# CASE STUDY OF HYPERTENSION RECURRENCE PREVENTION BEHAVIOR AT WONOKUSUMO PUSKESMAS SURABAYA

Elintia Susan<sup>1</sup>, Dyah Wijayanti<sup>2(CA)</sup>, Hasyim As'ari<sup>3</sup>, Minarti<sup>4</sup>

1.2.3.4 Department of Nursing, Health Polytechnic, Ministry of Health, Surabaya dyahwi@poltekkesdepkes-sby.ac.id

**Abstract.** The lack of prevention of the recurrence of hypertension causes unstable blood pressure resulting leading to complications such as stroke, heart disease, and kid-ney failure. The purpose of this study is to determine the behavior of patients in preventing hypertension recurrence at Wonokusumo Health Center Surabaya. This study uses a descriptive research design. The population in this study were 160 hypertensive patients who sought treatment at Wonokusumo Health Center and 40 among them were chosen to participate using a purposive sampling tech-nique. The participants need to complete a set of questionnaires. This variable is hypertension recurrence prevention behavior. The results showed that almost half (45%) of each behavior (knowledge, attitude, and action) are sufficient. It is con-cluded that the behavioral prevention of the recurrence of diabetes mellitus is ade-quate among the patients at the research site. Hypertension patients are expected to continue to increase their knowledge by digging up more information and be-ing able to have a positive attitude and adhere to the hypertension treatment being undertaken so that hypertension recurrence can be prevented

Keywords: Behavior, Recurrence Prevention, Hypertension

#### 1 INTRODUCTION

Hypertension is a health problem that is quite dangerous for people not only in Indonesia but throughout the world (Nurhasana, Mahmud & Sididi, 2022). Hypertension sufferers who do not maintain a healthy lifestyle are at risk of experiencing repeated increases in blood pressure or recurrence of hypertension (Rijal, 2018). Not all hypertensive sufferers can prevent their disease because the level of knowledge about preventing hypertension is not the same (Caroline, Arneliwati & Dewi, 2018). Many hypertension sufferers do not pay attention to the causes of hypertension recurrence, such as non-compliance with hypertension sufferers in treatment, which is caused by several reasons, including boredom from taking medication because of blood pressure still up and down. (Priyadarsani, Sutresna & Wirajaya, 2021). In Susanto's (2018) research, hypertension sufferers said they did not take antihypertensive medication regularly because they felt they had recovered. This is what causes hypertension sufferers to experience a recurrence of their disease.

Based on Riskesdas (2018), the prevalence of hypertension based on measurement results in the population aged 18 years was 34.1%, the highest in South Kalimantan (44.1%), while the lowest was in Papua (22.2%). Hypertension occurs in the age group 31-44 years (31.6%), age 45-54 years (45.3%), age 55-64 years (55.2%). The prevalence of hypertension in Indonesia tends to increase with age, namely the prevalence of hypertension in the age group 55-64 years is 45.9%, age 65-74 years is 57.6%, and the age group >75 is 63.8% (Ministry of Health of the Republic of Indonesia, 2013). Hypertension in East Java province, the percentage of hypertension is

22.71% or around 2,360,592 residents, with the proportion of men being 18.99% (808,009 people) and women being 18.76% (1,146,412 people). The highest prevalence of hypertension was found in the elderly group aged more or less 75 years, namely 62.4%. The prevalence of hypertension in the city of Surabaya reached 22.0%, of which 16.78% occurred in adults aged 18 years and over (East Java Health Office, 2018).

One of the successful factors in preventing hypertension recurrence is the attitude and knowledge of sufferers who have a history of hypertension. One of the most important knowledge is the factors that cause hypertension. Several risk factors from behavior that are considered to contribute to the increase in hypertension include non-compliance with the hypertension diet, non-compliance with taking medication, lack of physical activity, non-compliance with stopping smoking behavior, inability to control stress which makes the sufferer's blood pressure uncontrolled (Priyadarsani, Sutresna & Wirajaya, 2021). Hypertension is often referred to as a silent killer because it often goes without complaints, so sufferers do not know they have hypertension and only find out after complications occur, the impact of hypertension or complications that may occur such as heart failure, kidney failure, CVA bleeding and can even cause death (Sembiring, 2021).

Prevention of hypertension recurrence can be minimized by increasing individual, group or community knowledge about hypertension, as well as good awareness regarding hypertension treatment (Caroline, Arneliwati & Dewi, 2018). A very important effort by nurses in providing nursing care is as educators in providing counseling to increase knowledge. Hypertension sufferers can prevent recurrence of hypertension with the right attitudes and actions, namely by maintaining normal body weight, reducing foods high in salt and fatty foods, and doing sports activities, undergoing an antihypertensive treatment program, stopping smoking, avoiding alcohol consumption, being able to Managing stress, hypertension sufferers must also have regular check-ups at health services and check their blood pressure regularly so they can monitor their blood pressure (Nurhasana, Mahmud & Sididi, 2022).

### 2 METHOD

This study uses a descriptive research design with a case study approach. In this study, what will be described is the behavior to prevent recurrence of hypertension at the Wonokusumo Community Health Center, Surabaya. The population taken in this study was 160 hypertension sufferers at the Wonokusumo Community Health Center, Surabaya. In this study, the sampling technique used a purposive sample technique, namely a sample determination technique by selecting a sample among the population according to the research objectives (research objectives or problems), so that the sample can represent the characteristics of a previously known population of 40 hypertension sufferers in Wonokusumo Health Center Surabaya. The data measurement tool used in this study was a questionnaire. The questionnaire in this study consists of one part, namely the behavior of hypertension sufferers towards preventing

hypertension recurrence. The questionnaire in this study used an ordinal scale with 25 positive statements and 5 negative statements. The questionnaire consists of 10 questions to determine knowledge of preventing recurrence of hypertension sufferers, 10 statements to determine attitudes towards preventing recurrence of hypertension sufferers, 10 statements to determine actions to prevent recurrence of hypertension sufferers. With result criteria: good if the score is 67-100, fair if the score is 34-66, poor if the score is <34. After the questionnaire form is filled out by the respondents, the data obtained will then be processed by descriptive analysis.

### 3 RESULT

#### General Data

Table 1. Characteristics Based on Age

| Age   | Frequency | Percentage (%) |
|-------|-----------|----------------|
| 45-59 | 18        | 45             |
| 60-74 | 22        | 55             |
| Total | 40        | 100            |

**Table 1.** Based on the research, it shows that of the 40 hypertension sufferers, the majority were aged 60-74, 22 people (55%).

Table 2. Characteristics Based on Gender

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male   | 10        | 25             |
| Female | 30        | 75             |
| Total  | 40        | 100            |

**Table 2.** Based on the research, it shows that of the 40 hypertension sufferers, most of them were 30 women (75%).

Table 3. Characteristics Based on Education

| Level of education | Frequency | Percentage (%) |
|--------------------|-----------|----------------|
| SD                 | 10        | 25             |
| SMP                | 10        | 25             |
| SMA                | 12        | 30             |
| S1                 | 8         | 20             |
| Total              | 40        | 100            |

**Table 3.** Based on the research, it shows that of the 40 hypertension sufferers, almost half had a high school education, 12 people (30%).

Table 4. Characteristics Based on Occupation

| Occupation | Frequency | Percentage (%) |
|------------|-----------|----------------|
|            |           |                |

| Total          | 40           | 100 |
|----------------|--------------|-----|
| Civil servants | <del>-</del> | -   |
| Teacher        | 4            | 10  |
| Private        | 2            | 5   |
| Employee       | 4            | 10  |
| Trader         | 4            | 10  |
| Housewife      | 26           | 65  |

**Table 4.** Based on the research, it shows that of the 40 hypertension sufferers, most of them were housewives, 26 people (65%).

### **Special Data**

**Table 5.** Knowledge of Hypertension Recurrence Prevention

| Category | Frequency | Percentage (%) |
|----------|-----------|----------------|
| Good     | 18        | 45             |
| Enough   | 14        | 35             |
| Enough   | 8         | 20             |
| Total    | 40        | 100            |

**Table 5.** Based on the research, the results of the study show that the behavior of preventing recurrence of hypertension at the Wonokusumo Health Center in Surabaya was found to be almost half in the knowledge domain in the good category, 18 people (45%).

Table 6. Attitudes to Prevent Recurrence of Hypertension

| Category  | Frequency | Percentage (%) |
|-----------|-----------|----------------|
| Good      | 12        | 30             |
| Enough    | 18        | 45             |
| Deficient | 10        | 25             |
| Total     | 40        | 100            |

**Table 6.** Based on the research, the research results show that almost half of the attitudes towards preventing hypertension recurrence at the Wonokusumo Surabaya Community Health Center were found to be in the sufficient category, 18 people (45%).

Table 7. Prevention of Hypertension Recurrence

| Category  | Frequency | Percentage (%) |
|-----------|-----------|----------------|
| Good      | 10        | 25             |
| Enough    | 18        | 45             |
| Deficient | 12        | 30             |
| Total     | 40        | 100            |

**Table 7.** Based on the research, the research results show that almost half of the behavior for preventing hypertension recurrence at the Wonokusumo Surabaya Community Health Center was found to be in the sufficient category, 18 people (45%).

**Table 8.** Behavior to Prevent Hypertension Recurrence

| Category            | Frequency | Percentage (%) |
|---------------------|-----------|----------------|
| Good                | 14        | 22             |
| Enough              | 16        | 52             |
| Enough<br>Deficient | 10        | 26             |
| Total               | 40        | 100            |

**Table 8.** Based on the research, the research results show that almost half of the behavior for preventing hypertension recurrence at the Wonokusumo Surabaya Community Health Center was found to be in the sufficient category, 16 people (40%).

### 4 DISCUSSION

This chapter describes "Prevention of Hypertension Recurrence at the Wonokusumo Health Center in Surabaya" with 40 patients aged 45-74 years. This research was conducted in February 2023. The results showed that there were still many hypertension sufferers who experienced recurrence as evidenced by the fact that over time the observations showed high blood pressure in patients accompanied by complaints of dizziness.

# **Knowledge of Hypertension Sufferers Regarding Prevention of Hypertension Recurrence**

The results of the study showed that the knowledge of hypertension sufferers regarding the prevention of hypertension recurrence was almost half (45%) or as many as 18 sufferers were in the good category. This is because as many as 8 sufferers (20%) have an undergraduate degree. Patients who have higher education find it easier to identify, analyze and understand all information related to hypertension that they receive. Mardhatillah's research (2015) states that the level of education is related to the level of knowledge, someone who has a high level of knowledge tends to have better knowledge so that education influences a person's way of thinking.

The knowledge of hypertension sufferers regarding preventing hypertension recurrence was obtained by 14 sufferers (35%) in the sufficient category. This is because some sufferers find it easy to obtain information about health from health workers, but some have difficulty understanding this information. Most knowledgeable sufferers know enough about the meaning and signs of hypertension, but sometimes sufferers forget other things, such as the causes of hypertension. This is because the majority (55%) of sufferers are elderly. This research is supported by Caroline, Arneliawati and Dewi (2018), who show that sufficient knowledge in the elderly cannot be separated from the elderly's ability to remember actual knowledge about hypertension, where in the elderly there is a decline in intellectuality which includes cognitive abilities, perception and memory.

Knowledge of hypertension sufferers regarding preventing hypertension recurrence was found in 8 sufferers (20%) in the poor category. This is due to the low level of education, which in this study found that 10 sufferers (25%) had elementary school education. Patients who have low education have more difficulty understanding the information they receive. Patients who lack knowledge and are not well informed tend to show less effort in preventing hypertension recurrence. Supported by research by Nurhasana, Mahmud and Sididi (2020), namely that many sufferers have elementary school education so they lack knowledge about health and the illnesses they experience so that they will have difficulty and be slow in receiving information.

# Attitudes of Hypertensive Sufferers Regarding Prevention of Hypertension Recurrence

The results of the study showed that the attitude of hypertension sufferers regarding preventing recurrence of hypertension was 12 sufferers (30%) in the good category. Sufferers are able to behave in accordance with the knowledge they have. Some sufferers with a good attitude want to listen to and follow directions from health workers and their families. The formation of a good attitude in sufferers can be caused by increasing age, the older the sufferer, the more things they do so that it is easier for the sufferer to respond to what they face. Angkawijaya's research (2016) states that good knowledge can also be obtained from the age factor because the older you get, the more experience you have.

The attitude of hypertension sufferers regarding the prevention of hypertension recurrence was found by almost half (45%) or as many as 18 sufferers in the fair category. This is because the sufferer is not maximal in responding to something even though the level of knowledge is good. Most of the patients in the moderately non-adherent category in hypertension treatment such as routine control. Patients only control when reminded. Some sufferers also think that if their blood pressure is still normal then there is no need for routine control or taking antihypertensive drugs. In line with research by Ainiyah and Wijayanti (2019) which states that many sufferers with good knowledge have not fully followed up with a good attitude, such as sufferers knowing the causes of blood pressure recurrence but sometimes being disobedient in taking medication and living a healthy lifestyle, resulting in relapse.

The attitude of hypertension sufferers regarding the prevention of recurrence of hypertension was found in 10 patients (25%) in the less category. This is because there are still many sufferers' perceptions that are distorted and if they are reminded by their families or health workers they don't pay attention, such as when they are reminded to take medication. Patients tend to be indifferent because they feel they are still healthy and do not need treatment. Research by Mardhatillah (2015) states that negative attitudes or less tend to avoid or dislike certain objects.

# Actions of Hypertension Sufferers Regarding Prevention of Hypertension Recurrence

The results of the study showed that the actions of hypertension sufferers regarding preventing recurrence of hypertension were found to be 10 sufferers (25%) in the good category. This is because the patient is able to do something according to the information received. Good actions are also obtained from a high level of education which can trigger someone to make the right decision to do something. Research by Ainiyah and Wijayanti (2019) states that good actions are based on higher education so that they have good knowledge and also the mindset of individuals who are able to make good decisions.

Actions of hypertension sufferers regarding prevention of recurrence of hypertension found almost half (45%) or as many as 18 patients in the sufficient category. This is because sufferers are inconsistent, in the sense that sufferers only do things as they please, for example sometimes sufferers cannot avoid and still consume foods that contain high cholesterol and rarely take part in hypertension gymnastics held by posyandu. This is in line with research conducted by Palupi (2021) that recurrence of hypertension in sufferers as a result of the intake of food consumed is still a lot that is not in accordance with the recommended diet. The dishes that are made are still one with the family, meaning that foods that are high in cholesterol or coconut milk that the respondents should not consume are still consumed in excess.

Measures of hypertension sufferers regarding prevention of recurrence of hypertension found as many as 12 patients (30%) in the less category. This is because sufferers are unable to withstand everything that is restricted and do not want to take medication. Less action can be attributed to the age factor. As patients get older, they become lazier and get tired more easily, for example they never exercise or do regular physical activity so they often experience recurrence of hypertension. Supported by research by Rijal (2018) which states that as age increases, muscle mass decreases and body fat increases. This makes the muscles work harder than usual and makes the body tired easily and lazy to move.

# Behavior of Hypertension Sufferers Regarding Prevention of Hypertension Recurrence

The results showed that the behavior of hypertension sufferers regarding prevention of recurrence of hypertension was in the good category of 14 patients (35%). This is due to receiving a lot of information which can increase the knowledge, attitudes and actions of sufferers. Patients who have a higher level of education tend to have better knowledge. In line with Mardhatillah's research (2015) most (73%) of respondents had high school education and good behavior, it can be said that education has an important effect on behavior.

The behavior of hypertension sufferers regarding the prevention of recurrence of hypertension is almost half (40%) in the sufficient category of 16 patients. This is because some sufferers are able to understand but not all want to do so that relapses still occur. Non-compliance with taking medication is one of the most common causes of recurrence of hypertension. Supported by Susanto's research (2018) which states that

recurrence of hypertension is caused by non-compliance with taking medication because of the feeling of "cure" that the patient feels so he only takes it when he has a relapse.

The behavior of hypertension sufferers regarding prevention of recurrence of hypertension is in the less category as many as 10 sufferers (25%). This is because some sufferers do not want to hear or carry out orders from health workers and their families because they feel bored so that their behavior tends to be negative. It is supported by the research of Priyadarsani, Sutresna and Wirajaya (2021) which states that recurrence of hypertension occurs due to non-adherence of hypertensive patients in medication such as boredom of taking medication because blood pressure still fluctuates.

### 5 CONCLUSION

Based on the research results and discussion presented, it can be concluded that almost half of the behaviors to prevent hypertension recurrence are sufficient. Researchers can add several variables related to behavior in preventing recurrence of hypertension soproduce more accurate research, as well as material input and data sources for further research and encourage parties interested in conducting further research.

#### 6 REFERENCES

Adawiyah. (2014). Perception of the Elderly with Hypertension Prevention Efforts at Posbindu Bumi Asri RW IV, Sambiroto Village, Semarang. Semarang: Muhammadiyah University. Thesis.

Adventus, M., Jaya, I. M. M., & Mahendra, D. (2019). Buku Ajar Promosi Kesehatan. In Pusdik SDM Kesehatan. Jakarta. (1st ed., Vol. 1, Issue 1, pp. 1–91), http://repository.uki.ac.id/2759/1/Bukumodulpromosikesehatan.pdf, diperoleh 15 November 2022).

Ainiyah, Nur, & Lono Wijayanti. (2019). Hubungan Sikap Tentang Hipertensi Dengan Frekuensi Kekambuhan Hipertensi Pada Penderita Hipertensi Di Rw 06 Karah Kecamatan Jambangan Surabaya: Relationship Attitude Of Hypertension With The Frequency Of Recurrence Hypertension In The Hypertension Patient In RW 06 Karah Kecamatan Jambangan Scientific Journal of Nursing. 5.1 : 47-53, http://journal.stikespemkabjombang.ac.id/index.php/jikep/article/view/214.

Angkawijaya, A. A. (2016). Hubungan tingkat pengetahuan masyarakat dengan tindakan pencegahan hipertensi di Desa Motoboi Kecil Kecamatan Kotamobagu Selatan. Jurnal Kedokteran Komunitas dan Tropik. Diakses pada 15 Mei 2023 dari : https://ejournal.unsrat.ac.id/index.php/JKKT/article/view/11276.

Boan AD, Lackland DT, Ovbiagele B. Lowering of blood pressure for recurrent stroke prevention. Stroke. 2014 Aug;45(8):2506-13. doi: 10.1161/STROKEAHA.114.003666. Epub 2014 Jul 1. PMID: 24984744; PMCID: PMC4134881.

Brunner & Suddarth. Keperawatan medikal bedah. Jakarta: EGC; 2016.

Caroline, S., Arneliwati, A., & Dewi, Y. I. (2018). Hubungan pengetahuan tentang hipertensi dengan perilaku pencegahan kekambuhan hipertensi pada lansia. Jurnal Online Mahasiswa (JOM) Bidang Ilmu Keperawatan, 5(2), 251-258.

Direktorat P2PTM Ditjen Pencegahan dan Pengendalian Penyakit. (2018). Manajemen Program Pencegahan dan Pengendalian Hipertensi dan Perhitungan Pencapaian SPM Hipertensi. Workshop Pencegahan Dan Pengendalian Hipertensi, April, 11, 17, 20.

Fransiska, S., Veronika, E., Nyoman, I., Kristen, U., & Wacana, K. (2018). Artikel Penelitian Pengaruh Tekanan Telapak Kaki Bagian Depan terhadap Faktor Risiko Ketidakpatuhan Minum Obat Antihipertensi Pasien Pemakaian Hak Tinggi dan Indeks Massa Tubuh Mahasiswi pada FKUI Hipertensi di Puskesmas Kecamatan Palmerah Juli 2016 Djap. Jurnal Kedokteran Meditek. 24(68), http://ejournal.ukrida.ac.id/ojs/index.php/Meditek/article/view/1698, diperoleh 05 Mei 2023).

Fuchs FD, Fuchs SC, Moreira LB, Gus M, Nóbrega AC, Poli-de-Figueiredo CE, Mion D, Bortoloto L, Consolim-Colombo F, Nobre F, Coelho EB, Vilela-Martin JF, Moreno H Jr, Cesarino EJ, Franco R, Brandão AA, de Sousa MR, Ribeiro AL, Jardim PC, Neto AA, Scala LC, Mota M, Chaves H, Alves JG, Filho DC, Pereira e Silva R, Neto JA, Irigoyen MC, Castro I, Steffens AA, Schlatter R, de Mello RB, Mosele F, Ghizzoni F, Berwanger O. Prevention of hypertension in patients with pre-hypertension: protocol for the PREVER-prevention trial. Trials. 2011 Mar 5;12:65. doi: 10.1186/1745-6215-12-65. PMID: 21375762; PMCID: PMC3059277.

Hackam DG, Quinn RR, Ravani P, et al. The 2013 Canadian Hypertension Education Program recommendations for blood pressure measurement, diagnosis, assessment of risk, prevention, and treatment of hypertension. Can J Cardiol 2013;29:528-42.

Haijian Guo, MPH. 2018. Prevention of hypertension in patients with prehypertension in the rural areas of China: a community-based quasi-experiment. Journal The Lancet DOI https://doi.org/10.1016/S0140-6736(18)32711-9.

Heriyanto. (2017). Metode Penelitian. Jurnal Keperawatan, 10(1), 11-16.

Hermanto, Katmini. 2021. Application of HBM Theory (Health Belief Model) to Preventing Behavior of Hypertension Complications in Public Health Center Raas, Sumenep Regency. Journal for Quality in Public Health Vol. 5, No. 1, November 2021, pp. 149-159 DOI: 10.30994/jqph.v5i1.263

Hyun-E Yeom. 2011. Influence of Illness Representations on Self-Management Behaviors in Korean Hypertensive Patients Journal of Nursing and Care. Doi: 10.4172/2167-1168.1000326.

Hidayati, Rina & Ibnu, Faisal & Roifah, Ifa. (2018). Improved The Behavior Of The Prevention Of Recurrence Of Hypertension On The Elderly Through Empowerment Support Group.

International Journal Of Nursing And Midwifery Science (Ijnms). 2. 86-91. 10.29082/IJNMS/2018/Vol2/Iss01/120.

Josephine McCarthy et.al. 2021. Hypertension Management in Stroke Prevention Time to Consider Primary Aldosteronism. AHA Journals Vol. 52 no. 10.

Kaberi Dasgupta et.al. 2014. The 2014 Canadian Hypertension Education Program Recommendations for Blood Pressure Measurement, Diagnosis, Assessment of Risk, Prevention, and Treatment of Hypertension. Canadian Journal of Cardiology Volume 30, Issue 5, May 2014, Pages 485-501.

Laar, A.K., Adler, A.J., Kotoh, A.M. et al. Health system challenges to hypertension and related non-communicable diseases prevention and treatment: perspectives from Ghanaian stakeholders. BMC Health Serv Res 19, 693 (2019). https://doi.org/10.1186/s12913-019-4571-6.

Maes S, Karoly P. (2015). Self-Regulation assessment and intervention in physical health and disability: Areview. Applied Psychology: An International Review, 54(2).

Nurhasana, H., Mahmud, N. U., & Sididi, M. (2020). Gambaran Pengetahuan dan Sikap Pencegahan Kekambuhan Hipertensi pada Penderita Hipertensi di Wilayah Kerja Puskesmas Antang Kota Makassar Tahun 2020. Window of Public Health Journal, 1(2), 157–165, https://doi.org/10.33096/woph.v1i2.128, diperoleh 08 September 2022).

Palupi, Dwi Lestari Mukti. (2021). Hubungan Tingkat Pengetahuan Keluarga Tentang Diet Hipertensi Dengan Kekambuhan Hipertensi Pada Lansia di Wilayah Puskesmas Karanganyar. Jurnal Keperawatan GSH 10.1 (2021): 68-80, http://jurnal.akpergshwng.ac.id/index.php/kep/article/view/20, diperoleh 16 Mei 2023).

Priyadarsani, A. M. A., Sutresna, I. N., & Wirajaya, I. G. (2021). Hubungan Tingkat Pengetahuan Tentang Hipertensi Dengan Upaya Pencegahan Kekambuhan Hipertensi Pada Lansia. Jurnal Media Keperawatan: Politeknik Kesehatan Makassar, 12(1), 101, https://doi.org/10.32382/jmk.v12i1.2039 diperoleh 08 September, 2022).

Purwono. J (2014). Factors Associated with Commitment to Prevention of Tertiary Hypertension in Communities in the Work Area of Metro City Health Center 2014. Journal of Nursing Aisyiyah 1 (2).

Rijal, A. (2018). Hubungan Gaya Hidup Dengan Kekambuhan Hipertensi Pada Pasien Di UPTO Puskesmas Jatinangor Kabupaten Sumedang. Jurnal Media Keperawatan: Sekolah Tinggi Ilmu Kesehatan Bhakti Kencana Bandung http://repository.bku.ac.id/xmlui/handle/123456789/1700, diperoleh 09 November 2022).

Riskesdas, K. (2018). Hasil utama riset kesehata dasar (RISKESDAS). Journal of Physics A: Mathematical and Theoretical, 44(8), 1-200.

Sholiha M (2014). An Overview of Behavioral Change Opportunities with the Health Belief Model in Hypertensive Patients at the Ciputat Public Health Center, South Tangerang. Jakarta: Syarif Hidayatullah State Islamic University. Thesis.

Sembiring, K. (2021). Skripsi Literatur Review: Hubungan Pengetahuan Tentang Hipertensi Dengan Upaya Pencegahan Kekambuhan Hipertensi Pada Lansia. Media Keperawatan: Politeknik Kesehatan Jurusan Keperawatan Medan. Jurnal Media Kesehatan: Politeknik Kesehatan Medan.

Susiani, A., & Magfiroh, R. (2020). Pengaruh Pelaksanaan Kegiatan Prolanis Terhadap Kekambuhan Hipertensi. Jurnal Kesehatan, 11(1), 1–9, https://doi.org/10.38165/jk.v11i1.191, diperoleh 10 November, 2022).

Wulandari, A. (2019). Gambaran Pola Perilaku Pasien Hipertensi Dalam Menjaga Kesetabilan Tekanan Darah. Jurnal Media Keperawatan: Politeknik Kesehatan Semarang.

Zalni, R. I., & Bratha, S. D. K. (2022). Faktor yang Berhubungan dengan Kekambuhan Hipertensi di Puskesmas Lima Puluh Kota Pekanbaru. Jurnal Kesehatan Maharatu, 3(1), 64-77, https://ojs.stikestengkumaharatu.ac.id/index.php/JKM/article/view/61, diperoleh 27 November 2022).

Zoya Minasyan et.al. 2018. Health Promotion Behavior Among Hypertensive and Normotensive Armenian Americans. Journal of Social, Behavioral, and Health Sciences Volume 12, Issue 1, Pages 171–185