

HEALTH BELIEF OF HYPERTENSION PATIENTS IN ADHERANCE CONSUME DRUG IN THE WORKING AREAS OF PUSKESMAS KALIKOTES : A PHENOMENOLOGY STUDY

Istianna Nurhidayati^{1*}, Marwanti¹ & Atik Yuliati¹

¹Community Nursing Departmen Stikes Muhammadiyah Klaten

Abstract

Hypertension is called the silent killer, a disease that causes cardiovascular organ damage and undetected for years. Recurrence of hypertension experiencee by sufferers with almost the same symptoms. Recurrence will not occur frequently if the patient adheres to the treatment regimen, especially obediently taking medication. A person can adhere to taking medication based on the health trust he has. The study aims to gain in in-depth understanding of health belief of patients with hypertension in adherence to taking medication. This research used the qualitative design with phenomenological approach. The research sample consisted of seven participants using purposive sampling. The data of the research ware collected through structured in-depth interviews, observations and focus group discussion (FGD). The data were analyzed by using the Colaizzi (1978). The results obtained eighteen themes, namely the understanding of hypertension, signs of increased blood pressure, causes of increased blood pressure, how to regulate blood pressure, compliance with taking medication, obedient motivation to take medication, complications, measures to reduce risk, hypertension severity, more stable body, effects side, time, transportation, signs of the body increasing compliance, increased self-efficacy, quality service, expectations of officers, expectations of service. Conclusion The health belief of hypertension sufferers are good as a basis for making decisions or taking medication in this medication adherence.

Keywords: Health Belief; Medication Adherence; Hypertension

*) Corresponding author:

Email: istiannanurhidayati@gmail.com

1. Introduction

Hypertension is a state of systolic blood pressure of more than 140 mmHg and diastolic pressure of more than 90 mmHg in a state of enough rest / calm at two measurements with an interval of five minutes (Basic Health Research, 2018). World Health Organization (WHO, 2015) states the prevalence of hypertension sufferers in the world continues to increase every year, it is estimated that in 2025 there will be as many as 29% or 1.5 billion adults worldwide affected by hypertension and 9.4 million people will die from hypertension with complications because only 36.8% of sufferers take medication. Africa has the highest hypertension rate of 40%, followed by America with 35% and Southeast Asia with 36%.

Patients with hypertension in Indonesia in 2013 reached 25.8% and increased by 34.1% or reaching 658,201 people in 2018 with 31.3% male and 36.9% female. Patients with hypertension in Central Java in 2018 experienced an increase of 37.57% or 89,648 people before in 2017 at 12.98% with a percentage of women at 36.85% and men 31.34%

(Basic Health Research, 2018). The prevalence that occurs in Central Java shows a high incidence, Klaten Regency is included in an area that has a fairly high incidence of hypertension.

Patients with hypertension in Klaten in 2018 reached 60,122 people or 67.06% of the total data in Central Java. Kalikotes Health Center is an area in Klaten Regency which is included in the top five group with the highest hypertension sufferers for 4,621 people or 7.68% of patients including data collection of new patients (Klaten District Health Office, 2018). The increase in hypertension cases in the World, Indonesia, Central Java and Klaten District is influenced by various factors.

There are two factors that influence the occurrence of hypertension, namely the first cause that cannot be changed between sex, age and heredity, secondly the factors that can be changed include activity, lifestyle such as smoking, alcoholic drinks, obesity and so on (Pikir et al., 2015). The above theory is reinforced by research (Sapitri, Suyanto, & Butar-Butar, 2016) and Azhari (2017) which states that age,

family history, gender, physical activity, obesity and stress have a significant relationship to the incidence of hypertension.

Hypertension that has been long or develops from year to year if not handled properly will cause various impacts popping up both in terms of physical, financial and social. Control and impact of hypertension can be reduced by adherence and treatment patterns that can reduce blood pressure, one of them by consuming drugs (Chusna, Sari, Puspita, & Probosuseno, 2014). A person can adhere to a treatment regimen based on having a health belief they have.

Health trust is a measure of choice for health beliefs used by people as protective behaviors or promoting health (Pender, 2015). Decision making or someone's actions is based on conditions of vulnerability to health or the severity of the perceived disease, resulting in behavior changes by complying with or implementing a variety of suggestions suggested to give benefits. Obstacles will be felt in carrying out the suggested behavior, thus giving rise to cues to act by providing an understanding of vulnerability, gravity, the loss of treatment carried out which then raises confidence in acting to get results so that health trust arises in each person (Priyoto, 2014 ; Nies & Mcewen, 2015 ; Stanhope & Lancaster, 2016).

Patients with hypertension in the Kalikotes Community Health Center who participated in PROLANIS had a good level of adherence or 63% of hypertension sufferers were declared compliant in view of blood pressure control over the past 3 months. Compliance with hypertension sufferers at the Kalikotes Community Health Center is shown by the compliance with taking medication for patients with medication from Puskesmas or Hospitals. "What is the health belief of hypertension sufferers in taking medication compliance?"

2. Method

Qualitative research methods used in this study to be able to explore in detail and depth about the health beliefs of hypertension sufferers in taking medication. The informants chosen for this study were hypertension sufferers who took part in the Chronic Disease Control Program (PROLANIS).

Descriptive phenomenological research has four stages, namely: bracketing, intuiting, analyzing, and describing. Bracketing is the researcher who gets rid of their entire experience to fully understand the experiences of the participants (Moustakas, 1994; Creswell, 2015).

The population in this study was hypertension sufferers who participated in the Chronic Disease Control Program (PROLANIS) activity at the Kalikotes Health Center as many as 19 people. Researchers searched for data on hypertension sufferers from key informants namely PROLANIS program holders at the Kalikotes Health Center. The

sampling technique used in this study was purposive sampling. Purposive sampling is a technique of taking participants by selecting people based on eligibility criteria that is that can specifically give an understanding of research problems and phenomena in studies (Creswell, 2015). Determination of participants in this study using the inclusion criteria, namely 1) hypertension sufferers who participated in chronic disease management program activities (PROLANIS), 2) hypertension patients who controlled blood pressure during the last three months, 3) hypertension sufferers who were declared compliant using a modified questionnaire measurement of adherence to take anti-hypertensive medication, 4) hypertension sufferers who have suffered ≥ 2 years, 5) hypertension sufferers who can communicate verbally well. The researchers found 12 people with hypertension as potential participants and then the researchers came to the prospective participants one by one to explain the research of 12 participants and two prospective participants were used for in-depth interview trials. Participants agreed that it was marked by the availability of participants to sign and fill out informed consent and then a time contract was made to collect data and process data until the data was saturated with the 7th participant.

The study was conducted in the working area of the Kalikotes Community Health Center in January to August 2019. Dharma (2011) ; Polit and Beck (2014) describe four main principles in the ethics of nursing research, namely Respect for human dignity, Respect for privacy and confidentiality (about privacy and confidentiality of subjects), Balancing harm and benefits (Calculating benefits and disadvantages inflicted), Justice (Principles of Justice). Researchers need voice recording aids, interview guidance, focus group discussion (FGD) guidelines and field notes.

The researcher analyzes the data by listening to the results of the interview record and then transcribing the interview for all conversations, then doing step coding 1 removes data that does not give meaning to health beliefs, step coding 2 gives a sign with the color of each goal related to health trust, step coding 3 separates answers and keywords that answer the nine research aims of each participant, step 4 coding categorizes the same words and meanings to be used as research themes, step coding 5 determines the research themes totaling 18 themes. Determination of the validity of the data required inspection techniques, there are four criteria used according to Lincoln dan Guba (1985) in Creswell (2015), namely: *Credibility*, *Dependability*, *Confirmability*, *Transferability*.

3. Results and Discussion

This study found 18 themes: Theme 1: Definition of hypertension.

Submission of participants' perceptions is expressed based on experience during suffering from hypertension so that understanding of hypertension can

be identified. Participants revealed the notion of hypertension on blood pressure check results.

"Hypertension, high blood pressure, blood pressure checked 150 an upload" ... (P1, P3, P4)

"When the disease is checked, the tension is high, 150/100 is already high" ... (P5, P7)

This is in accordance with The Eighth Joint National Committee Report (JNC VIII) in Huether and Mccance (2017) which states hypertension in systolic blood pressure ≥ 140 mmHg and diastolic pressure ≥ 90 mmHg.

Theme 2: Signs of increased blood pressure.

Perceptions of hypertensive people identified in the theme are illustrated in: head signs, signs of vision impairment, body signs, and signs of extremity.

"Dizzy kliyeng-kliyeng" ... (P1)

"Ki's eyes are a bit fuzzy to see" ... (P4)

"The neck, the nape of the neck are whiny" ... (P2, P3, P4, P5)

"You are lemes, step by step like your body there is no energy" ... (P5, P6, P7)

"Often feel the ankles of the hands and feet" ... (P7)

Black and Hawks (2014) support the results of this study with the theory that headaches or persistent dizziness, fatigue, blurred vision, neck and neck pain are signs of an increase in blood pressure that is often experienced by people with hypertension when relapses.

Theme 3: Causes of increased blood pressure.

The perception of hypertension sufferers about the disease related to the cause of increased blood pressure includes physical activity, diet, rest patterns, and stress.

"Usually when you get tired of work" ... (P1, P2, P3, P5)

"Salty foods, coconut milk, offal, goat meat, fried foods, salted eggs, the main thing that has a lot of fat and salt" ... (P3, P5)

"Lack of sleep" ... (P2, P4, P5)

"A lot of thoughts" ... (P5)

The results of this study are in accordance with the research of Syahrini, Susanto, & Udiyono (2012) stating that excessive intake of sodium can cause disruption of blood sodium balance. Setiawan, Maulana, & Widyaningrum (2018) support the results of this study which explain the poor quality of sleep can affect the increase in blood pressure. Huether and Mccance (2017) explained that stress easily affects hypertensive patients because stress activates the sympathetic nervous system which can increase cardiac output and systemic vascular resistance.

Theme 4: How to regulate blood pressure.

Participants mentioned how to regulate blood pressure can be done with health checks, drug therapy, and lifestyle changes.

"Take medication no change go to the doctor" ... (P2)

"First take blood pressure-lowering drugs and then take a break" ... (P1, P3, P4, P6, P7)

"Eating cucumbers, star fruit, melons, pisan to help reduce tension" ... (P3, P6, P7)

"Not thinking about things that make up the burden of the mind" ... (P5)

This is in line with the research of Arifin, Weta, and Ratnawati (2016) states that control can be done to cut blood pressure by making healthy lifestyle changes such as: regular exercise, reducing sodium salt intake, fat, lots of fruit and vegetable consumption, and creating a relaxed atmosphere. The results of the study of Tarigan, Lubis, and Syarifah (2018) describe respondents who have a positive attitude towards hypertension diet (food intake regulation) and hypertension diet food regulation has a 10 times chance of implementing a hypertension diet well.

Theme 5: Compliance with medication.

The results of this study identified the criteria for hypertension sufferers said to be obedient in taking antihypertensive medication as a treatment effort. Compliance was conveyed by participants with medication behavior according to the rules.

"The main thing is to routinely take medicine every day according to the doctor's recommendation, if it's once a day yes, one time, two, two, two ... "(P1, P2, P4, P7)

"Well, those who regularly take tension medicine" ... (P3)

This is consistent with the theory in Koziar, Erb, Berman, and Snyder (2010) that adherence is the level of personal behavior in carrying out therapeutic recommendations or rules in the treatment given by health workers such as taking medication. The results of this study are in line with the research of Najimi and Mostafavi (2016) stating that the attitude of hypertension sufferers about drugs has an important role in taking medication, consuming antihypertensive drugs is believed to control hypertension and cut anxiety about the severity of the disease.

Compliance expressed by participants in accordance with the observations made by researchers. Observation results obtained by true participants in taking antihypertensive drugs by looking at the type of drug, the drug is consumed on time and with the right dose of one tablet once a day. Participants take medication in accordance with the advice of health workers and patients do not consume drugs other than drugs from doctors. The results of this study are in line with the research of Najimi and Mostafavi (2016) stating that the attitude of hypertension sufferers about drugs has an important role in taking medication, consuming antihypertensive drugs is believed to control hypertension and cut anxiety about the severity of the disease.

Theme 6: Motivate to take medication.

The results of this study identified adherence to taking medication for hypertensive patients by looking at compliant motivation to take medication delivered in hopes of being healthy and in controlled tension.

"Yes, encouragement from oneself to be healthy" ...
(P5, P7)

"Tensine is stable, 130, 140 so don't even get high"
... (P1)

This is consistent with the theory in Kozier, Erb, Berman, and Snyder (2010) showed factors that influence individual compliance including client motivation to recover. Sukma, Widjanarko, and Riyanti (2018) supported the results of this study by expressing the good belief and motivation possessed by participants in conducting hypertension therapy affecting their behavior in adherence.

Theme 7: Complications.

The results of this study illustrate the perceived vulnerability of hypertension sufferers from all participants stating the complications of hypertension including stroke, kidney and heart.

"Hypertension can later stroke" ... (P1, P2)

"If you have high blood pressure, you can get other diseases such as stroke, heart and kidney" ... (P4, P5, P6, P7)

The results of this study are in line with Nuraini (2015) research stating that the increase in hypertension can cause complications such as coronary heart disease, heart failure, stroke, chronic kidney failure and retinopathy.

Theme 8: Actions to cut risk.

This illustrates the meaning and significance of the perceived vulnerability of hypertension sufferers after knowing the risk of complications from hypertension, then participants show actions to reduce risks which include maintaining diet, exercise, physical activity and positive thinking.

"Healthy lifestyle, for example, drink lots of water, eat salted zinc like salted fish, salted eggs like that"
... (P1, P6, P7)

"Take the medication routinely as directed by the doctor" ... (P2, P4)

"Exercise is a form of a healthy lifestyle" ... (P3)

"That activity needs to be done every day" ... (P4)

"His mind is always positive" ... (P5)

The results of this study are consistent with the theory in Priyoto (2014) conveying that the greater the risk a person feels, the greater the likelihood of engaging in behavior to reduce risk. Najimi & Mostafavi (2016) research stated that the patient's attitude about the disease plays an important role in the treatment, the patient's trust is considered as the basis for making decisions.

Theme 9: Signs of severity of hypertension.

The results of this study illustrate the severity felt by the participants expressed through the sign severity of hypertension which includes body aches, headaches, and visual impairment.

"The body when held hurts all" ... (P2)

"Dizzy throbbing pain, sirah e" ... (P5)

"The sight before the eyes as if there are flickers" ...
(P6)

The results of this study are in line with research by Wati (2018) that the signs of increased blood pressure experienced by patients with hypertension when relapses are dizziness, severe headache, whiny nape, pegel and blurred vision.

Theme 10: More stable body's

The results of this study illustrate the perceived benefits perceived by hypertension sufferers as reflected in decreased physical complaints and blood pressure examination results.

"The body tastes better and cheese is rarely" ... (P2, P3, P6)

"You can do more activities even if you are not heavy" ... (P4)

"The tension is stable now around 120, 130 like that" ... (P5, P6, P7)

Perceptions of behavior change will be influenced by each belief about the benefits that will be felt from various suggestions or suggestions given to cut the threat or risk of disease (Pender, 2015).

Theme 11: Side effects.

The results of this study illustrate the perceived obstacles that are the side effects of drugs felt after taking medication such as nausea and fear of being immune to drugs.

"Feeling nauseous but not vomiting after taking medicine" ... (P1)

"Fear of body becoming immune from taking medication continuously" ... (P3)

Almasdy, Sari, Ilahi, and Kurniasih (2018) research supports this research which states the side effects of antihypertensive drugs consumed by hypertensive patients in the form of nausea.

Theme 12: Time.

The results of this study illustrate the time in taking medication and queuing up for taking drugs are obstacles that he felt during routine medication.

"Taking the medicine is delayed from his hours because of busy activity" ... (P4)

"Long queues of drugs while in control at the hospital" ... (P2, P7)

This is in line with research by Soesanto, Istiarti, and Pietojo (2010) that long waiting times in health services made respondents feel they wasted time and left their work affecting adherence to taking medication.

Theme 13: Transportation.

The results of this study illustrate the obstacles experienced in treatment that is in the transportation used.

"PROLANIS too late because they have to take school children and only ride bicycle ontel" ... (P2)

"If you want to go for treatment, you have to ask the dealer to be troublesome" ... (P3, P6)

Fithria and Isnaini (2014) conveyed that transportation is a supporting cause for utilizing health services, the availability of transportation facilities will give convenience in getting health services.

Theme 14: Body signs that increase compliance.

The results of this study illustrate the signs to act in this case looking for health services in the form of a sense of body including a whiny bad head, dizzy head, stiff joints, difficulty walking and difficulty sleeping.

"The body feels no body ravings feel sore, all hurts" ... (P2, P3, P5)

"whiny nape" ... (P2)

"The head feels like going to break dizzy around and around ..." (P7)

"The road is not strong enough to have to climb or grip the wall" ... (P6)

"It's hard to take a break if you feel that your weight has increased" ... (P3)

The research results of Arifin et al. (2016) and Damayantie, Heryani, and Muazir (2018) support the results of this study that the pain perception of hypertensive sufferers influences the treatment behavior of both positive and negative perceptions.

Theme 15: Self-efficacy increases.

The results of this study illustrate the confidence possessed by participants after taking medication regularly with increased self-efficacy.

"After regularly taking the drug, the body of drugs is felt, my grandmother used blood pressure until 200, now it is well 140, can get regular activities at home" ... (P1)

"After routinely taking medicine there are activities in the community that can still be actively involved such as helping neighbors who have a celebration, hadroh, recitation, PKK event" ... (P2, P4, P5, P7)

This is in line with research Fitriana and Harysko (2014) states that it is found that the majority of respondents have high motivation, this is illustrated by the want in the respondents themselves to be able to undergo treatment, the motivation from within the respondents themselves to be healthy and can have a good activity.

Theme 16: Quality service.

The results of this study illustrate the form of service that is felt during treatment in the form of friendliness, patience in serving officers, providing health education and drug rules explained.

"Health workers serve friendly, sincere, sincere-sumeh" ... (P3, P4, P5, P6)

"In terms of service to patients is good" ... (P1, P5, P6)

"Often giving counseling or direction so that makes the treatment or come we are happy and increase patient knowledge" ... (P2, P7)

"When administering drugs were told the rules of drinking" ... (P7)

The results of this study are in line with the research of Maharani and Syafrandi (2017) stating that the role of health workers is enough to play a role, health workers have provided information about the illnesses suffered by respondents and a control schedule returned to check pressure.

Theme 17: Expectations for officers.

The results of this study illustrate the expectations of participants in health services in this case related to the expectations addressed to health workers.

"Staying patient in serving patients who come from children to parents" ... (P1, P2)

"The hope is still well served, the service that is already good is maintained" ... (P5, P7)

This is in line with research by Fithria and Isnaini (2014) stating that the interaction of health workers with hypertension sufferers is very closely related to medication adherence because with good communication will increase the intimacy between doctors or nurses with hypertension sufferers, which makes hypertensive sufferers get their own satisfaction when seeking treatment and tends to for regular treatment. The results of this study are supported by Green's theory in Notoatmodjo (2010) which states that knowledge comes from experience can be obtained with information obtained and will affect attitudes.

Theme 18: Hope in service.

The results of this study illustrate the health services expected by participants in the future to be even better in serving patients and improving the health of existing communities.

"There is a free health check-up with counseling so that people understand about maintaining their health" ... (P1)

"It is better for health workers to have a soccer ball effort in the community by giving direct observation" ... (P3)

High risk of developing hypertension in low education, probably due to lack of knowledge of health and difficult or slow to receive information provided so that it has an impact on healthy behavior or lifestyle (Anggara & Prayitno, 2013).

4. CONCLUSION

The perception of hypertension sufferers of the disease interpreted by the understanding of hypertension, signs of increased blood pressure, causes of increased blood pressure, and how to regulate blood pressure as seen from the results of blood pressure checks, head signs, signs of visual impairment, signs of bodies, signs of extremities, physical activity, diet, lack of rest, stress, health checks, drug therapy and lifestyle changes.

Compliance with taking antihypertensive medication patients with hypertension interpreted by adhering to taking medication and compliant motivation to take medication which interpreted from drinking drug as recommended, hope for health and blood pressure control.

The meaning and meaning of vulnerability perceived by hypertension sufferers is meant by hypertension problems and actions to cut the risk interpreted from hypertension complications which include susceptibility to stroke, heart and kidney

disease, efforts taken include maintaining diet, exercise, physical activity, and neutral thoughts .

The meaning and meaning of the severity of hypertension sufferers interpreted as a sign of the severity of hypertension which interpreted from bodily pain, headache, and visual impairment in the body, pain, headache, headache, severe eyes, and eye sight.

The meaning and meaning of the perceived benefits in patients with hypertension interpreted as more stable signs of decreased physical complaints and blood pressure examination results described by a healthy body, comfortable activities, stable tension.

The meaning and meaning of barriers that are felt in patients with hypertension interpreted and elaborated with side effects, time, transportation.

The meaning and meaning of the signs that are felt for immediate treatment of hypertension sufferers interpreted with body signs that increase compliance translated from body sense including body discomfort, scaly neck, headache, stiff joints, stiff joints, difficulty walking, and difficulty sleeping. hypertensive patients identified increased self-efficacy.

The meaning and meaning of self-confidence in patients with hypertension interpreted by increased self-efficacy translated from better body conditions and actively take part in community activities.

Expectations of hypertension sufferers in health services interpreted by quality service, expectations for officers and expectations for services explained from attitudes in serving, health service providers, health counseling, prescribed drug rules, patient, free, and patient visits.

5. References

- Almasdy, D., Sari, Y. O., Ilahi, H. T., & Kurniasih, N. (2018). Development of Drug Side Effects Monitoring Instruments: Drug Side Effects in Ischemic Stroke Patients. *Journal of Pharmaceutical & Clinical Science*, 5(3), 225–232.
- Anggara, F. H. D., & Prayitno, N. (2013). Factors Related to Blood Pressure in Telaga Murni Health Center, West Cikarang in 2012. *Scientific Journal of Health*, 5(1), 20–25. Retrieved from <http://eprints.poltekkesjogja.ac.id/517/1/Awal.pdf>
- Arifin, M. H. B. M., Weta, I. W., & Ratnawati, N. L. K. A. (2016). Factors Related to the Occurrence of Hypertension in the Elderly Group in the Work Area of the UPT Puskesmas Petang I Bandung Regency in 2016. *Medika, E-Jurnal*, 5(7). Retrieved from <http://ojs.unud.ac.id/index.php/eum>
- Azhari, M. H. (2017). Factors Related to the Occurrence of Hypertension in Makrayu Health Center, Ilir Barat II District, Palembang. *Aisyah Journal of Health Sciences*, 2(1), 23–30. Retrieved from <http://ejournal.stikesaisyah.ac.id/index.php/eja>
- Basic Health Research. (2018). *RISKESDAS 2018*. Retrieved from <http://www.depkes.go.id/resources/download/inf-o-terkini/hasil-riskesdas-2018.pdf>
- Black, J. M., & Hawks, J. H. (2014). *Nursing Medical Surgery*. singapura: Elsevier.
- Chusna, N., Sari, Puspita, I., & Probosuseno. (2014). Effects of Compliance and Treatment Patterns on Therapeutic Results of Hypertension Patients. *Journal of Pharmacy Management and Services*, 2946. Retrieved from <http://jurnal.ugm.ac.id/jmpf/article/view/29457/17601>
- Creswell, J. W. (2015). *Qualitative Research and Research Design. Issue 3*. Jakarta: Pustaka Belajar.
- Damayantie, N., Heryani, E., & Muazir. (2018). Factors that influence the behavior of hypertension management by sufferers in the Work Area of Sekernan Ilir Health Center, Muaro Jambi Regency in 2018. *Nurse and Midwifery Journal*, 224–232. <https://doi.org/10.26699/jnk.v5i3.ART.p224>
- Dharma, K. K. (2011). *Nursing Research Methodology*. Jakarta: Trans Info Media.
- Fithria, & Isnaini, M. (2014). Factors Associated with Compliance with Medication in Patients with Hypertension in Sumber Sehat Clinic, Indrapuri Aceh Besar. *Idea Nursing Journal*, (2). Retrieved from <http://www.jurnal.unsyiah.ac.id/INJ/article/view/6734>
- Fitrina, Y., & Harysko, R. O. (2014). *RELATIONSHIP CHARACTERISTICS AND MOTIVATION OF PATIENTS OF HYPERTENSION ON COMPLIANCE IN TALKING TREATMENT IN PUSKESMAS TALANG, SOLOK DISTRICT, 2014*. Retrieved from <http://www.jurnal.unsyiah.ac.id/INJ/article/view/6734>
- Huether, S. E., & Mccance, K. L. (2017). *Textbook of Pathophysiology. Issue 6*. Singapura: Elsevier.
- Klaten District Health Office. (2018). *Klaten District Health Profile 2018*. Klaten.
- Kozier, B., Erb, G., Berman, A., & Snyder, S. J. (2010). *Nursing Fundamentals*. Jakarta: EGC.
- Maharani, R., & Syafrandi, D. P. (2017). Factors That Are Related to Blood Pressure Control Behavior in Patients with Hypertension in Harapan Raya Health Center, Pekanbaru City. *Journal of Health Communication*, 3(5), 165–171. Retrieved from [h?ps://doi.org/10.25311/keskom.Vol3.Iss5.122](https://doi.org/10.25311/keskom.Vol3.Iss5.122)
- Najimi, A., & Mostafavi, F. (2016). Patient's Beliefs about Adherence to Medication toward Hypertension: a Qualitative Study. *International Journal of Advanced Biotechnology and Research*, 7(3), 1555–1561. Retrieved from <https://pdfs.semanticscholar.org/1a7f/1cd0bf5e71ccd7068c9a7f496ae6a0975df5.pdf>

- Nies, M. A., & McEwen, M. (2015). *Community and Family Health Nursing*. Singapore: Elsevier.
- Notoatmodjo, S. (2010). *Health Promotion and Application*. Jakarta: Rineka Cipta.
- Nuraini, B. (2015). *Risk Factors of Hypertension*. 4(5), 10–19. Retrieved from <http://jke.kedokteran.unila.ac.id/index.php/majority/article/view/602/606>
- Pender, N. J. (2015). *Health Promotion in Nursing Practice. Seventh Edition*. USA: Pearson.
- Pikir, B. S., Aminuddin, M., Subagjo, A., Dharmadjati, B. B., Suryawan, G. R., & Eko, J. N. (2015). *Comprehensive Hypertension Management*. Surabaya: Pusat Penerbitan dan Percetakan Unair (AUP).
- Polit, D. F., & Beck, C. T. (2014). *Essential of Nursing Research Appraising Evidence for Nursing Practice*. China: Wolters Kluwer Health.
- Priyoto. (2014). *Theory of Attitudes and Behavior in Health*. Yogyakarta: Nuha Medika.
- Sapitri, N., Suyanto, & Butar-Butar, W. R. (2016). Risk Factor Analysis of the Occurrence of Hypertension in Communities on the Siak River Coastal District of Rumbai, Pekanbaru City. *Jom FK*, 3(1), 1–15. Retrieved from <https://jom.unri.ac.id/index.php/JOMFDOK/article/view/9177/8842>
- Setiawan, A., Maulana, D., & Widyaningrum, R. (2018). Relationship between sleep quality and elderly blood pressure sufferers of essential hypertension in upt the elderly social service house Budi Dharma Yogyakarta. *Journal of Madani Medika Health*, 9(1).
- Soesanto, E., Istiarti, T., & Petojo, H. (2010). Hypertension Elderly Practices in Controlling Personal Health in the Mranggen Demak Health Center Area. *Indonesian Health Promotion Journal*, 5(2). Retrieved from <https://ejournal.undip.ac.id/index.php/jpki/article/viewFile/18697/13074>
- Stanhope, M., & Lancaster, J. (2016). *Public Health Nursing: Population Centered Health Care in The Community*. United States of America: Elsevier.
- Sukma, A. N., Widjanarko, B., & Riyanti, E. (2018). FACTORS RELATED TO COMPLIANCE WITH HYPERTENSION PATIENTS IN DOING THERAPY IN PANDANARAN PUSANMAS, SEMARANG CITY. *Journal of Public Health*, 6, 687–695.
- Syahriani, E. N., Susanto, H. S., & Udiyono, A. (2012). PRIMARY HIPERTENS RISK FACTORS IN TLOGOSARI PUSKESMAS KULON SEMARANG CITY. *Journal of Public Health*, 1. Retrieved from <http://ejournals1.undip.ac.id/index.php/jkm>
- Tarigan, A. R., Lubis, Z., & Syarifah. (2018). FAMILY SUPPORT FOR HIPERTENSIONAL DIETS IN HULU VILLAGE, PANCUR BATU DISTRICT, 2016. *Journal of Health*, 11(1), 9–17. Retrieved from <http://journal.uinalauddin.ac.id/index.php/kesehatan/article/view/5107>
- Wati, candra sulisty. (2018). *DIFFERENCES IN GIVING HYPERTENSION BUKLET AND FAMILY FACILITIES IN CHANGES OF BLOOD EATING AND PRESSURE BLOOD HYPERTENSION PATIENTS IN GONDOKUSUMAN 1 PUSKESMAS 1*. Retrieved from <http://eprints.poltekkesjogja.ac.id/517/1/Awal.pdf>
- WHO. (2015). *A Global Brief on Hypertension*. Geneva. Retrieved from http://www.who.int/cardiovascular_diseases/publications/global_brief_hypertension/en/