relationship with active physical activity of senior hypertensive patients at Gamping Health Center 1 in July 2022

		Physical Activity			Total
		Good	Moderate	Bad	
Family Support	Good	34	55	1	90
	Fair	6	8	2	16
	Low	0	1	2	3
Total		40	64	5	109

(Source: Primary Data 2022)

Based on table 4. It can be seen that the respondents with family support and physical activity activeness in the good category were 34 respondents, then for family support in the good category with active physical activity in the moderate category, as many as 55 respondents and family support in the good category with poor physical activity activeness as many as one respondent. For respondents with sufficient family support and good physical activity activeness were six respondents. For family support, the category was sufficient with the activeness of moderate category physical activity, namely eight respondents. In comparison, for family support, the sufficient category and poor physical activity activeness, as many as two respondents. Respondents with low category family support and moderate physical activity activeness were one respondent, then for low category family support with poor category physical activity activeness were two respondents.

3.1.5. Bivariate

Bivariate analysis in this study was used to determine the relationship between the free variable (family support) and the bound variable (activeness of physical activity).

Table 5. Spearman rank analysis results of family support with active physical activity of senior hypertensive patients at Gamping Health Center 1 in July 2022

		Family support	Physical activity
Spearman's rho	Family support	Correlation coefficient	1.000
		Sig. (2-tailed)	.752**
		N	184
	Physical activity	Correlation coefficient	.752**
		Sig. (2-tailed)	1.000
		N	184

(Source: Primary Data 2022)

Based on table 5. It is known that from the results of data analysis with the Spearman Rank test, data were obtained for a significance value is 0.00, which means that there is a correlation between family support and physical activity activeness because the value of $p < 0.05$, that the value of the correlation coefficient of 0.752 is obtained which means that there is a close relationship between family support and physical activity activeness in the strong category.

3.2. Discussion

3.2.1 Family Support

The results of the study on family support variables showed that most of them were in a good category (82.6%). This is to the results of previous studies stating that most respondents had family support in the good category (75.3%) (Amelia, 2020). The results of this study are also in accordance with the results of the research of Herlinah et al. (2013) which states that most elderly people with hypertension get emotional support, appreciation, information and instrumental from the family. Another supporting research result is the study Daziah et al. (2020), which shows that there is a significant relationship between family support and hypertension treatment behavior carried out by the family during home treatment. Family support is very important in the process of treating and preventing hypertension. The important role of the family in providing supervision and prevention of hypertension complications, besides that it can also provide support to the elderly and how their efforts in providing decisions the senior hypertensive patients in carrying out treatment (Mubarokah et al., 2020).

3.2.2 Physical Activity Activeness

The results of the study on physical activity activeness showed that most of them had a moderate category (82.6%). This study's results were from previous studies, which stated that most respondents (75%) had a physical activity with moderate categories (Diana & Ludia, 2021). People who do active physical activity have lower blood pressure torture results and can minimize high blood pressure. They also tend to have better muscle and joint function strength because their organs become stronger and more flexible (Hasanudin et al., 2018). Minimal physical activity is an independent risk aspect that makes chronic diseases in addition to the totality estimated to cause death globally (Iswahyuni 2017).

In preventing hypertension, physical activity interventions can be done by doing activities with qigong gymnastics movements. Qigong gymnastics has an effective function and is very useful for regulating blood pressure, which is useful for reducing high blood pressure in the elderly with hypertension. Qigong is a gymnastic movement originating from China with several movement exercises such as meditation, breathing exercises, or rhythmic body movement exercises (Yang et al., 2017; Salmiyati et al., 2021). The results of a study conducted by Salmiyati et al. (2021), entitled Qigong Gymnastics Lowers Blood Pressure in Senior hypertensive patients in Sleman Yogyakarta which gets results that Qigong Gymnastics can reduce blood pressure in the elderly who suffer from hypertension.

3.2.3 Bivariate

3.2.3.1 The Relationship between Family Support and Physical Activity

In this study, it was found that there is a close relationship related to family support with the activeness of physical activity of senior hypertensive patients at the Gamping I Health Center, the

significant number is 0.00, and the correlation coefficient is 0.752, which means that there is a close relationship between family support and physical activity activeness in the strong category.

The results of this study are supported by the results of a previous study conducted by (Diana & Ludia 2021) with the results of a study that concluded that there is a relationship between family support and physical activity of hypertensive elderly. The results of this study are also by research that Liana Syaroh has conducted (2018), where the results of her study mention that there is a relationship between family support for the physical activity of the elderly and hypertension. The better the family support provided to the elderly, the higher the activity of senior hypertensive patients in carrying out physical activity.

3.2.4 Research Limitations

It takes longer to reach the target respondents since the senior hypertensive patients visiting the health center are unpredictable daily.

4. Conclusion

There is a relationship between family support and active physical activity in senior hypertensive patients at the Gamping I Health Center. From the results obtained in this study, it is hoped that respondents will be more active in maintaining and paying attention to their body health by improving coping mechanisms to be able to actively carry out physical activity in overcoming hypertension because people who are not active in physical activity, the results of the heart rate frequency examination tend to be higher, this can cause the heart muscle at each contraction to be harder. The bigger the heart muscle and the more it pumps, the greater the pressure imposed on the arteries, which can cause blood pressure to increase (Karim, 2018)

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