

Relationship Of Stress With Blood Pressure In Elderly >60

Susi Yulianingsih, Ganjar Safari, Waryantini

Nursing Study Program, Universitas Bale Bandung, Indonesia

Susi_yulia@gmail.com, Ganjar_ners@yahoo.com, kbintari18@gmail.com,

Article Information

Submitted: 5 April 2022

Accepted: 10 April 2022

Online Publish: 20 April 2022

Abstract

Blood pressure is the pressure at which blood circulates in the blood vessels. Changes in blood pressure are influenced by various factors, one of which is stress conditions. In general, stress can stimulate an increase in blood pressure, which can be at risk for illness, especially in the elderly. Therefore, this study aims to determine the relationship between stress and blood pressure in the elderly >60 years during the Covid-19 pandemic in the Pameungpeuk Community Health Center, Bandung Regency. Correlational analytic research method with cross-sectional approach. Samples of 30 elderly people over 60 years were taken by incidental sampling technique. The research instrument used a data questionnaire sheet and the results of blood pressure checks on the respondents. Spearman rank is used for statistical tests with an error rate of 5%. The results showed that most of the respondents' stress levels experienced moderate stress (46.7%) and almost all of the respondents' blood pressure increased or hypertension (63.3%). Spearman Rank test proved that there is a positive and significant relationship between stress and blood pressure in the elderly > 60 years (significant value = 0.023 and correlation coefficient 0.414). Thus, especially for the elderly to be able to manage stress well so that an increase in blood pressure can be prevented, such as by maintaining a healthy lifestyle.

Keywords: *Blood Pressure; Stress; elderly;*

Introduction

The elderly are categorized as a group of people who have entered old age and are entering the final stages of their life phase, the elderly are divided into 4 criteria including middle age (middle age), namely 45-59 years old, elderly (elderly) namely 60-74 years old, advanced age (old) is 75-90 years old, third (presidium phase) is 55-65 years old, fourth (senior phase) is 65 to death. (WHO, 2016)

Elderly or the aging process is not a physical disease, although there are limitations in carrying out daily activities, and many experience physical or mental decline which can cause various disease problems such as depression and sleep disturbances. Azizah in Reni Windarti (2018), Elderly health problems include the respiratory system, cardiovascular system, neurological system, musculoskeletal system, endocrine system, sensory system, digestive system, reproductive and urinary system, integument system, mental health. (Azizah 2011)

Santoso (Santoso 2010) states that blood pressure is the pressure at which blood circulates in the blood vessels. This pressure is constantly in the blood vessels and allows the blood to flow constantly. Factors that affect blood pressure in the elderly According to Potter & Perry, (2010), namely: stress, medication/drugs, gender. Blood Pressure Measures in the Elderly (WHO, Hypotension (<90/<60) mmHg, Normal (95-145/70-90) mmHg, Hypertension >150/>90 mmHg.

Normal blood pressure in the elderly is getting higher over time. Only this does not mean it is always bad. Blood vessels will become stiffer as a person ages. With this condition, stronger pressure is needed so that blood can still be circulated throughout the body. Hypertension is a condition in which the blood vessels have high blood pressure. Blood pressure is the power of blood to fight the pressure of the arterial walls when the blood is pumped by the heart throughout the body. The higher the blood pressure, the harder the heart works (Windarti 2018).

In Indonesia, the highest hypertension rate is in the 3 most recent Riskesdas surveys in coastal areas. In Riskesdas 2007, the highest hypertension rate was in the Natuna Islands at 53.3% (Kemenkes 2008). Meanwhile, at Riskesdas 2013, the highest hypertension rate was in the Bangka Belitung Islands, which was 30.9% (Kemenkes RI, 2013). In addition, at Riskesdas 2018 the highest hypertension rate was in South Kalimantan, which was 44.13% (Kemenkes 2019).

One of the risk factors for hypertension is stress, which stress can have a negative effect on the body. Stress is a non-specific human response experienced by sufferers due to emotional, physical, or environmental demands that exceed their power and ability to cope effectively (Putri 2018). Stress can also be interpreted as pressure, tension, or unpleasant disturbances that come from outside of one's self (Putri 2018).

The relationship between stress and blood pressure occurs through the activity of the sympathetic nerves. The occurrence of increased nerves can cause high blood pressure erratically. So stress in the long term can result in blood pressure a condition that remains high. Stress will increase the resistance in peripheral blood vessels and cardiac output so that it will stimulate the work of the sympathetic nerves.

Based on research conducted by Fajar Hermawan (2014) that stress levels are related to blood pressure in hypertensive elderly. Research conducted by Istiqomah (2020) There is a significant relationship between stress management and blood pressure in the elderly. Research by Citra Windani Mambang Sari, et al (2019) There is a relationship between stress and blood pressure in the elderly with hypertension in the work area of the Kadungora Public Health Center, Garut Regency. Research by Annas Budi Setyawan (2018), there is a significant relationship between stress and anxiety levels with the incidence of hypertension in the elderly. Research by Fanny Damayanti Situmorang Imanuel & Sri Mei Wulandari (2020) the results that stress can affect both systolic and diastolic blood pressure in respondents, so stress has a relationship with blood pressure.

Of the 62 Puskesmas in Bandung Regency, one of them is Pameungpeuk Health Center which is located on Jalan Raya Banjaran No. 501, Sukasari Village, Pameungpeuk District, Bandung Regency with working area boundaries in Rancamulya Village, Rancatungku Village, Sukasari Village, Langonsari Village, Bojong Manggu Village and Bojong Kunci Village. Pameungpeuk Health Center is one of the Puskesmas that plays a role in the Hypertension prevention program because it is one of the diseases that ranks first out of the top ten diseases in Pameungpeuk Health Center.

Table 1.1:
Recapitulation of the Top Ten Diseases in Pameungpeuk Health Center from January to December 2020

NO.	DISEASES	NUMBER OF CASES
1.	Hypertensi	2.345
2.	Myalgia	1.880
3.	Ispa	1.703
4.	Fever	858
5.	Commoncold	726
6.	Tuberculosis	589
7.	Rematisme	469
8.	Gastritis	417
9.	Cough	406
10.	Diabetes	210
Amount		9.419

Source: Pameungpeuk Health Center 2020

**Recapitulation of the Number of Patients with Hypertension in the Elderly
Who Take Treatment at Pameungpeuk Health Center from January to
December 2020**

NO.	MONTH	NUMBER OF PATIENT
1.	January	93
2.	February	59
3.	March	39
4.	April	19
5.	May	24
6.	June	33
7.	July	33
8.	August	49
9.	September	26
10.	October	78
11.	November	87
12.	December	36
Amout		576 Elderly

Based on the table above It was found that of the 10 biggest diseases at the Pamengpeuk Health Center, hypertension was ranked first with a total number of 2,345 patients, while the number of elderly people with hypertension who received treatment at the Pamengpeuk Health Center was 576 elderly. The researcher also conducted a preliminary study on elderly patients using the DASS scale measurement in the work area of the Pamengpeuk Health Center.

**Results of Preliminary Study of Blood Pressure and Results of Stress Level
Measurement (DASS) for Elderly >60 Years in the Work Area of
Pameungpeuk Health Center 2021**

NO.	NAME	AGE	BLOOD PRESSURE	Stress level measurement results (DASS)
1.	Tn. M	66 Year	160/95 mmhg	Low
2.	Tn. T	67 Year	140/95 mmhg	Normal
3.	Ny. N	62 Year	160/100 mmhg	Low
4.	Ny. H	75 Year	140/100 mmhg	Normal
5.	Ny. S	65 Year	170/95 mmhg	Normal
6.	Ny. C	89 Year	149/97 mmhg	Low
7.	Ny. A	61 Year	156/95 mmhg	Low

8.	Tn. S	65 Year	216/133 mmhg	Critical
9.	Tn. A	62 Year	178/100 mmhg	Low
10.	Ny.C	60 Year	170/100 mmhg	Low

From the results of the data above, 70% of the 10 elderly people experience stress.

The results of a preliminary study conducted by researchers in January to 10 elderly people with hypertension using the DASS measuring instrument showed that the 10 elderly people were stressed, tired, anxious, and environmental factors that caused stress, especially during the COVID-19 pandemic, which made the elderly stressed because the existence of information where the elderly are very susceptible to the virus. Based on the description above, the researcher is interested in conducting further research on

"The Relationship between Stress and Blood Pressure in the Elderly >60 Years During the Covid-19 Pandemic in the Work Area of the Pameungpeuk Health Center, Bandung Regency".

Method

The research used in this research is a quantitative research using a correlational study research design, namely related factor research, which identifies the independent variable, namely stress on one object, then also identifies other variables or the dependent variable, namely blood pressure in one object. and see if there is a relationship between the two variables, namely stress, and blood pressure. The hypothesis set in this study is as follows:

Ha : $\rho \leq 0,05$ = There is a positive and significant relationship between stress and blood pressure in the elderly > 60 years during the covid-19 pandemic in the work area of Pameungpeuk Health Center

H0 : $\rho > 0,05$ = There is no positive and significant relationship between stress and blood pressure in the elderly > 60 years during the COVID-19 pandemic in the work area of the Pameungpeuk Health Center.

The population in this study were all elderly people in Sukasari Village, the working area of the Pamengpeuk Health Center / who received treatment at the Pamengpeuk Health Center on average per month as many as 176 people. If the population is large, and it is not possible for the researcher to study everything in the population, for example, due to limited funds, manpower and time, the researcher can use samples taken from that population. (Sugiyono, 2020:127). The sample in this study was the elderly aged more than 60 years in Sukasari Village according to the specified sample criteria.

The sampling technique used in this research is Non-Probability Sampling (Nonrandom sampling) with the sampling technique using Accidental Sampling, namely the technique of determining the sample based on chance. The types of instruments or questionnaires used in this study are as follows: **1) Stress Instruments** The questionnaire to measure stress in this study used stress scales based on the Depression Anxiety and

Stress Scale instruments which have two versions, namely DASS-42 and DASS-21. DASS-21 is a shortened version of DASS-42. DASS-21 consists of twenty-one statements. Where for the stress scale from DASS 21 consists of 7 statements with answer choices in the form of a Likert scale **2) Instruments for measuring blood pressure in the elderly** to determine blood pressure in the elderly, manual (One-Med Aneroid) and stethoscope (Tension) measurements are used. blood).

Validity Test This research uses a validity test using a special or standard instrument, namely the Depression Anxiety Stress Scales (DASS) with the Stress Scale developed by Lovibond. S.H and Lovibond. P. H (1995) The results of the validity test of the DASS-21 questionnaire have a high validity value of 0.71 and a reliability value of 0.93 which is processed based on the Cronbach alpha assessment (Crawford & Henry in Rahmawati, 2015). DASS has also been tested for validity by Abdullah and Amrullah (2014) on 20 elderly respondents with hypertension with a value of r table ($r = 0.444$) so that it can be concluded from the 21 questions the DASS instrument is valid and reliable.

Reliability Test Research on DASS 21 itself has been carried out in several Asian countries, including Indonesia, and from the research of Oei, Sawang, Goh, and Mukhtar (2013), the reliability results of this scale are quite satisfied with an Alpha value for the depression dimension ($\alpha = 0.86$), the dimension of anxiety ($\alpha = 0.81$), the dimension of stress ($\alpha = 0.70$), and the total scale ($\alpha = 0.91$) so that it can be concluded from the 21 questions the DASS instrument is valid and reliable.

Data Analysis

Univariate analysis used in this study was used to determine the proportion of each research variable including the independent variable, namely blood pressure in the elderly. Processing of data the relationship between two variables is presented in the form of tables and percentages.

Bivariate analysis in this study, bivariate analysis was used to determine the relationship between the X variable or the independent variable, namely Stress, and the Y variable or the dependent variable, namely blood pressure. To find out the closeness of the level of relationship between the independent variable and the dependent variable, the analysis carried out is Rank Spearman Correlation which is used to find relationships or tests significant associative hypotheses if each variable connected is ordinal, and the data sources between variables do not have to be the same (Sugiyono, 2011). 2019:211). The purpose of Rank Spearman in this study was to examine the relationship between stress and the dependent variable, namely blood pressure. Data analysis was assisted using computerization with a 95% confidence level, and an error rate of 5% or 0.05.

Research Result

Frequency Distribution of Stress Levels in Elderly >60 Years

There were five categories of stress levels in the elderly in this study, including respondents who were categorized as normal, mild stress, moderate stress, severe stress,

and very heavy stress. The following are the results of the frequency distribution of the statement item Stress Levels in the elderly from 30 respondents, namely as follows:

Item Frequency Distribution of Stress Levels in the Elderly Based on Respondents'

Answers

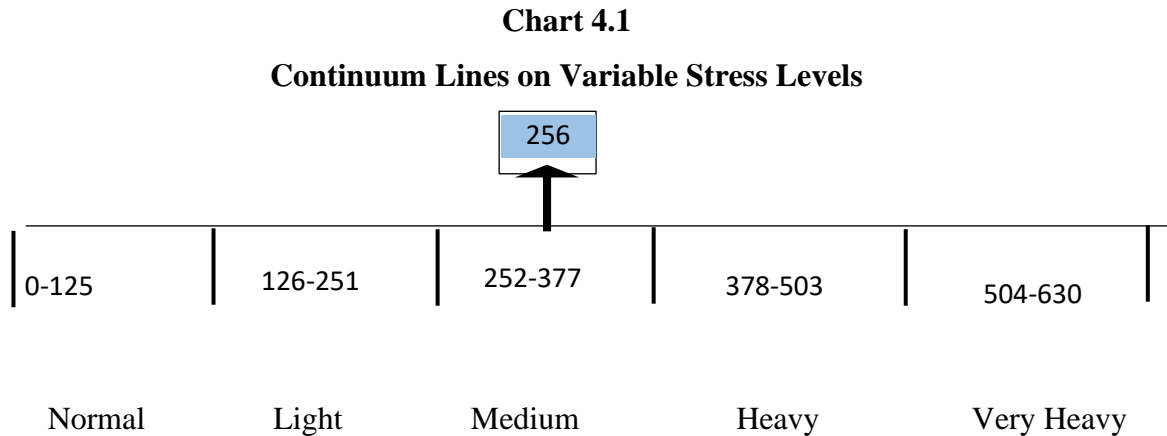
Item Answer Stress Level in the Elderly													
No	TP			KK			S			SS			Score total
Item	F	Score	%	F	Score	%	F	Score	%	F	Score	%	
X_1	8	0	26.7	16	16	53.3	6	12	20.0	0	0	0	28
X_2	1	0	3.3	13	13	43.3	11	22	36.7	5	15	16.7	50
X_3	3	0	10.0	13	13	43.3	10	20	33.3	4	12	13.3	45
X_4	2	0	6.7	20	20	66.7	7	14	23.7	1	3	3.3	37
X_5	8	0	26.7	15	15	50.0	7	14	23.3	0	0	0	29
X_6	4	0	13.3	20	20	66.7	6	12	20.0	0	0	0	32
X_7	5	0	16.7	15	15	50.0	10	20	33.3	0	0	0	35
Average Total Score													256

highest score= $3 \times 7 \times 30 = 630$

Lowest score = $0 \times 30 = 0$

The calculation results = $256/630 \times 100 = 40,6 \%$

category = Light



The frequency of questions about stress levels in the elderly is in accordance with the calculation of the total score, having the highest score of 630 and the lowest score of 0. Based on data obtained from 30 respondents, the total number of scores obtained is 256 or (40.6%) Category The level of stress in elderly respondents can be seen in the calculation results, which have a calculated result of 256, then the stress level of respondents based on the DASS (Depression Anxiety Stress Scales) is included in the category of mild stress.

Table 4.6
Distribution of Stress Levels in Elderly >60 Years

Tingkat stress	Frekuensi	Persen %
Normal	7	23,3 %
Ringan	8	26,7 %
Sedang	14	46,7 %
Berat	1	3,3 %
Sangat berat	0	0 %
Total	30	100,0

Based on table 4.6 the frequency distribution of stress levels can be explained that the stress level in the elderly >60 years is almost entirely in the moderate category with a total of 14 respondents 46.7%.

Blood Pressure Frequency Distribution

The distribution of the frequency of blood pressure in the elderly according to the calculation of the total score has the highest value of 90 and the lowest value of 30. Based on the data obtained from 30 respondents, the total number of scores obtained is 79 or (87.7%) Category Blood pressure in elderly respondents can be seen in the calculation results, which have a count of 79, then the respondent's blood pressure is included in the Hypertension category.

Blood Pressure Distribution in Elderly >60 Years

Blood Pressure	Frequency	Percentage %
Hypotension	0	0%
Normal	11	36,6 %
Hypertension	19	63,3 %
Total	30	100,0

Based on table 4.8, it can be seen that most of the respondents had hypertension (63.3%)

Relationship between stress and blood pressure in the elderly >60 years

Test Results Spearman Rank Relationship between Stress and Blood Pressure in the Elderly

Variable	Correlation Coefficient	ρ -value	Description	Conclusion
X with Y	0,414*	,023	H ₀ Rejected H ₁ Accepted	There is a Relationship

The results of the significance test obtained a p-value of 0.023, or smaller than the alpha value (0.05) so H₀ was rejected and H_a was accepted. In other words, there is a significant relationship between stress and blood pressure in the elderly >60 years. The results of the correlation coefficient of 0.414* indicate that the level of strength of the relationship between stress and blood pressure in the elderly >60 years is in the moderate category. And the number of correlation coefficients in the results above is positive or the relationship between the two variables is unidirectional (type of unidirectional relationship), which can be interpreted that if stress is getting heavier, blood pressure will increase. Thus, it can be concluded that there is a relationship between stress and blood pressure in the elderly over 60 years in Sukasari village, the working area of Pameungpeuk Health Center, Bandung Regency.

Discussion

Gender of Respondents

Based on the results of the study, it can be explained that of the 30 respondents between women and men half 15:15, namely (50.0%) are female, and (50.0%) are male. Gender is a cultural determination of awareness, attitudes, and beliefs about the male or

female gender. Both men and women have the same risk of experiencing changes in blood pressure, there is no difference in risk between women and men.

The prevalence of hypertension in men is the same as in women. However, women are protected from cardiovascular disease before menopause, one of which is coronary heart disease. Women who have not experienced menopause are protected by the hormone estrogen which plays a role in increasing levels of High-Density Lipoprotein (HDL). High levels of HDL cholesterol are a protective factor in preventing the process of atherosclerosis. The protective effect of estrogen is thought to explain the presence of premenopausal female immunity. In premenopause women begin to lose little by little the hormone estrogen which has been protecting blood vessels from damage. This process continues where the estrogen hormone changes in quantity according to the age of the woman naturally, which generally begins to occur in women aged 45-55 years. Bianti Nuraini, (2015)

A study conducted by Swandito Wicaksono (2019) The results showed that there was no significant relationship between age and gender with the incidence of hypertension in the elderly. Meanwhile, research conducted by Louisa, Sulistiyani, & Joko (2018) shows that the prevalence of hypertension in men is greater than that of women, which is 60%. A different study by Setyanda, Sulastri, & Lestari (2015) stated that smoking habits and the incidence of hypertension were mostly found in men aged 35-65 years.

The ratio of the increase in blood pressure in men reached 2.29 for the increase in systolic blood pressure and 3.76 for the increase in diastolic blood pressure. This is because the resting heart rate and cardiac index in men are lower and their peripheral pressure is higher when compared to women (Louisa, Sulistyani, and Joko 2018). This is in line with research conducted by Oktarini (2015), regarding the relationship between age, gender, occupation, and hypertension at the Siti Khodijah Islamic Hospital Emergency Installation Palembang in 2015, it was found that there was a relationship between gender and hypertension with ($P=0.044$).

This is in line with research conducted by Oktarini (Oktarini and Etrawati 2021), regarding the relationship between age, gender, occupation, and hypertension at the Siti Khodijah Islamic Hospital Emergency Installation Palembang in 2015, it was found that there was a relationship between gender and hypertension with ($P=0.044$).

Age of Respondents

Based on the results of the study, it can be explained that the distribution of data from 30 elderly respondents >60 years mostly aged 60-74 years with a total of 24 people (80.0%), and a small proportion of respondents aged >90 years amounting to 1 person (3.3%). Research conducted by Amanda and Martini (2018) showed significant results ($p = 0.01$) on the test of the relationship between age and hypertension. As you age, your blood pressure will also increase. Arterial walls will experience thickening caused by the accumulation of collagen substances in the muscle layer, causing blood vessels to narrow and become stiff after the age of 40 years.

The results of Heryanto & Melyanti's research (2016) state that increasing age can significantly increase the incidence of hypertension in patients by 44%. This condition occurs because, with increasing age, blood pressure also increases, especially systolic blood pressure (Mafaza, Wiratmadi, & Adriani, 2016). The older a person is, the more at risk of developing hypertension because the arteries have lost their elasticity with age, resulting in structural and functional changes in the vascular system in old age (Aryzki and Akrom 2018).

Occupational Status of Respondents

Based on the results of the study, it can be explained that of the 30 respondents, 7 respondents (23.3%) worked and 23 respondents (76.7%) did not work. Research conducted by Wildan Setyanto (2017) on the physical activity of people with hypertension, stated that doing physical activity in addition to lowering blood pressure can reduce the incidence of various complications of the disease (Setyanto 2017).

This study was strengthened by Devi Afriza et al (Devi Ervina 2020) in their research showing that there is a significant relationship between physical activity and blood pressure in the elderly who suffer from hypertension. Researchers state this according to the theory that the elderly is at risk of increased blood pressure (hypertension), which is based on the results of this study explaining that most of them are 23 people with an unemployed status where experience in adapting to disease is still lacking and made worse by most of the elderly >60 years. does not work, so the psychological burden continues to be thought of. By working we can divert the psychological burden by doing busy things.

Recent Education

Based on the results of the study, it can be explained that of the 30 respondents in the elementary level education category with a total of 23 respondents (76.7%) there were 6 respondents at the junior high school level (20.0%) and 1 respondent high school education (3.3%). According to Rebecca and Bhisma (2005) in their research entitled *The Relationship Between Education Levels and Hypertension in Women in Sukoharjo Regency*, the results showed that there was a significant relationship between education level and hypertension.

Research conducted by Priwanci (2009) showed the effect of health education on stage hypertension. 1 on increasing family knowledge in carrying out 5 family health tasks in the Mojo Health Center work area significantly ($p = 0.027$). Domas and Anika's 2010 study, explained that there was an increase in the average value of knowledge about hypertension after the provision of education from 4.46 to 13.97 and the average attitude about hypertension from 3.49 to 9.90. There is an effect of education on the knowledge and attitudes of the elderly about hypertension in Makamhaji Village, each with a p-value of 0.000.

The researcher states that this is in accordance with the theory that respondents who suffer from hypertension based on the results of this study explain that most of them have

elementary or basic education, totaling 23 people. So this is very influential in how to adapt to situations that cause stress and determine how individuals maintain adaptive behavior and change maladaptive behavior.

Stress Level of Elderly >60 years in the Work Area of Pameungpeuk Health Center, Bandung Regency

Based on the results of the study, it can be explained that the stress level of the elderly >60 years is mostly in the moderate category with a total of 14 respondents (46.7%), mild with a total of 8 respondents (26.6%), normal with a total of 7 respondents (23.3%). and a small part is categorized as heavy with 1 respondent (3.3%).

Stress is a stimulus or situation that causes distress and creates physical and psychological demands on a person. Stress requires coping and adaptation which is influenced by factors including life experience, sleep patterns, diet, body posture, disease, perception, emotion, psychological situation, physical environment, biotic and social (Isaacs and Martonen 2005).

Based on the results of this study, which explains that stress in the elderly >60 years in the working area of the Pameungpeuk Health Center is not completely influenced by blood pressure, but there are other factors that influence it, namely economic problems in a pandemic situation where some respondents complained because part of their family members became victims of layoffs in their companies that affect the economic situation, some respondents also complained that their stress was influenced by adaptation to various diseases based on hypertension such as stroke, heart disease, etc., while treatment was still low due to unstable economic problems, especially during the pandemic. a strict hypertension diet in an effort to maintain blood pressure stability, such as a salt diet having to take medication every day, and a lack of family support which results in a lack of discipline of respondents in maintaining blood pressure stability.

Blood Pressure in Elderly >60 Years in the Working Area of Pameungpeuk Health Center, Bandung Regency.

Based on the results of the study, it can be explained that the blood pressure of the elderly >60 years is mostly in the Hypertension category with a total of 19 respondents (63.3%), and in the normal category with a total of 11 respondents (36.7%).

Relationship between stress and blood pressure in the elderly >60 years in the working area of Pameungpeuk Health Center, Bandung Regency Based on the Spearman Rank test results, the Spearman

The rank coefficient is 0.414**. The result of the significant test is that the value is 0.023. Then it can be seen that $-value(0.023) < \alpha(0.05)$ so that H_0 is rejected and H_1 is accepted. The results of this study are in line with the results of research conducted by Fajar Hermawan (2014) that stress levels are related to blood pressure in hypertensive elderly. This is because stress is the body's reaction to various specific demands or burdens on it. Stress can also be interpreted as a general pattern of adaptation and a pattern of stressor reactions, which come from within the individual and from the environment,

stress can be a triggering factor for both causes and consequences of a disorder or disease. Psychosocial factors are quite meaningful for the occurrence of stress in a person.

Based on research conducted by (Purnama and Saleh 2017) there is a significant influence between dietary patterns and the incidence of high blood pressure with an OR value of 8.679 meaning that a poor diet has an 8.679 times chance of experiencing high blood pressure compared to a good diet. The results of this study are also supported by the results of research conducted by Istiqomah (2020). There is a significant relationship between stress management and blood pressure in the elderly. Research by Citra Windani Mambang Sari, et al (2019) There is a relationship between stress and blood pressure in the elderly with hypertension in the work area of the Kadungora Public Health Center, Garut Regency. research conducted by (Rahmah, 2019) states that there is a significant relationship between stress and blood pressure with a p-value = 0.000, a person who is experiencing stress will cause the release of the hormone adrenaline which can cause an increase in blood pressure through arterial contraction or vasodilation and an increase in blood pressure. heart rate, if the stress lasts a long time then blood pressure will remain high which can cause hypertension (South, 2014). This is in accordance with the results of research conducted by (Yulistina, 2017) which states that stress is one of the factors that can cause high blood pressure.

The results obtained by researchers, researchers assume that stress in the elderly at the Pameungpeuk Health Center, Bandung Regency, experiences stress with normal, mild, moderate and severe levels. The blood pressure of the elderly is almost half of the hypertension category. Thus, it can be concluded that there is a relationship between stress and blood pressure in the elderly >60 years in the moderate relationship category.

Conclusion

The stress level in the elderly >60 years in the work area of the Pameungpeuk Health Center, Bandung Regency, was mostly (46.7%) which included the category of moderate stress level. Blood pressure in the elderly >60 years in the working area of Pameungpeuk Health Center. Almost all of Bandung Regency (63.3%) are included in the category of hypertension. There is a positive and significant relationship between stress and blood pressure in the elderly >60 years in the working area of Pameungpeuk Health Center, Bandung Regency.

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