

The Relationship Between Knowledge and the Role of the Family and Efforts to Control Blood Pressure in Hypertension Patients at the Mangasa Community Health Center, Makassar City

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Abstract

High blood pressure, or what is often called hypertension, is a risk factor for cardiovascular disease with quite high prevalence and mortality. The prevalence of hypertension in Indonesia is around 31.7%, of which 76.1% are not aware that they have hypertension. In Makassar City, hypertension is in 4th place out of 10 main diseases for all age groups in Makassar City in 2013 with a total of 71,032 cases. The aim of the research was to determine the relationship between knowledge and the role of the family and efforts to control blood pressure in hypertensive patients at the Mangasa Community Health Center, Makassar City. This type of research is analytical observational research, with a cross-sectional design. The sample in this study were hypertensive patients who were seeking treatment at the Mangasa Health Center, Makassar City at the time the research was conducted, namely 65 people, using an accidental sampling technique from March 3 to April 3 2017. Data was collected using a questionnaire. The results of the research show that there is a relationship between knowledge and efforts to control blood pressure in hypertensive patients, with the results of the chi square test obtaining a value of $p = 0.002 < 0.05$, and there is a relationship between the role of the family and efforts to control blood pressure in hypertensive patients, with the test results the chi square value obtained was $p = 0.001 < 0.05$. Based on the research results, it was concluded that the better the knowledge and role of the family in hypertensive patients, the better the patient's efforts to control blood pressure. It is recommended that the Community Health Center provide health education to the community, patients and families in the form of counseling, to increase knowledge about how to control blood pressure so that the risk of more serious disease complications does not occur.

Keywords: Knowledge Family, Role Efforts to Control Blood, Pressure Hypertension

Introduction

Blood pressure is a very important factor in the circulatory system. An increase or decrease in blood pressure will affect homeostasis in the body. Blood pressure is always needed for the driving force of blood flow in the arteries, arterioles, capillaries and venous system, so that a steady blood flow is formed. If blood circulation becomes inadequate, there will be disruption to the system of transporting oxygen, carbon dioxide and other metabolic products. There are two blood pressure disorders, namely hypertension or high blood pressure and hypotension or low blood pressure. Hypertension has become a disease of concern in many countries in the world, because hypertension is often the number one non-communicable disease in many countries (Anggara Dwi, 2015).

High blood pressure, or what is often called hypertension, is a risk factor for cardiovascular disease with quite high prevalence and mortality, especially in developed countries and in urban areas in developing countries, as is the case in Indonesia. Hypertension is also known as the silent killer because sufferers do not know that they suffer from hypertension. Therefore, it is often discovered by chance when sufferers come to the doctor

to check for other diseases. An increase in blood pressure rarely causes specific symptoms. The pathological effects of hypertension often do not show signs for several years after hypertension occurs. Hypertension is also known as a heterogeneous group disease because it can attack anyone from various age, social and economic groups. (Widyanto, Triwibowo, 2013).

Hypertension is a degenerative disease. Hypertension is caused by blood pressure that is higher than normal. Generally, blood pressure increases slowly with increasing age. The risk of suffering from hypertension in a population of approximately 55 years who previously had normal blood pressure is 90%. Most patients have pre-hypertension blood pressure before they are diagnosed, hypertension occurs between the ages of the third decade and the fifth decade (Triyanto, 2014).

Hypertension can be divided into primary and secondary hypertension. Primary hypertension tends to be influenced by hereditary factors. Meanwhile, secondary hypertension occurs as a result of complications from other diseases such as kidney disease and tumors of the adrenal glands. The cause of most cases of primary hypertension is unknown, but hypertension is largely influenced by a person's living habits.

Risk factors that cause hypertension can be divided into two groups, namely factors that can be changed and factors that cannot be changed. Factors that cannot be changed include age, gender and heredity. Meanwhile, factors that can be changed include obesity, stress, smoking, lack of exercise, excessive alcohol consumption, excessive salt consumption and hyperlipidemia. Hypertension will become a serious health problem if it is not controlled. Hypertension can cause dangerous and fatal complications such as stroke, coronary heart disease and kidney failure (Widyanto, Triwibowo, 2013).

High blood pressure or hypertension kills 9.4 million people worldwide every year. The World Health Organization (WHO) estimates that the number of hypertension sufferers will continue to increase as the population grows. In 2025, it is projected that around 29% of the world's population will suffer from hypertension. Data from the Global Status Report on Noncommunicable Diseases in 2010 stated that 40% of developing economic countries have hypertension sufferers, while only 35% of developed countries have hypertension. The African region holds the peak position for hypertension sufferers at 46%. In the Southeast Asia region, 36% of adults suffer from hypertension. For the Asian region, this disease kills 1.5 million people every year. In 2011, WHO recorded that there were one billion people affected by hypertension (Ministry of Health of the Republic of Indonesia, 2013).

The prevalence of hypertension in Indonesia is around 31.7% or 1 in 3 adults have hypertension, 76.1% are not aware that they have hypertension. Increased prevalence of hypertension based on interviews (have you ever been diagnosed with a health worker and taken hypertension medication) from 7.6% in 2007 to 9.5% in 2013 (Ministry of Health of the Republic of Indonesia, 2014).

Riskesdas results in 2013. The prevalence of hypertension in South Sulawesi obtained through measurements at ages ≥ 18 years was 28.1%, the highest in Enrekang (31.3%), followed by Bulukumba (30.8%), Sinjai (30.4%) and Gowa (29.2%). The prevalence of hypertension in South Sulawesi obtained through questionnaires diagnosed by health workers was 10.3%, those diagnosed by health workers or who were taking medication was 10.5%, so there were 0.2% who took their own medication (Ministry of Health of the Republic of Indonesia, 2013).

Based on non-communicable disease surveillance data from the P2PL sector of the South Sulawesi Provincial Health Service in 2014, there were 5,902 new cases of essential hypertension (primary), 7,575 cases of old sufferers, with 65 deaths, 1,687 cases of old sufferers with hypertension, 1,670 new sufferers with 24 people died, 58 cases of kidney hypertension in new sufferers, 34 cases of old sufferers with 5 deaths, heart and secondary hypertension in old sufferers 2,082 cases and 2,081 new sufferers with 18 deaths (South Sulawesi Provincial Health Office, 2015).

Based on data obtained from the P2PL Development Division of the Makassar City Health Service, hypertension was in 4th place out of 10 main diseases for all age groups in Makassar City in 2013 with a total of 71,032 cases (Makassar City Government Health Office, 2014).

The initial survey conducted at the Mangasa Makassar Health Center obtained data on 1,815 people suffering from hypertension in 2013, 1,980 people in 2014, 1,955 people in 2015, and 1,592 people in 2016 (Mangasa Makassar Health Center Medical Records, 2017).

The number of hypertension sufferers is estimated at 15 million Indonesians but only 4% are able to control hypertension (controlled hypertension). Controlled hypertension is those who suffer from hypertension and are aware that they suffer from hypertension and are undergoing treatment so that they are controlled from possible attacks of excessive blood pressure increases. To control hypertension, good knowledge is needed, an active family role, awareness of the existence and risks of hypertension, as well as patient efforts and behavior in daily life so that hypertension complications can be prevented (Bustan, 2015).

Management of hypertension care in hypertensive sufferers really requires a good family role, in the sense that family members support the management of hypertension care. The direct involvement of family members to help hypertensive patients is a form of support so that hypertension treatment can run well. If hypertension management is carried out properly, it is hoped that hypertensive patients will be able to maintain normal blood pressure. The role of the family in managing hypertension care is such as recognizing family health problems. Families need to know the health condition of hypertension sufferers during the hypertension treatment process (Rachmawati, 2013).

The results of research conducted by Irawan B (2014), with the research title "the relationship between the level of knowledge about hypertension complications and efforts to control blood pressure in hypertension sufferers in Batuwarno Village, Batuwarno District, Wonogiri Regency", obtained statistical test results using the Spearman Rank test, there was a relationship between the level of knowledge about complications of hypertension and efforts to control blood pressure in hypertension sufferers in Batuwarno Village, Batuwarno subdistrict, Wonogiri Regency (p -value = 0.001).

The results of another study conducted by Ningrum R.S (2012), with the research title "The relationship between the role of the family and efforts to control blood pressure in hypertensive patients in the Working Area of the Minggir Sleman Health Center, Yogyakarta", obtained the results of the Kendall Tau correlation coefficient statistical test, there is a positive relationship and There is a significant relationship between the role of the family and efforts to control blood pressure in hypertensive patients in the Minggir Sleman Yogyakarta Health Center Working Area, with a t analysis result of 0.682 and a significance level of 0.000 ($p < 0.05$).

Based on the above, researchers are interested in conducting research on the relationship between knowledge and the role of the family and efforts to control blood pressure in hypertensive patients at the Mangasa Community Health Center, Makassar City. The aim of this research is to determine the relationship between knowledge and the role of the family and efforts to control blood pressure in hypertensive patients at the Mangasa Community Health Center, Makassar City.

Methods

This type of research is an analytical observational study, with a cross-sectional design, where the relationship between knowledge and the role of the family and efforts to control blood pressure in hypertensive patients is observed at the same time (one time), meaning that each research subject/sample is observed only once.

The population in this study was the average number of hypertension patients seeking treatment at the Mangasa Health Center, Makassar City in 2016, namely 133 people. The sample in this study was hypertensive patients who were seeking treatment at the Mangasa Health Center, Makassar City at the time the research was conducted, with a total of 65 people. Sampling used a non-probability sampling method with an accidental sampling technique, namely by selecting respondents who happened to be present/encountered at the time of the research and met the inclusion criteria previously set by the researcher. The inclusion criteria set by researchers are as follows: Hypertension patients, Willing to be respondents, can communicate well.

Univariate and Bivariate Analysis

Univariate analysis was carried out on each variable from the research results and produced a presentation of each variable studied. Bivariate analysis is carried out to see the relationship between each variable using statistical tests to assess the relationship between the independent and dependent variables with the level of significance $\alpha < 0,05$. The test used is the Chi Square test using the SPSS computerized program. In the research results, it is said that there is a relationship between the independent and dependent variables if the p value $< \alpha$ ($= 0,05$), and it is said that there is no relationship if the p value $\geq \alpha$ ($= 0,05$).

Results and Discussion

This research was carried out at the Mangasa Community Health Center, Makassar City, from March 3 to April 3 2017. The total sample was 65 people using the accidental sampling technique.

Respondent Characteristics

Table 1. Characteristics of Respondents at the Mangasa Community Health Center, Makassar City, 2017

Respondent Characteristics	n	%
Age:		
21-30 years old	6	9,2
31-40 years old	10	15,4
41-50 years old	18	27,7
> 50 years	31	47,7
Sex:		
Male	33	50,8
Female	32	49,2

Education:		
Elementary School	18	27,7
Junior High School	27	41,5
Senior High School	15	23,1
College	5	7,7
Accupation:		
Civil servants	4	6,2
Private sector employee	5	7,7
Self-employed	24	36,9
Laborer	6	9,2
IRT	19	29,2
Doesn't work	7	10,8
Total	65	100,0

Source: Primary Data

Table 1 shows that of the 65 respondents studied, the largest age group was the 41–50-year age group, namely 18 people (27.7%), and the least was the 21–30-year age group, namely 6 people (9.2%). Based on gender, the majority were men, namely 33 people (50.8%), and women were 32 people (49.2%). Based on education, the majority of respondents' education was junior high school, namely 27 people (41.5%), and the least was tertiary, namely 5 people (7.7%). Meanwhile, based on occupation, the majority of respondents worked as entrepreneurs, namely 24 people (36.9%), and the least were civil servants, namely 4 people (6.2%).

Characteristics of Research Variables

Table 2. Characteristics of Research Variables at the Mangasa Community Health Center, Makassar City, 2017

Research variable	n	%
Knowledge:		
Not enough	45	69,2
Good	20	30,8
Family Role:		
Not enough	42	64,6
Good	23	35,4
Efforts to Control Blood Pressure:		
Bad	38	58,5
Good	27	41,5
Total	65	100,0

Source: Primary Data

Table 2 shows that of the 65 respondents studied, the majority of respondents had poor knowledge in controlling blood pressure, namely 45 people (69.2%), and 20 respondents who had good knowledge (30.8%). Based on the role of the family, most of them are still lacking, namely 42 people (64.6%), and the families of respondents who play a good role in helping patients control their blood pressure are 23 people (35.4%). Meanwhile, the majority of respondents' efforts to control blood pressure were poor, namely 38 people (58.5%), and the respondents' efforts were good, namely 27 people (41.5%).

Bivariate Analysis

The Relationship Between Knowledge and Efforts to Control Blood Pressure in Hypertension Patients

Table 3. Relationship Between Knowledge and Efforts to Control Blood Pressure in Hypertension Patients at The Mangasa Community Health Center, Makassar City, 2017

Knowledge	Efforts to Control Blood pressure				Amount		p-Value
	Bad		Bad		n	%	
	n	%	n	%			
Not enough	32	71,1	13	28,9	45	100,0	0,002
Good	6	30,0	14	70,0	20	100,0	
Total	38	58,5	27	41,5	65	100,0	

Source: Primary Data

Table 3 shows that of the 65 respondents studied, 45 of them had less knowledge, most of the respondents had poor efforts to control their blood pressure, namely 32 people (71.1%), and 13 people (28.9%) have good efforts to control their blood pressure. Meanwhile, there were 20 respondents who had good knowledge, the majority of respondents had good efforts in controlling their blood pressure, namely 14 people (70.0%), and 6 people (30.0%) had poor efforts in controlling their blood pressure.

The results of the chi square test obtained a value of $p = 0.002 < 0.05$, which means there is a relationship between knowledge and efforts to control blood pressure in hypertensive patients at the Mangasa Community Health Center, Makassar City.

The Relationship Between the Role of the Family and Efforts to Control Blood Pressure in Hypertension Patients

Table 4. Relationship between Knowledge and Efforts to Control Blood Pressure in Hypertensi on Patients at the Mangasa Community Health Center, Makassar City

Family Role	Efforts to Control Blood pressure				Amount		p-Value
	Bad		Good		n	%	
	n	%	n	%			
Not enough	31	73,8	11	26,2	42	100,0	0,001
Good	7	30,4	16	69,6	23	100,0	
Amount	38	58,5	27	41,5	65	100,0	

Source: Primary Data

Table 4 shows that of the 65 respondents studied, 42 people had a poor role in the family, most of the respondents had poor efforts to control their blood pressure, namely 31 people (73.8%), and 11 people (26.2%) have good efforts to control their blood pressure.

Meanwhile, 23 people had a good role in the family of respondents, the majority of respondents had good efforts in controlling their blood pressure, namely 16 people (69.6%), and 7 people (30.4%) had poor efforts in controlling their blood pressure.

The results of the chi square test obtained a value of $p = 0.001 < 0.05$, which means there is a relationship between the role of the family and efforts to control blood pressure in hypertensive patients at the Mangasa Community Health Center, Makassar City.

Respondent Characteristics

The research results showed that of the 65 respondents studied, the largest age group of respondents was the 41-50 year age group, namely 18 people (27.7%). This is because at this age body functions begin to decline so that at this age you are susceptible to suffering from certain diseases, one of which is hypertension. According to Widyanto C.F & Triwibowo C (2013), states that in general blood pressure will increase with increasing age, especially after the age of 40 years. This is caused by stiffness and thickening of the arteries due to arteriosclerosis so that they cannot expand when the heart pumps through the arteries.

Based on gender, it shows that the majority of respondents were men, namely 33 people (50.8%). This is because men's burdens and responsibilities are greater than women's, so if responsibilities cannot be fulfilled properly it will trigger stress which can trigger hypertension. According to Widyanto C.F & Triwibowo C (2013), states that men tend to experience high blood pressure compared to women. The ratio of hypertension between men and women is around 2.29% for systolic blood pressure and 3.6% for diastolic blood pressure. Men tend to have a lifestyle that can increase blood pressure compared to women.

Based on education level, it shows that the majority of respondents' education was junior high school, namely 27 people (41.5%). A person's education can influence their knowledge about efforts that can be made to control their blood pressure. The higher a person's education, the better the knowledge they have. Hypertensive patients who have good knowledge will avoid consuming foods that can cause the risk of hypertension complications. According to Budiman & Riyanto (2013), knowledge is closely related to education, where it is hoped that with higher education, that person will have broader knowledge. However, it needs to be emphasized that someone with low education does not mean absolutely low knowledge. Increased knowledge is not absolutely obtained in formal education, but can also be obtained in non-formal education.

Meanwhile, based on occupation, it shows that the majority of respondents work as entrepreneurs, namely 24 people (36.9%). This is because someone who works as an entrepreneur is less likely to manage their diet well because they are busy carrying out activities, so they are more likely to consume unhealthy ready-to-eat food so that the risk of experiencing hypertension complications is higher.

The Relationship Between Knowledge and Efforts to Control Blood Pressure in Hypertension Patients

Knowledge is the result of knowing and this occurs after people sense a particular object. Most of a person's knowledge is obtained through the sense of hearing (ears) and the sense of sight.

The research results showed that of the 65 respondents studied, 45 of them had less knowledge, the majority of respondents had poor efforts to control their blood pressure, namely 32 people (71.1%). This is due to a lack of information regarding efforts that can be made to control blood pressure. This is proven in the results of the questionnaire answers,

where more than half of the respondents do not know several factors that can cause hypertension, as well as the efforts that can be made to control blood pressure to avoid more serious complications. However, the results of the study found that 13 people (28.9%) had good efforts to control their blood pressure, even though they had insufficient knowledge. This is due to the good role of the family in supervising the management of family members who suffer from hypertension, for example; reminded respondents to reduce salt consumption, advised them to stop smoking, not drink alcoholic beverages, advised them to exercise regularly, and advised them to always consume nutritious food.

Meanwhile, there were 20 respondents who had good knowledge, the majority of respondents had good efforts to control their blood pressure, namely 14 people (70.0%). Knowledge about hypertension can make patients have good efforts and behavior in controlling blood pressure, therefore patients who have a correct and proportional understanding of the risks of hypertension will tend to understand the ways they can prevent complications of hypertension. However, the results of the study found that 6 people (30.0%) had poor efforts to control their blood pressure, even though they had good knowledge. This was due to the respondents' lack of awareness of the existence and risks of hypertension, as well as the respondents being busy at work, which resulted in the respondents not having time to exercise. As a result, fat in the body increases and accumulates, which can obstruct blood flow. Vessels that are squeezed by fat deposits cause high blood pressure.

The results of the chi square test obtained a value of $p = 0.002 < 0.05$, which means there is a relationship between knowledge and efforts to control blood pressure in hypertensive patients at the Mangasa Community Health Center, Makassar City. Knowledge about hypertension can influence the patient's efforts to control blood pressure. Because knowledge is an important factor in shaping the behavior of a patient who is suffering from an illness. This is in accordance with the theory put forward by Bustan M.N (2015), stating that controlling hypertension requires good knowledge and awareness of the existence and risks of hypertension, as well as the patient's efforts and behavior in daily life so that hypertension complications can be prevented.

The results of this research are in line with research conducted by Irawan B (2014), with the research title "The relationship between the level of knowledge about complications of hypertension and efforts to control blood pressure in hypertension sufferers in Batuwarno Village, Batuwarno District, Wonogiri Regency", obtained statistical test results using the Rank test. Spearman, there is a relationship between the level of knowledge about complications of hypertension and efforts to control blood pressure in hypertension sufferers in Batuwarno Village, Batuwarno subdistrict, Wonogiri Regency (p -value = 0.001).

In general, knowledge has a predictive ability towards something as a result of recognizing a pattern. According to the constructivist approach, knowledge is not a fact of a reality that is being studied, but rather a person's cognitive construction of objects, experiences, and their environment. Knowledge is an important factor in shaping the behavior of a patient who is suffering from an illness (Budiman & Riyanto, 2013).

Someone takes action because of the knowledge they have. This knowledge can be obtained from the learning process, both formal and non-formal. This learning process is influenced by various internal factors, such as motivation and external factors in the form of available information facilities, as well as socio-cultural conditions (Buhari, 2016).

The respondent's level of knowledge is influenced by several factors, including the respondent's education level. The relatively low level of education of respondents causes the

respondents' ability to understand information about complications of hypertension to be poor. According to Sadiman (2002), quoted in Irawan B (2014), revealed that the level of education is related to a person's ability to understand and analyze information into knowledge, this is because in education a person is taught about understanding information into knowledge.

Based on the discussion presented above, the researchers concluded that the better the knowledge of hypertension sufferers about the complications of hypertension, the better their efforts to control blood pressure will be, and vice versa.

The Relationship Between the Role of the Family and Efforts to Control Blood Pressure in Hypertension Patients

Family roles are a set of interpersonal behaviors, traits, activities related to individuals in certain positions and situations.

The results of the study showed that of the 65 respondents studied, 42 people had a poor role in the family, most of the respondents had poor efforts to control their blood pressure, namely 31 people (73.8%). This is due to the lack of family knowledge regarding efforts that can be made to control blood pressure in family members who suffer from hypertension, as well as the patient's lack of knowledge and awareness of the risk of complications. However, the results of the study found that 11 people (26.2%) had good efforts to control their blood pressure, even though they did not receive enough support from their family in controlling their blood pressure. This is due to the patient's good knowledge about hypertension, as well as awareness of the risks of the disease so that the patient always makes good efforts to control his blood pressure even though he does not get a good role or support from the family.

Meanwhile, 23 people had a good role in the family of respondents, the majority of respondents had good efforts in controlling their blood pressure, namely 16 people (69.6%). The presence of stimulus or stimulation from outside will influence a person's behavior. The family is one of the factors that can influence the behavior of hypertensive patients in controlling their blood pressure, where the better the support given by the family to hypertensive patients in controlling blood pressure, the better the hypertensive patient's behavior will be in controlling blood pressure so that more serious disease complications do not occur. Forms of family support that can be provided include reminding patients to reduce salt consumption, adopting a healthy lifestyle, accompanying them to the Community Health Center to control blood pressure, and providing support both psychologically and materially in controlling blood pressure.

However, the results of the study found that 7 people (30.4%) had poor efforts to control their blood pressure, even though they had received good support from their families in controlling their blood pressure. This is due to the patient's lack of knowledge and awareness of the risk of more serious disease complications, as well as the patient's busy schedule at work so that even though the family has provided support or a good role, if the patient does not have good awareness, then the patient will still not make adequate efforts. Good for controlling blood pressure.

The results of the chi square test obtained a value of $p = 0.001 < 0.05$, which means there is a relationship between the role of the family and efforts to control blood pressure in hypertensive patients at the Mangasa Community Health Center, Makassar City. A good role from the family will provide patient motivation in controlling their blood pressure, where the

better the family's role or support given, it is hoped that the better the efforts made by the patient in controlling blood pressure so that the risk of complications can be prevented. This is in accordance with the theory put forward by Johnson L & Leny R (2010), stating that family roles are a set of interpersonal behaviors, traits, activities related to individuals in certain positions and situations. Individual roles in the family are based on expectations and behavior patterns, from the family group and society.

The results of this research are in line with research conducted by Ningrum RS (2012), with the research title "The relationship between the role of the family and efforts to control blood pressure in hypertensive patients in the Working Area of the Minggir Sleman Yogyakarta Health Center", obtained a t analysis result of 0.682 and a significance level of 0.000 ($p < 0.05$), so there is a positive and significant relationship between the role of the family and efforts to control blood pressure in hypertensive patients in the Minggir Sleman Yogyakarta Health Center Working Area.

The family can be a support system in the lives of hypertension patients, so that the situation they experience does not get worse and avoid complications due to hypertension. Families can help hypertensive patients in managing healthy eating patterns, inviting them to exercise together, accompanying them and reminding them to check their blood pressure regularly so that patients do not experience the risk of complications (Susanto, 2012).

Family support is defined as the willingness of family members to provide assistance to family members who suffer from hypertension in treating hypertension. Aspects of family support are emotional, instrumental, informative and appreciation support (Friedman, 1998, quoted in Susanto, 2012).

Management of hypertension care in hypertensive sufferers really requires a good family role, in the sense that family members support the management of hypertension care. The direct involvement of family members to help hypertensive patients is a form of support so that hypertension treatment can run well. If hypertension management is carried out properly, it is hoped that hypertensive patients will be able to maintain normal blood pressure. The role of the family in managing hypertension care is such as recognizing family health problems. Families need to know the health condition of hypertension sufferers during the hypertension treatment process (Rachmawati, 2013).

Based on the discussion presented above, the researchers concluded that the better the support or role of the family for family members who suffer from hypertension, the better the efforts made by the patient in controlling their blood pressure.

Conclusion

Based on the results of research on the relationship between knowledge and the role of the family and efforts to control blood pressure in hypertensive patients at the Mangasa Health Center, Makassar City, it was concluded that: There is a relationship between knowledge and efforts to control blood pressure in hypertensive patients at the Mangasa Health Center, Makassar City, with a value of $p = 0.002 < 0.05$. There is a relationship between the role of the family and efforts to control blood pressure in hypertensive patients at the Mangasa Community Health Center, Makassar City, with a value of $p = 0.001 < 0.05$. The better the knowledge and role of the family in hypertensive patients, the better the patient's efforts to control blood pressure.

References

Anggara, D. H. F. (2015). Faktor-Faktor Yang Berhubungan Dengan Tekanan Darah Di

- Puskesmas Telaga Murni, Cikarang Barat Tahun 2012. *Jurnal Ilmiah Kesehatan*, 5(1).
http://lp3m.thamrin.ac.id/upload/artikel%204.%20vol%205%20no%201_feby.pdf.html
- Budiman, & Riyanto, A. (2013). Jakarta. *Kapita Selekta Kuesioner Pengetahuan dan Sikap dalam Penelitian Kesehatan*. Salemba Medilka.
- Bustan, M. N. (2015). Jakarta. *Manajemen Pengendalian Penyakit Tidak Menular*. Rineka Cipta.
- Dinkes Pemkot Makassar. (2014). *Profil Kesehatan Kota Makassar Tahun 2013*.
<http://www.depkes.go.id/profil-kesehatan-indonesia-2013.pdf.html>
- Dinkes Pemprov Sulsel. (2015). *Profil Kesehatan Provinsi Sulawesi Tahun 2014*.
http://www.depkes.go.id/resources/download/profil/PROFIL_KES_PROVINSI_2014/27_Sulawesi_Selatan_2014.pdf.html
- Irawan, B. (2014). *Hubungan Antara Tingkat Pengetahuan Tentang Komplikasi Hipertensi dengan Sikap Mengontrol Tekanan Darah pada Penderita Hipertensi di Desa Batuwarno Kecamatan Batuwarno Kabupaten Wonogiri*.
http://eprints.ums.ac.id/28789/16/02_NASKAH_PUBLIKASI.pdf.html
- Jhonson, L., & Leny, R. (2010). Yogyakarta. *Keperawatan Keluarga: Plus Contoh Askep Keluarga*. Nuha Medika.
- Kemenkes R.I. (2013). *Riset Kesehatan Dasar 2013*.
<http://www.depkes.go.id/resources/download/general/Hasil%20Rikesdas%202013.pdf.html>
- Kemenkes R.I. (2014). *Profil Kesehatan Indonesia Tahun 2013*.
<http://www.depkes.go.id/resources/download/pusdatin/profil-kesehatan-indonesia/profil-kesehatan-indonesia-2013.pdf.html>
- Ningrum, R. S. (2012). *Hubungan Peran Keluarga Dengan Sikap Mengontrol Tekanan Darah Pada Pasien Hipertensi di Wilayah Kerja Puskesmas Minggir Sleman Yogyakarta*.
<http://opac.unisayogya.ac.id/878/1/Naskah%20Publikasi.pdf.html>
- Rachmawati, A. Y. (2013). *Dukungan Keluarga dalam Penatalaksanaan Hipertensi di Puskesmas Candirejo Magetan*.
http://eprints.ums.ac.id/24142/14/NASKAH_PUBLIKASI.pdf.html
- Rekam Medik Puskesmas Mangasa Makassar. (2017). *Data Pasien Hipertensi Tahun 2013-2016*. Puskesmas Mangasa Makassar.
- Riyadi, S. (2014). Yogyakarta. *Keperawatan Medikal Bedah*. Pustaka Pelajar.
- Susanto, T. (2012). *Buku Ajar Keperawatan Keluarga