HUBUNGAN ANTARA PENGETAHUAN KELUARGA TENTANG DIIT HIPERTENSI DENGAN KEKAMBUHAN HIPERTENSI PADA LANSIA DIPOSYANDU SETYA BUDI DESA REKSOSARI SURUH KABUPATEN SEMARANG

NASKAH PUBLIKASI
Diajukan sebagai salah satu syarat
untuk meraih gelar serjana keperawatan

Disusun oleh :
NAMA : MUSNEE   PUTEH
NIM   : J 210100095

FAKULTAS ILMU KESEHATAN
UNIVERSITAS MUHAMMADIYAH SURAKARTA
2015

Surat Pernyataan Artikel Publikasi Ilmiah

Yang bertanda tangan di bawah ini :

Pembimbing I :
Nama   : H.M. Abi Muhlisin, SKM., M.Kep.

Pembimbing II :
Nama   : Kartinah A. Kep., S. Kep.

Telah membaca dan mencermati naskah artikel publikasi ilmiah, yang merupakan ringkasan skripsi/tugas akhir dari mahasiswa :

Nama	:	Musnee Puteh
NIM	:	J210100095
Fakultas	:	Ilmu Kesehatan
Program Studi	:	S1 Keperawatan Internasional
Judul Skripsi	:	HUBUNGAN ANTARA PENGETAHUAN KELUARGA TENTANG DIIT HIPERTENSI DENGAN KEKAMBUHAN HIPERTENSI PADA LANSIA DIPOSYANDU SETYA BUDI DESA REKSOSARI KECAMATAN SURUH KABUPATEN SEMARANG

Naskah artikel tersebut layak dan dapat disetujui untuk dipublikasikan. Demikian persetujuan ini dibuat, semoga dapat dipergunakan sepelunya.

Surakarta, 11 Mei 2015

Pembimbing I

H.M. Abi Muhlisin, SKM., M.Kep.

Pembimbing II

Kartinah A. Kep., S. Kep.

Hubungan antara Pengetahuan Keluarga tentang Diit Hipertensi dengan Kekambuhan Hipertensi pada Lansia di Posyandu Setya Budi, Desa Reksosari, Kecamatan Suruh Kabupaten Semarang (Musnee Puteh)

1

RELATIONSHIP BETWEEN FAMILY KNOWLEDGE OF HYPERTENSION DIET WITH RELAPSE HYPERTENSION IN THE ELDERLY IN SETYA BUDI NEIGHBORHOOD HEALTH CENTER REKSOSARI SURUH SEMARANG

By Musnee Puteh

Abstract

Hypertension was a disease that classified as a silent killer. Hypertension was a disease that currently includes high and continues to rise, one of which caused non-adherent patients carry hypertension diet. Initial survey research on elderly Setya Budi neighborhood health center of Reksosari showed 7 of 9 elderly had a relapse, and most of the family members not understand about diet hypertension. The purpose of this study was to determine the relationship between knowledge about family relationships hypertension diet with recurrence of hypertension in the elderly in Setya Budi neighborhood health center of Reksosari Suruh Semarang. That study was a descriptive correlative study with cross-sectional design. The sample was 46 elderly family members who had hypertension in the elderly Setya Budi neighborhood health center of Reksosari Suruh Semarang with purposive sampling technique. The data processing techniques used Spearman Rank technique. Based on the results of research and discussion, the conclusions of this study were: (1) knowledge of the family of hypertension as a major diet was moderate category, (2) the recurrence rate of hypertension in the elderly mostly in the category often recur, and (3) there was a significant relationship between the level of knowledge about diet hypertension families with recurrence of hypertension in the elderly in Setya Budi neighborhood health center of Reksosari Suruh Semarang.

Keywords : family knowledge, recurrence of hypertension, elderly.

.

Hubungan antara Pengetahuan Keluarga tentang Diit Hipertensi dengan Kekambuhan Hipertensi pada Lansia di Posyandu Setya Budi, Desa Reksosari, Kecamatan Suruh Kabupaten Semarang (Musnee Puteh)

3

INTRODUCTION

Hypertension is a silent killer (silent killer) among other killers such as diabetes, hypercholesterolemia and osteoporosis. Currently hypertension is still high and still cendurung increased, which caused the patient is not adherent to implement because of a lack of knowledge about diet diet hypertension hypertension so often relapse (Franz, *2011*).

Hypertensive disease has killed 9.4 million people in the world each year. The World Health Organization (WHO) estimates that the number of patients with hypertension will continue to increase along with a large population.

WHO reported that there were a developed country has *35%.* Areas of the United States as much as *35%.* In Southeast Asia as much as *36%.* According Khancit in billion people affected by hypertension while for the Asian region hypertensive disease has killed *1.5* million people annually. While in Indonesia the number of people reached *32%* in *2008* with the upper age range of *25* years. The number of male patients reached *42.7%* while *39.2%* of women (Widiyani, *2013*).

Indonesia is a country that experienced many health problems because the older the person, the health problems will be growing (Budiyanto, *2005).* If people do not know who mengelami hypertension dietary pattern seharianya setting and how to prevent it, it is at risk of complications

suffered from hypertension such as heart failure, stroke, and so on. It is estimated that with patients age 60 years and older who will mengelami cognitive heart disease, myocardial infarction, stroke, aortic dissection in five years if untreated hypertension (Stanley, 2007).

One way to prevent hypertension is usually a low-salt diet or otherwise limit the use of salt and consumption of foods rich in salt. Salt if consumed in excess will retain fluid and increase the work of the heart so that blood pressure will also increase. Nutrition and optimal dietary patterns in the elderly should receive more attention. Optimal diet is the key to cure diseases and of course if people do not comply with the diet given disease will recur (Purba, 2005). Based on the survey results in IHC Setyabudi Reksosari village on December 4, 2013, of 110 elderly enrolled in the IHC there who have hypertension as many as 86 elderly people, while the data posyandu elderly who experienced a relapse were 60 elderly people. From the results of interviews with nine family members who have a recurrence of the elderly with hypertension 7 family members say do not know what is meant by the diet to hypertension, which is known is not allowed to consume salt, should not drink coffee and can not smoke. While two members of the family say hypertension is diet food should not be eaten by a person with hypertension, for example, should not be at all eaten the intestines, liver, chicken or goat.

Based on the above description researchers interested in studying the relationship between family knowledge about hypertension diet with a recurrence of hypertension in the elderly in Posyandu Setya Budi Desa

Hubungan antara Pengetahuan Keluarga tentang Diit Hipertensi dengan Kekambuhan Hipertensi pada Lansia di Posyandu Setya Budi, Desa Reksosari, Kecamatan Suruh Kabupaten Semarang (Musnee Puteh)

4

Reksosari Kecamatan Suruh Kabupaten Semarang.

The purpose of this study was to determine the relationship between family knowledge about hypertension diet with a recurrence of hypertension in the elderly in IHC Setya Budi, Reksosari Village, District Tell Semarang District.

THEORETICAL BASIS

Elderly

Based on the general definition, a person is elderly when he was 60 years and over, both men and women.

While the Department of Health RI mention someone said to elderly age starting from age 55 years and older. According to the World Health Organization (WHO) old age starting from the age of 60 years (Kushariyadi 2010; Indriana, 2012; Wallnce, 2007).

Age restrictions that include age restrictions elderly of the opinions of various experts who are quoted from Nugroho (2008): (1) Law No. 13 of 1998 in chapter I of Article 1, paragraph II, which reads "elderly is a person who reaches the age of 60 years and above ", (2) divides into four categories: middle age (45-59 years old), the elderly (60-74 years), advanced old age (75-90 years) and very old age (over 90 years). Changes that occur in the elderly, according Mujahidullah (2012) and Wallace (2007), among others

1) Physical changes

a) Cells, when a person enters old age state of the cell in the body will change, as the numbers decreased, the size of a large lebuh that cellular repair mechanisms will be disrupted and the proportion of protein in the brain, muscle, kidney, darah dan hati beekurang.

b) System persyarafan, state system persyarafan pada elderly will undergo changes, such as sensory nerve sags.

c) Gastrointestinal system, there will be decline in the elderly Selara meals, frequent constipation, the decline in the production of saliva (saliva) and intestinal peristaltic movements also decreased.

d) genitourinary system, the kidneys elderly will experience downsizing so that blood flow to the kidneys decreases.

e) The musculoskeletal system, the spine elderly will lose fluid and increasingly fragile, a state body will be shorter, stiff joints and tendons shrivel.

f) Cardiovascular Systems, in elderly heart will experience decreased blood pump, the heart size decreases kesuruhan absence of clinical disease, decreased heart rate, heart valve in the elderly will be thicker and stiffer as a result of the accumulation of lipids. Increased systolic blood pressure in the elderly because the loss of arterial distensibility. Diastolic blood pressure remained the same or increased.

2) Changes in intellectual According Hochanadel and Kaplan in Mujahidullah (2012), due to the aging process will occur a decline in the ability of the brain such as changes intelegenita Quantion. Another change is the change in memory, because the decline in the ability of the brain that an elderly person will find it hard to accept the stimulus given to him so that the ability to remember the elderly too reduce.

Hubungan antara Pengetahuan Keluarga tentang Diit Hipertensi dengan Kekambuhan Hipertensi pada Lansia di Posyandu Setya Budi, Desa Reksosari, Kecamatan Suruh Kabupaten Semarang (Musnee Puteh)

5

3) religious changes

According to Maslow in Mujahideen (2012), in general, the elderly will be more regular in his religious life, it is concerned with the state of the elderly who will leave the life of the world.

Knowledge

Knowledge is the result of out and this happens after someone did sensing to a particular object. Most of the human knowledge acquired through the eyes and ears (Notoatmodjo, 2007).

Knowledge is what is known or the work out, or know, consciously, understanding, intelligent. Knowledge of the process is the result of human effort to know (Bahtiar, 2004).

According to Mubarak, (2009) the factors that affect the information on diet hypertension

1) Level of education

Education is a way to provide a knowledge resulting in increased positive behavior change.

2) Culture

Is the mind or intellect. Habits or human behavior in knowing who needs to have an attitude or kepercayyan.

3) Information

Someone with more resources will have greater knowledge.

4) Social economy

Through the knowledge level of a person's ability to make ends meet.

5) Experience The more experience a person has the more the knowledge acquired.

Concep hypertension in Elderly

Hypertension is a condition where the systolic and diastolic pressure increased beyond normal limits is systole blood pressure> 140mmHg and diatole. 90 mmHg. Hypertension or high blood pressure is a disease in one of the high risk that could be heart disease, stroke and kidney failure (Muwarni, 2011; Zhao, 2013). Kaplan memberikan batasan hipertensi dengan memperhatikan usia dan jenis kelamin (Soeparman dalam buku Udjianti, 2010).

1. Men aged over 45 years, said to be hypertension when blood pressure when lying down more than 120/90 mmHg

2. The 45-year-old man, said to be hypertension when blood pressure is more than 145/95 mmHg.

3. Women, hypertension when blood pressure over 150/95 mmHg

Factors that Affect Recurrence Hypertension

1) Life style

Always konsumption high sodium have triggering hypertension. (Martuti, 2009).

2) Stress

Stress can be effect cardiovascular disease. Sepecialis tress one of factor psikologis can be hypertention. (Marliani, 2007)

3) smoke

in system kardiovaskuler, smoke effect to increase for hypertension. Smoking also lead to blood vessel walls thicken gradually which can make it difficult for the heart to pump blood. Yamg heart work harder certainly can increase blood pressure (Marliani, 2007).

Hubungan antara Pengetahuan Keluarga tentang Diit Hipertensi dengan Kekambuhan Hipertensi pada Lansia di Posyandu Setya Budi, Desa Reksosari, Kecamatan Suruh Kabupaten Semarang (Musnee Puteh)

6

Prevention of hypertension

Febry, et al (2013), pencegahan terjadi hipertensi meliputi :
1) reduce konsumption sodium . needs salt per day is 5 gr (1 dst).
2) Prevent obesity
3) limiting konsumption of
4) exersice
5) have consumption fruit and vagetable
6) prevention smoke and alcohol
7) exersice
8) To try estabilish life of positive

Diet hypertension

Hypertension diet is a way to prevent the occurrence of hypertension with no side effects, because it uses more natural foods than using drugs decrease blood pressure (Sustrani, 2005).Diet hypertension according Sustrani et al (2005) have are:
1) Reduce salt intake
2) Increase the fiber
3) Stopping smoking
4) Increase intake of potassium
5) Meet the needs of magnesium
6) Completing calcium needs
7) Know the vegetables and spices that are beneficial for blood pressure
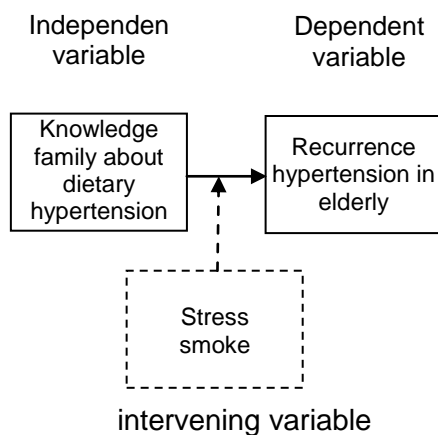
Conceptual framework

Independen variable   Dependent variable

intervening variable

Image1.conceptual framework

Hipothesis

H_0 : not relation between knowledge family about dietary hypertension with recurrence hypertension in elderly

H_a : have relation between knowledge of family about dietary hypertension with recurrence hypertension in elderly.

Hubungan antara Pengetahuan Keluarga tentang Diit Hipertensi dengan Kekambuhan Hipertensi pada Lansia di Posyandu Setya Budi, Desa Reksosari, Kecamatan Suruh Kabupaten Semarang (Musnee Puteh)

7

Research methodology

Study design

This research uses descriptive method with cross sectional correlative is a research method is emphasized at the time of the measurement data is only one at a time (Sujarweni, 2014). The purpose of this study was to look at a picture of a situation objectively about the relationship between two variables in a group of subjects at the same time (Notoadmodjo, 2010).

Population and Sampel

The population in this study are all members of the family are are elderly who have hypertension are listed in Posyandu elderly in the village Reksosari Setya Budi county districts Tell Semarang totaling 86 people.
The sample was 46 with a determination of sample purposive sampling technique

Instrument Penelitian

This study uses a measuring instrument in the form of questionnaires and checklists knowledge recurrence elderly hypertension.

Data analysis

Analysis of the data in this study is bivariate. To be able to test and analyze the data used technique Spearman Rank

Result and discussion
Univariate analysis

Description knowledge Family and Elderly Hypertension Recurrence

Tabel1 Frequency Distribution knowledge of Family

knowledge	total	%
less	5	10,9%
moderate	36	78,3%
good	5	10,9%
total	46	100

Tabel 2. frequency distribution recurrence hypertension

Kategoy	total	%
Sometime recurrence	16	34,8%
Always recurrence	30	65,2%
total	46	100

Relation between knowledge family with recurrence hypertension

Tabel 3. Relation between knowledge family with recurrence hypertension

| Recurrence hypertension | knowledge | | | | | | total | | rho | p |
| | less | | Mode-rate | | good | | | | | |
	N	%	N	%	N	%	N	%		
Sometime relapse	2	4.3	10	21.7	4	8.7	16	34.8		
Always relapse	3	6.5	26	56.5	1	2.2	30	65.2	0.405	0.005
total	5	10.8	36	78.3	5	10.9	46	100		

Based on Table 3 shows that the respondents have less knowledge frequent recurrence of hypertension in the elderly as much as 3 people (6.5%) and relapse sometimes as many as two people (4.3%). Knowledge family is going on sometimes recur as many as 10 people (21.7%) and always recur as many as 26 people (56.5%). Good

Hubungan antara Pengetahuan Keluarga tentang Diit Hipertensi dengan Kekambuhan Hipertensi pada Lansia di Posyandu Setya Budi, Desa Reksosari, Kecamatan Suruh Kabupaten Semarang (Musnee Puteh)

8

knowledge of family recurrence occurred in elderly hypertensive sometimes as many as four people (8.7%) and often recur many as one person (2.2%). Based on Table 3 is known that the Spearman-rho correlation testing the relationship between family knowledge about hypertension diet with relapse in elderly count r = 0405, p = 0.005. because p <0.05, so that the null hypothesis is rejected, it can be concluded that the family knowledge about hypertension diet with a recurrence of hypertension in the elderly there is a significant relationship.

Discussion

Level of knowledge

Results of univariate analysis showed that the level of knowledge of elderly families in the village of Tell Reksosari is the highest category of being that 36 respondents (78.3%). Families who have knowledge about diet (foods may or may not be consumed by people with hypertension) but did not apply that knowledge in everyday life. This is in accordance with the statement of Ayla (2012), which states that knowledge can be influenced from a variety of ways, one of which is through education that means it is a way to provide a knowledge that positive behavioral changes. can pula melalui informasi yang artinya seseorang yang mempunyai sumber informasi lebih banyak sehingga dapat pengetahuan yang benar dan jelas. Kemudian pengalaman, yang berarti sesuatu yang pernah dialami oleh someone will add to the knowledge

that is informal. Implementation of the diet may change due to education or knowledge of a person (Istiany, 2014).

recurrance

From the results of the univariate tests showed that the recurrence of hypertension in the elderly in the village Reksosari majority including frequent relapses that 30 (65.2%), relapse sometimes as many as 16 respondents (34.8%). Recurrence of hypertension is defined as the onset of symptoms of high blood pressure equal to or greater than 140/90 mm / Hg. Distribution studies indicate that most respondents have hypertension kecedurungan high recurrence. The study states that there are elderly people who say often exhaustion and headaches. Some factors influencing the recurrence of hypertension among others history of the disease and healthy behavior of patients with hypertension. It is as raised by Marliani (2007) which suggests that the recurrence of hypertension caused by several things that are not regularly control, lack of knowledge, do not run a healthy lifestyle such as proper diet, exercise, stop smoking, reduce alcohol or kafein , As well as reducing stress, particularly in people who have risk factors for hypertension.

Hubungan antara Pengetahuan Keluarga tentang Diit Hipertensi dengan Kekambuhan Hipertensi pada Lansia di Posyandu Setya Budi, Desa Reksosari, Kecamatan Suruh Kabupaten Semarang (Musnee Puteh)

9

Relation between knowledge of family about diet hypertension with recurrence hypertension in Elderly

From the above results, it is known that family knowledge about diet hypertension as the respondents have knowledge in the category were as many as 36 respondents (78.3%). According Notoadmojo (2007) that the knowledge of a person can be influenced by educational, cultural, socioeconomic and experience. Based on the interview to the respondent families that parents who are economically respondents are not able to send the respondent to the high school. However, respondents' knowledge about the knowledge gained from experience diit hypertension, hearing and vision through the media, TV. Radio and so on. Or cognitive domain knowledge is very important for the formation of one's actions, behavior based on knowledge will be more lasting than behavior that is not based on knowledge. Similarly, of the Goddess (2010) said the lack of knowledge will affect people with hypertension to be able to overcome the prevention of relapse or do in order to avoid complications so that knowledge and attitude about

hypertension is something that is very important to have in order to cope with hypertensive disease itself. In the study also found that 5 respondents(10.9%) had hypertension. good knowledge but hypertension in the elderly often recur. It may be due to other factors that affect recurrence Factors affecting the recurrence of hypertension such as poor lifestyle such as stress, irregular eating patterns, smoking and so on (Marliani, 2007). Lifestyle is a pattern of life in the world expressed in the activities, interests and opininnya. Many diseases caused by lifestyle habits are closely related to the one while to achieve physical and psychological conditions remain prime needs a set of habits and a healthy lifestyle. Lifestyle influence on the shape of a person's behavior or habits in response to physical and psychological health, environmental, social, cultural and economic. A healthy lifestyle is done with the goal of keeping longer in avoiding various diseases. A healthy lifestyle is a health behavior that is a person's response to external stimuli for maintaining health as a whole. Behavior is formed by three important aspects such as knowledge, attitude and action (Pratama, 2010). Aging can also affect the degenerative process because the function of organs that result in the absorption of food (Schaie, 2009).

conclusions and suggestions

conclusion

1. Knowledge about the diet hypertension family in Posyandu Setya Budi show as big is the category of being.

2. The rate of recurrence of hypertension in the elderly in the village Reksosari Posyandu Setya Budi county districts Tell Semarang showed most in the category of frequent relapses.

3. There is a significant correlation between the level of family knowledge about hypertension diet with a recurrence of hypertension in the elderly in the village Reksosari Posyandu Setya Budi county districts Tell Semarang.

Suggestions

1. Elderly

Elderly expected maximal effort to Posyandu elderly health check and adhere to the rules of diet-related disease.

2. Family

Families should improve the knowledge of elderly care in particular about the diet through various ways such as on health or education by reading books related to health.

3. Cadre / officer health

Cadres should encourage the participation of families and the elderly to actively follow Posyandu activities and actively provide health education work together with another person

4. researchers further

Penilit selanjut terkai should develop a range of variables that affect the behavior of the incidence of recurrence of hypertension.

BIBLIOGRAPHY

Arikunto, S. (2006). Prosedur penelitian: suatu pendekatan praktek. Jakarta: Rineka Cipta

Almatsier, S.(2006). Prinsip dasar ilmu gizi. Jakarta: PT. Gramedia pustaka utama

Bakhtiar,A. (2004). Filsafah Ilmu. Jakarta: PT.Raja Grafindo Persada

Budiyanto, A K. (2005). Gizi dan kesehatan.Malang: Bayu media. UMM press

Badan penelitian dan pengembangan kesehatan republic Indonesia(2013). Laporan nasional Riskesda 2013. http:// litbag. Depkes.go. id/. Diakses tanggal 31 Maret 2014

Dewi,M.(2010). Teori dan pengukuran pengetahuan sikap dan perilaku manusia. Jakarta: Nuha media

Franz,M.(2011). Clinician's manual of treatment hypertension. New York: springer healthcare

Febry,A (2013). Ilmu gizi untuk praktisi kesehatan. Yogyakarta : Graha ilmu

Gunawan, L.,(2007). Hipertensi tekanan darah tinggi. Jakarta: Gramedia

Harmoko,S.(2012). Asuhan keperawatan keluarga.Yogyaarta: Hak cipta

Hidayat, A. Aziz Alimul. (2011). Metode penelitian keperawatan dan teknik Analisis Data. Jakarta: Salemba Medika

Istiany,A.& Rusilanti. (2013).Gizi Terapan. Bandung: PJ Remaja Rosdakarya

Indriana, Yeniar.(2012). Gerontology dan progeria. Jogjakarta : Pustaka pelajar

Kasmadi & Sunariah Siti Nia. (2013). Panduan Modern penelitian kuantitatif. Bandung: Alfabeta

Kurshariyadi. (2010). Asuhan keperawatan pada klien lanjut usia.Jakarta :Salemba Medika

Marliani,L,. (2007). 100 question & answer hipertensi . Jakarta : Elex Media Komputindo

Martuti.(2009). Merawat dan menyembuhkan hipertensi. Bantul: Krasi wacara

Muhlisin, Abi. (2012). Keperawatan keluarga. Yogyakarta: Gosyen publishing

Mujahidullah, Khalid. (2012). Keperawatan Geriatrik. Yogyakarta: Pustaka Pelajar

Mubarak, I.(2009) Ilmu kesehatan masyarakat teori dan aplikasi. Jakarta: Salemba Medika

Mudzhar,A.(2008). Wanita dalam masyarakat Indonesia.Yohyakarta: Sunan Kalijaga

Muwarni, A. (2011). Perawatan pasien penyakit dalam. Yogyakarta: Gosyen publishing

Notoatmodjo, S. (2007). Promosi kesehatan dan ilmu perilaku, teori dan aplikasi. Jakarta: Rineka Cipta

Notoatmodjo, S. (2010). Metodelogi penelitian kesehatan. Jakarta: Rineka Cipta

Nugroho, W. (2008). Keperawatan gerontik & geriatric. Jakarta : EGC

Purba, M. (2005). Status gizi makro dan kadar homocysteine pada usia lanjut.pertemuan ilmiah Nasional dietetic II tahun 2005. Prosiding, 18-19 pebuari 2005. Bandung

Potter&Perry.(2009). Fundamental of nursing 7th edition. USA: Mosby Elsevier

Pratewi.(2010). Pengaruh penyuluhan hipertensi terhadap tingkat pengetahuan pada penderita hipertensi.http://digilib. Unimas.ac.id/. diakses tanggal 30 april 2014

Rudianto,B.(2013). Menaklukan hipertensi dan diabetes. Yogyakarta: Sakkhasukma

Stanley, Mickey & Patricia Gauntlett Beare. (2007). Buku ajar keperawatan gerontik (nety Juniari & Sari Kurnianingsih, Penerjemah). Jakarta: EGC

Sujarweni, Wiratna. (2014). Metodelogi penelitian keperawatan. Yogyakarta: Bava Media

Sustrani, et.al. (2004).hipertensi. Jakarta : PT Gramedia pustaka utama

Sustrani.(2005). http://helpingpeopleideas.com/publichealth/diet-untuk—

Hubungan antara Pengetahuan Keluarga tentang Diit Hipertensi dengan Kekambuhan Hipertensi pada Lansia di Posyandu Setya Budi, Desa Reksosari, Kecamatan Suruh Kabupaten Semarang (Musnee Puteh)

12

hypertensi/ diakses pada tanggal 19 Januari 2014

Suprajitno.(2012). Asuhan keperawatan keluarga:aplikasi dalam praktik. Jakarta: EGC

Sugiyono. (2012).metode penelitian kuantitatif kualitatif dan R&D. Bandung: Alfabeta

Udjianti Wajan J. (2010). Keperawatan kardiovaskular. Jakarta: Salemba Medika

Wallance, Meredith. (2007). Essentials of Gerontological Nursing. New York: Springer Publishing company

Widiyani, Rosmha. (2013). Penderita hipertensi terus meningkat. Artikel Jumat 15 april 2013 jam 14:04 WIB. Diambil dari Kompas.com

Zhao,Yaling; Yan, Hong; Marshall, Roger J Dang, Shaonong; Yang,Rulhal; LI,Qiang; Qin,Xueying. (2013). Trends in Population Blood pressure and Prevalence,Awareness, Treatment, and Control of hypertension among Middle-age and older adults in a Rural Area of Northwest China. PLos one journal. ID document 13440330

*Musnee Puteh:** Mahasiswa S1 Keperawatan FIK UMS. Jln A Yani Tromol Post 1 Kartasura

** H.M Abi Muhlisin, SKM., M. Kep:** Dosen Kepera-watan FIK UMS. Jln A Yani Tromol Post 1 Kartasura.

*** Kartinah A. Kep., S. Kep:** Dosen Keperawatan FIK UMS. Jln A Yani Tromol Post 1 Kartasura