



***The Relationship between Family Functions and the Quality of Life of the Elderly with Hypertension in the working area Public Health Center of Babadan***

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**ABSTRACT**

**Background:** Due to the high rate of hypertension in the elderly, it has a negative impact on the quality of life. Elderly who suffer from hypertension need the role of a good family function in order to create a good quality of life as well. The purpose of this study was to explain the relationship between family functions and the quality of life of elderly patients with hypertension.

**Methods:** Analytical observational research with cross sectional approach and used simple random sampling technique with 67 samples. This research was conducted from October to December 2021 in the working area of the Babadan Health Center, Ponorogo Regency. Data collection was obtained used APGAR Family and WHOQOL-BREF questionnaire. The data obtained were analyzed used Chi-Square test.

**Results:** The majority of elderly people with hypertension at the Babadan Health Center have healthy family functions and a good quality of life, especially in the domain of social relations. Based on statistical analysis using the Chi-Square test, it was found that there was a significant relationship between family function and the quality of life of the elderly with hypertension ( $p = 0.000$ ;  $PR = 8.9$ ;  $CI = 95\% 2.954$  to  $26.830$ ).

**Conclusion:** Elderly people with hypertension who come from healthy families are 9 times more likely to have a good quality of life than the elderly who come from unhealthy families. The role of a good family function will affect the quality of life of elderly people with hypertension, especially in terms of social relationships.

**Keywords:** *Family Function, Quality of Life, Hypertension*

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## INTRODUCTION

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The aging process is a natural process that occurs during an individual's life. The number of people aged >60 years according to the national population census in 2020 is 26.82 million people.<sup>1</sup> Along with the increasing number of the elderlies population, it can cause many complex problems related to the health of the elderly, one of which is hypertension. As a result of the aging process, it causes a decrease in the function of the heart organs, namely stiffness of the blood vessels and the elasticity of the ventricular walls is reduced which is gradually could cause pressure blood rise or normal called hypertension.<sup>2</sup>

Hypertension part big is disease at age continued. According to Basic Health Research 2018, hypertension is disease main attack elderly, with percentage varied, by 69.53% at the age >75 years, 63.22% at the age 65-74 years, and 55.23% at the age 55-64 years.<sup>3</sup> The prevalence of hypertension in Ponorogo Regency according to the latest data on the health profile of Ponorogo Regency in 2018 as many as 39,004 cases.<sup>4</sup> Based on the monthly reports of elderly health services at the Babadan Health Center, hypertension is a disease that is often experienced by the elderly. The latest data is in 2021 are elderly people with hypertension in the work area, there were 539 cases of Babadan Health Center consisting of 339 women and 200 men.

A person's quality of life is determined by their perspective on their position in life in relation to the cultural environment and value system in which they live, as well as their conceptions of the individual's hopes, aspirations and standards of living.<sup>5</sup> There are several factors that influence the quality of life of the elderly, such as health status, age, level of marital status, education, and family.<sup>6</sup> Family is the smallest unit in society. Someone in the middle step on age carry on will experience dependency to family.

Function role family will give impact on quality life elderly sufferer hypertension in the family.

Based on previous research it was stated that health barriers among family members were closely related to many problems of other family members. When family members suffer from health problems, it affects the family's ability to carry out its functions. Likewise, the presence of the elderly with hypertension affects the quality of family life, and vice versa the role of family functions affects the quality of life of the elderly. Hypertensive patients in the family.<sup>7</sup>

Along with the increasing prevalence of hypertension in the elderly in the working area of the Babadan Health Center, so that it has an impact on the quality of life of the elderly with hypertension because in the aging process an elderly person will experience weakness, limitations, incompetence, and inhibitions so that it can have an impact on decreasing the quality of life of the elderly. Thus, the family plays an important role in carrying out family functions optimally to create an optimal quality of life for the elderly with hypertension. In accordance with this explanation, the researcher wants to carry out an in-depth research on how the Relationship between Family Functions and quality of life for elderly patients with Hypertension.

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## METHODS

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This research is analytic observational with cross-sectional approach. The sample inclusion criteria in this study included elderlies with hypertension who lived with their families, elderlies with hypertension who had active treatment at the Babadan Health Center, and elderlies with hypertension who were willing to be research respondents. Meanwhile, the sample exclusion criteria in this study included the elderlies who did not fill out the questionnaire completely and the elderlies who could not read and

write. This research was conducted from October to December 2021. In this study, the population studied were the elderly who suffered from hypertension and resided in the working area of the Babadan Health Center Ponorogo as many as 67 elderly. The sampling technique in this study is using a simple random sampling technique, so that the entire population has the same opportunity to be used as research samples. In study this, family function used questionnaire *APGAR Family* and quality life used questionnaire *WHOQOL-BREF* which has been translated use Indonesian as well has been valid and reliable with Cronbach's alpha value is 0.77 for used measure quality of life.<sup>8</sup> The criteria used to measure family function are: Function family healthy if score 7-10, function family no healthy if score 0-3. Quality of life is measured in the form of the following criteria : Quality of life is categorized as good if the score obtained is > 50, quality of life is categorized as poor if the score obtained is ≤ 50.<sup>9</sup> Data analysis in research this using the *Chi-Square* test. This research has obtained an ethical statement with No. 116/EC/FK/2021 from KEPK, Faculty of Medicine, Semarang.

**RESULTS**

**Table 1.** Frequency distribution of respondents general characteristics

Variables	Frequency (n)	Percentage (%)
Age		
60-74 years	67	100%
75-90 years	0	0%
Gender		
Male	28	41.8%
Female	39	58.2%
Education		
Elementary school	23	34.3%
Junior High School	24	35.8%
Senior High School	16	23.9%
Bachelor	4	6.0%
Marriage		
Widower	0	0%
Widow	0	0%
Married	67	100%
Not married	0	0%
Living		
Family	67	100%
Alone	0	0%
Total	67	100%

Based on table 1, it shows that all the elderly who participated in this study were aged 60-74 years who were included in the elderly group (early). In the terms of gender, the majority are female 58.2%. In the terms of the level of education, the majority are junior high school 35.8%.

**Table 2.** Functions of the elderly family with hypertension

Variable	Frequency (n)	Percentage (%)
Function Family		
Function family healthy	36	53.7%
Family no healthy	31	46.3%
Total	67	100%

Based on table 2, the results show that the majority of elderly people with hypertension in the working area of the Babadan Health Center have healthy family functions, namely 36 elderly (53.7%).

**Table 3.** Quality of life for the elderly with hypertension

Variable	Frequency (n)	Percentage (%)
Quality Life		
Quality life good	41	61.2%
Quality life bad	26	38.8%
Total	67	100%

Based on table 3, the results show that the majority of elderly people with hypertension have a good quality of life, namely 41 elderly (61.2%). Based on the calculation of the average score for each quality of life domain, the results obtained include the physical health domain 59.6, the psychological health domain 59.8, the social relations domain 62, and the environmental relations domain 57. Thus, the highest average score for each domain is the domain of social relations.

**Table 4** The relationship between family functions and the quality of life of the elderly with hypertension

Function Family	Quality life						p Nilai value	Score PR
	Bad		Well		Total			
	n	%	n	%	N	%		
Family no healthy	23	74.2	8	25.8	31	100	0.00	8,903
Function family healthy	3	8.3	33	891.7	36	100		
Total	26	38.8	41	61.2	67	100		

Based on table 4 above, it shows that the majority of the elderly have healthy family functions, namely 36 elderlies, of which 33 have good quality of life (91.7%), while those who have poor quality of life are 3 (8.3%). Based on the results of the Chi-Square test, the value obtained is  $p = 0.00$  ( $p < 0.05$ ), meaning that there is a significant correlation between family functions and the quality of life of elderly people with hypertension. Based on the table, the PR value = 8.903 this shows that the elderly who have healthy family functions are 9 times more likely to have a good quality of life than the elderly who come from unhealthy families.

## DISCUSSION

In this study, there were 67 elderlies people with hypertension at the Babadan Health Center, Ponorogo Regency. The respondents were then characterized based on age, gender, education, marital status and condition of the elderly at home whether living alone or with family. Most of the respondents are 60-74 years old, female, have a junior high school education, are married, and live with their families. Based on the results of data analysis, it was found a significant correlation between family functions and the quality of life of elderly people with hypertension in the working area of Babadan Health Center.

Most of the elderlies people with hypertension at the Babadan Health Center have healthy family functions (53.7%). Healthy family functions can be created

from well-established multifunctional relationships in which there are many interactions, these interactions are interactions between family members. A healthy family has the understanding that the welfare of a family is assessed from the physical, mental, and social aspects which will create a complete family so that they can live normally.<sup>10</sup> Based on this, it can be concluded that with the functioning of the role of the family, the elderly can be more assisted in face health problems, thus a healthy family function will lead to a better quality of life.

The majority of elderly people with hypertension in the working area of Babadan Health Center have a good quality of life (61.2%). Elderly people who can accept changes in physical conditions or the degenerative processes they experience, are able to adapt, receive reasonable treatment from their environment, receive attention and affection so that their complaints feel heard by their families, these things can create a good quality of life for the elderly patients with hypertension. This is in line with current research. The result is that the average score for each domain of quality of life in the elderly with hypertension in the working area of the Babadan Health Center is the social domain which has the highest average score, meaning that the good quality of life possessed by most elderly people with hypertension at the Babadan Health Center is influenced by social relationships in the form of active interactions with family, friends, or neighbors, where it can motivate the elderly to remain confident in living their old age. The fulfillment of the need to be able to interact and socialize with other individuals through associations, professional organizations, sports, and common hobbies is an important indication in the creation of good social relationships in the elderly.

This study obtained results that are in line with research conducted at the Darul

Imarah Health Center Aceh Besar regarding family functions in dealing with the incidence of hypertension in the elderly.<sup>11</sup> This study found a significant correlation between family function and the incidence of hypertension in the elderly. The study also explained that affective function has a significant effect on the incidence of hypertension in the elderly. Affective functions such as affection, giving a sense of security, and attention can reduce the burden and despair from within the elderly as a result of the decline in the function of the elderly body system and the physical limitations they experience. This function is very important for family members, especially the elderly who are undergoing treatment and medication for their illness.<sup>11</sup>

This study obtained results that are in accordance with the results of research conducted in the hamlet of Geblagan Tamantirto, Kasihan, Bantul, Yogyakarta. Based on the results of data analysis conducted in this study, a significant correlation was found between family functions and the quality of life of the elderly.<sup>12</sup> In the degenerative process, the elderly experience a decrease in the ability to live, as a result of this, the elderly experience dependence on their families. Family Function which can later affect the quality of life of the elderly will be good, because the family is able to understand what is felt by the elderly with hypertension, the family gives affectionate attention and makes the elderly feel safe, the family is able to be wise and patient in caring for the elderly with hypertension, and families do not consider the elderly with hypertension as a burden on the family because of their limitations. This is in line with the results of research conducted by researchers that the average score for the domain of quality of life in elderly people with hypertension in the working area of the Babadan Health Center is the highest in the domain of social relations. Good social relations can be

created from good social interactions as well. Social interaction can come from family, close friends, co-workers, to the community. In a family, social interaction or social support can take place well if the functions of the family can also be carried out properly. The creation of good social relations in the elderly, especially the elderly who are undergoing treatment and disease control, will be able to optimize the quality of life of the elderly with hypertension.

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### CONCLUSION

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The elderly who come from healthy family functions have a 9 times greater chance of having a good quality of life than the elderly who come from unhealthy families.

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