

# THE RELATIONSHIP BETWEEN PSYCHOLOGICAL WELL-BEING AND SELF-CARE BEHAVIOR IN THE ELDERLY WITH HYPERTENSION

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## Abstract

Older adults are at risk of developing degenerative diseases such as coronary heart disease, hypertension, diabetes mellitus, and others. One of the problems that many older adults suffer from is hypertension. This study aimed to analyze the relationship between psychological well-being and self-care behavior in the elderly with hypertension. This quantitative research method used a cross-sectional design to analyze correlations with the Somer's gamma test. One hundred seven elderly respondents with hypertension in Notog Village, Patikraja District, Banyumas Regency, used nonprobability sampling techniques. Data were taken using the Psychological Well-Being Scale (PWBS) and Hypertension Self Profile (HBP-SCP): Behavior Scale questionnaires. The research showed that most respondents had a moderate level of psychological well-being of 57.9% and a moderate level of hypertension self-care behavior of 64.5%. The results of this study showed that there was a significant relationship between psychological well-being and hypertension self-care behavior ( $p\text{ value} \leq 0.001$ ,  $p < 0.05$ ) with a moderate level of correlation (coefficient  $r = 0.477$ ). There was a significant relationship between psychological well-being and self-care behavior in older adults with hypertension.

**Keywords:** Elderly, hypertension, psychological well-being, self-care behavior

## Introduction

According to the World Health Organization (WHO), older people are men and women who have reached the age of  $\geq 60$ . The elderly population in 2022 will be 13.07 percent in Central Java. The number of older men is 92,807, and older women are more, namely 99,461 people in Banyumas in 2022 (Dinkes, 2022). The number of older adults in 2022 will reach 9,354 in Patikraja (Dinkes, 2022). In this data, there is Notog village, one of the villages in Patikraja District, where the number of older adults reaches 1245 (Notog et al., 2023). The elderly are at risk of developing degenerative diseases such as coronary heart disease, hypertension, diabetes mellitus, and others. The elderly tend to experience hypertension as they get older because the arteries tend to harden and lose their elasticity.

One of the problems that many older adults suffer from is hypertension. According to WHO, hypertension is when the systolic blood pressure in a person's body is  $\geq 140$  mmHg and or diastolic blood pressure is  $\geq 90$  mmHg. The prevalence in 2018 of hypertension cases in Indonesia amounted to 63,309,620 people. In 2022, the number of hypertension cases in Central Java reached 8,494,296 cases. Based on data from the Dinkes Banyumas, data on the number of hypertension sufferers in 2022 was 108,948 cases, with a percentage receiving health services of 95.32%. In 2023, there will be 321 (Patikraja District Puskesmas, 2023) older adults suffering from hypertension in Patikraja District. Poor psychological conditions that can increase blood pressure, such as anxiety, stress, and negative thoughts, significantly influence the decline in physical health and psychological well-being.

The theoretical model of psychological well-being consists of six aspects of positive functioning: autonomy, control over the environment, personal growth, life goals, positive relationships with others, and self-acceptance. (Ryff, 2019). When their psychological well-being is good, it will be easier for hypertensive older adults to manage stress more effectively and avoid risky behavior that causes reduced self-care. Self-care is a preventive measure to improve health, especially in the elderly, who often overlook hypertension as a natural condition. Uncontrolled hypertension can increase cardiovascular disease risk. To control hypertension independently, following self-care behaviors, including regular health check-ups, medication use, maintaining a low-salt diet, physical activity, positive thinking about illness, stress management, and fostering good relationships with family and society is crucial.

Based on the results of a preliminary study conducted in Notog Village, Patikraja District, on ten hypertensive elderly respondents, As many as 70% of older adults have poor psychological well-being because they cannot control excessive stress, do not comply with medical care, and engage in risky behavior when their psychological well-being is poor. Excessive anxiety will make it difficult for the elderly to sleep and increase blood pressure in the elderly due to lack of support from family or motivation from other people and 30% of older adults have been able to control their psychological well-being well with the awareness to carry out good self-care such as carrying out regular physical activity, living a healthy lifestyle, visiting health services and undergoing medical treatment as well as getting positive support from their family and those closest to them. Therefore, researchers are interested in researching the relationship between psychological well-being and self-care behaviors in elderly hypertension. This study aimed to analyze the relationship between psychological well-being and self-care behavior in the elderly with hypertension.

## Methods

This quantitative research uses a cross-sectional design with correlation analysis to analyze the relationship between psychological well-being and self-care behavior in hypertensive elderly. The research sample was 107 respondents, with the inclusion criteria for the hypertensive elderly group in this study being 1) suffering from hypertension, 2) willing to be respondents, 3) elderly aged 60-75, and 4) independent ADL. There are 2 data analyses in this research, namely univariate and bivariate. Univariate analysis to analyze gender, employment, income, and education using frequency distribution. Meanwhile, to analyze age using numerical data analysis. Bivariate analysis in this study analyzed the relationship between psychological well-being and hypertension self-care behavior in the elderly. Data were taken using the Psychological Well-Being Scale (PWBS) and Hypertension Self Profile (HBP-SCP): Behavior Scale questionnaires. Test the validity of Apriliani's (2018) psychological well-being questionnaire, which was adopted by Maulina (2021) because a correlation test had been carried out by previous researchers, namely Saskia (2019), using the Pearson product-moment correlation test. The validity test was carried out on 30 older adults. The instrument will be declared valid if the calculated  $r$  result exceeds the  $r$  table (Swarjana, 2015). The results of the 18 questions were 15 questions, which were declared valid for the psychological well-being instrument. Invalid questions are then removed. Test the reliability of this instrument using the Cronbach alpha test. An instrument is reliable if its alpha value is 0.70 (Swarjana, 2015). The reliability test results obtained  $\alpha = 0.754$ , so this instrument was declared reliable.

Meanwhile, testing the validity of the self-care behavior questionnaire using the Hypertension Self Profile (HBP-SCP) instrument: the Indonesian version of the Behavior Scale has been tested for validity and reliability by previous researchers and obtained a Cronbach alpha value of 0.995 with a validity value tested on 40 respondents obtained interval  $r$  value of 0.4-0.8 (Upoyo et al., 2021). The statistical test used is the Sommer'd Gamma Test. All respondents' personal information was kept to ensure confidentiality, and only researchers could access the data. Institutional Ethical Committee approval was obtained from the Faculty of Health Sciences, Jenderal Soedirman University, with decision letter 1325/EC/KEPK/XII/2023.

## Results

### 1. Respondent Characteristics

The characteristics of participants in this study include age according to WHO, gender, occupation, education, history of hypertension, and income according to the UMK in Banyumas district 2024.

Table 1 Respondent Characteristics

Variable	N	Mean	Std. Deviation
Age (WHO)	107	66.02	4.27
	Frequency		Percent
Gender			
Female	77		72.2%
Male	30		28%
Education			
Did not go to school/did not finish SD	7		6.5%
Finished SD	66		61.7%
Finished SMP	18		16.8%
Finished SMA	11		10.3%
Finished D3	1		0.9%
Finished S1	4		3.7%

Work		
Does not work	58	54.2%
Retired	4	3.7%
Entrepreneur	18	16.8%
Farming	25	23.4%
Civil Servants	2	1.9%
Income (According to the Banyumas District UMK)		
>Rp. 2.195.690	95	88.8%
≤Rp. 2.195.690	12	11.2%
History of Hypertension		
Yes	107	100%
No	0	0%

Table 1 shows that the average age of participants is 66 years. Table 1 shows that the characteristics of participants in this study were dominated by older women (72.2%). The educational history of the elderly is also dominated by elementary school completion (61.7%). Some of the elderly also do not have jobs (54.2%) because they are housewives at home, and some participants get the income they receive only from their children, and the amount is uncertain. The income of the participants in this study was that older adults had incomes below >2.1 million by the 2024 Banyumas Regency UMK.

## 2. Description Of The Psychological Well-Being Condition Of Hypertensive Elderly In Notog Village

Table 2 Description of the psychological well-being condition of hypertensive elderly in Notog Village

Variable	Frequency	Percent
Psychological Well-Being		
Low $15 \leq x \leq 39$	20	18.7%
Medium $40 \leq x \leq 64$	62	57.9%
High $65 \leq x \leq 90$	25	23.4%

Table 2 showed that psychological well-being in this study was low at 18.7%. In comparison, moderate psychological well-being was more dominant in the elderly in this study at 57.9%, and high psychological well-being in this study was 23.4%.

## 3. Description Of Self-Care Behavior In Hypertensive Elderly In Notog Village

Table 3 Description of self-care behavior in hypertensive elderly in Notog Village

Variable	Frequency	Percent
Self-Care Behavior		
Low (20-40)	25	23.4%
Medium (40-60)	69	64.5%
High (60-80)	13	12.1%

Table 3 shows that the self-care behavior of hypertensive elderly in this study was low for 23.4% of participants. In comparison, self-care behavior was moderate for 64.5% of participants, and self-care behavior was high for 12.1%. Participant.

#### 4. The Relationship Between Psychological Well-Being And Self-Care Behavior In Elderly People With Hypertension In Notog Village

Table 4 The relationship between psychological well-being and self-care behavior in older adults with hypertension in Notog Village

Variable	Self-Care Behavior Questionnaire				Total	Correlation coefficient (r)	Value p
		Low 20-40	Medium 40-60	High 60-80			
Psychological Well-Being Questionnaire	Low 15x≤39	14	6	0	20	0.477	<0.001
	Medium ≤40x≤64	8	50	4	62		
	High ≤65x≤90	3	13	9	25		
Total		25	69	13	107		

Table 4 shows the results of the Somers D Gamma test. These results show that the self-care behavior variable has a value of  $p = <0.001$  ( $p < 0.05$ ), so it can be concluded that there is a relationship between psychological well-being and self-care behavior in older adults with hypertension. If the elderly's self-care behavior is good and they can control their hypertension well, then the psychological well-being of the elderly tends to be high and good. A correlation coefficient (r) of 0.477 was obtained or interpreted as a medium correlation (Sugiyono, 2010).

## Discussions

### 1. Respondent Characteristics

Participants in this study were older adults with hypertension with an age range of 60-75 years, and the average age was 66 years. At this age, the elderly experience an aging process characterized by a decline in physical or psychological function and cannot regulate their lives or health behavior. This is also in line with the theoretical review that as people get older, a person's blood pressure will increase 50% of people aged between 55 and 66 years are most likely to suffer from hypertension. As they age 65 years or more, the cases increase. This is because the elasticity of a person's blood vessels decreases with age (Imelda et al., 2020).

Based on research from Pardede (2020) shows that the majority of women suffer from hypertension, amounting to 68%, in this case, due to the effects of hormone deficiency after menopause and other risk factors such as obesity and stress, which affects women more than men. Based on research by Matud et al. (2019), it is stated that men's psychological well-being has a high score in the dimension of self-acceptance, while in the dimensions of positive relationships with other people and self-development, women have a higher score.

Research by Gusty and Merdawati (2020) shows that a low level of education is related to a lack of knowledge and awareness about health. Low knowledge and awareness of hypertension sufferers' risks make the hypertension condition not well controlled. According to research by Azijah (2021), the level of knowledge regarding health behavior can influence psychological well-being. If someone has a high level of education, that person tends to be more alert and maintain a healthy lifestyle because of the information that can/can be obtained.

According to research by Lay GL et al. (2019), participants who are housewives and do not work have a higher risk of developing hypertension compared to people who work outside the home. This happens because homemakers tend to be more lazy about exercising or doing physical activity. Physical activity 3-5 times weekly will strengthen the heart muscle and enlarge the heart chambers. Both will increase heart efficiency. The elasticity of blood vessels will increase so that blood flows more smoothly and blood pressure does not increase. Smooth blood vessels will also help remove waste smoothly so that older people do not get tired easily.

Income for the elderly comes from gifts from children, husbands who are still working, government assistance, and income from respondents who own businesses. According to research by Adhitomo (2014), hypertension was found to occur more frequently in low-income groups compared to middle and high-income groups, possibly due to a lack of funds for regular self-examination and psychological stress related to economic pressure.

## **2. Description Of The Psychological Well-Being Condition Of Hypertensive Elderly In Notog Village**

In this study, the level of low psychological well-being in older people was 18.7%, and the level of high psychological well-being was 23.4%. So, hypertensive patients who have psychological well-being problems, such as stress, not being able to control the environment and themselves, anxiety, and excessive emotions of anger, will affect their blood pressure. However, if hypertension sufferers have a high capacity for psychological well-being, they can develop their potential and can have and create an environment that suits their physical condition. Their blood pressure will be well controlled (Wells 2010 in Asmarani 2018). According to research by Ramadi et al. (2017), researchers believe it is necessary to take a psychological approach to hypertensive patients to be able to develop the potential within them so that their psychological condition can function well; patients can create an environment that suits their physical condition so that blood pressure will be well controlled. Research by Izzati et al. (2024) shows that the psychological well-being of individuals greatly influences their lives. If a person has good psychological well-being, the individual's relationship with others will be positive, have a purpose in life, and be able to develop his potential.

## **3. Description Of Self-Care Behavior In Hypertensive Elderly In Notog Village**

In this study, aspects of reading nutrition and information tables were very lacking. Elderly participants have difficulty reading nutritional tables to check the information due to physical decline, namely the sense of sight, and some older adults also feel that they do not need to read nutritional tables.

In several aspects, the elderly are good at self-care behavior to control hypertension. Some older adults still ignore self-care behavior as recommended by health workers due to a lack of knowledge and information regarding good self-care behavior. According to research by Irawan (2023), good behavior can be realized by changing lifestyle, such as limiting fatty foods, reducing salty foods, not smoking, not consuming alcohol, exercising regularly, and avoiding stress. This shows that older people in Notog village are good at self-care and limiting alcohol.

## **4. The Relationship Between Psychological Well-Being And Self-Care Behavior In Elderly People With Hypertension In Notog Village**

According to research by Ramadi et al. (2017), there is a need for psychological treatment for hypertensive older adults so that they can develop their potential. With good psychological conditions, older adults can create an environment that suits their physical condition so that hypertension can be well controlled. Respondents who have low psychological well-being tend to have a high degree of hypertension. Meanwhile, respondents who have high psychological well-being have a 10.125 times chance of being able to control their hypertension (Ramadi et al., 2017). According to research by Elimunisa (2022), it was concluded that the lower the psychological well-being, the higher the degree of hypertension sufferers will be. The psychological conditions of older people, for example, experience, character, personality type, and perspective, can influence how they deal with stress. A positive perspective toward older people when facing problems can resolve these problems through a positive resolution mechanism process. Problem-oriented, always looking for a middle ground, based on consideration of good and bad experiences.

The higher the psychological well-being of the elderly, the better the self-care behavior can influence the degree of hypertension and how the elderly can control their hypertension better. In the elderly, good psychological well-being is related to good self-care behavior, especially in maintaining a healthy diet, physical activity, medication compliance, and hypertension control. Dimensions of psychological well-being such as self-acceptance, purpose in life, positive relationships with others, mastery of the environment, life satisfaction, and stress levels can influence the ability and ways of older adults to carry out hypertension self-care behavior.

Existing scientific procedures have carried out this research. However, there are still many limitations to this research. The researcher did not include social support, the participant's environment, detailed life experiences, thought patterns, self-concept, personality, relationships with family, and further analysis in this research, as well as the respondent's source of income, so they could not analyze further about the respondent in this regard. This research has shortcomings, such as taking the majority of samples in places with only posyandu for the elderly, where the posyandu does not represent the entire village.

## Conclusions

The research results showed that the average age of the elderly respondents is 66. Most respondents were female; some of their education had been completed, such as elementary school, and they worked as homemakers/did not work. The results of this study show that the psychological well-being variable at a low level of psychological well-being was 18.7%. In comparison, the moderate level of psychological well-being was more dominant in the elderly in this study at 57.9%. For this study's high level of psychological well-being, it was 23.4%. Meanwhile, the self-care behavior variable for hypertension in the elderly in this study was low at 23.4%. In comparison, self-care behavior was moderate at 64.5%, and self-care behavior was high at 12.1%. There was a significant relationship between psychological well-being and self-care behavior in older adults with hypertension at a moderate correlation level. Families can pay more attention to the health of the elderly by increasing knowledge and information about self-care behavior in the elderly, especially those who have a history of hypertension. As well as providing family and emotional support to improve the psychological well-being of the elderly.

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