

Factors Influencing the Health Service Center Application for Hypertension Patients in Humbang Hasundutan Regency

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ABSTRACT

Based on data from the Humbang Hasundutan Regency Health Office in 2019 there were 53,004 cases of hypertension and of the total sufferers only 33 percent used health services. This study aims to analyze the factors that influence the utilization of health services at Public Health Center for hypertension sufferers in Humbang Hasundutan Regency. This research is a quantitative analytic survey research with a cross sectional design. The sample used was 110 people with the sampling technique using accidental sampling. Data analysis used univariate and bivariate analysis. The results showed that the related variables were Knowledge ($p=0.005$), Ownership of Health Insurance ($p=0.001$) and Need for Services ($p=0.001$) with Utilization of Health Services at Health Centers for Hypertension Patients in Humbang Hasundutan Regency. Suggestions for this study are that health workers are expected to be able to go into the field or to the community directly to conduct counseling and outreach to the community that is more intensive regarding information about non-communicable diseases (PTM), especially in this case hypertension, so that people know more about disease prevention and control hypertension. So that people have more good knowledge to improve public health status. Public Health Center is expected to become a health facility that can help and improve health services both in terms of providing services to people with hypertension and in terms of infrastructure and drug availability, so that people can more easily understand the flow and procedures for utilizing health services.

KEYWORDS

health services; utilization of health services; hypertension

INTRODUCTION

Hypertension could be a non-communicable infection which is one of the most causes of passing within the world. Hypertension may be a wellbeing issue since there are no signs or indications, so it is regularly called the quiet executioner. Hypertension may be a risk to open wellbeing since of its potential to cause complications such as stroke, coronary heart illness, and kidney disappointment. Hypertension is characterized by the result about of blood weight estimations appearing a systolic weight of > 140 mmHg and a diastolic weight of > 90 mmHg (Ministry of Health, 2019).

Hypertension is currently still a big challenge that must be faced by Indonesia, which occurs in primary health services. Hypertension in Indonesia has also increased from year to year. This is supported by the 2018 Basic Health Research (RISKESDAS) data that the prevalence of hypertension has increased from 2013 to 2018. The prevalence of

hypertension in Indonesia based on the results of national measurements in the population aged over 18 years in 2013 was 25.8 percent and experienced an increase in 2018 to 34.1 percent. In addition, the group of women has a greater proportion of hypertension than men. In 2013 the proportion of hypertension was 22.80 percent for men and 28.80 percent for women. Then in 2018 it increased, the proportion of male hypertension became 31.34 percent and 36.85 percent for women (Kementerian Kesehatan RI, 2019). The increase in the prevalence of hypertension also occurs in almost all provinces in Indonesia, including North Sumatra Province.

The prevalence of hypertension in North Sumatra seems to have increased. This can be seen from the 2019 North Sumatra Health Profile data showing an increase from 2018 to 2019. In 2018 hypertension cases were 24.9 percent and increased to 31.97 percent in 2019. The prevalence of hypertension who received more health services dominant in men, with the percentage of men at 32.28 percent higher than that of women at 31.6 percent. The prevalence of hypertension increases with age (Dinas Kesehatan Provinsi Sumatera Utara, 2019). An increase in cases of hypertension in North Sumatra has also occurred in almost every Regency /city, one of which is Humbang Hasundutan Regency.

Based on data from the 2019 Humbang Hasundutan Regency Health Office, the morbidity rate due to hypertension has tended to increase over the last 3 years (Dinas Kesehatan Provinsi Sumatera Utara, 2020). In 2017 there were 39,946 cases of hypertension, an increase in 2017 to 44,556 people, and in 2019 it rose again to 53,004 people. Judging from the cases of hypertension in 2019, only 33 percent of the total sufferers received health services. This is not in accordance with the strategic design of the P2PTM¹ Directorate in 2020 where the target of achieving integrated services for non-communicable diseases (Pandu PTM)² is at least 50 percent of the total sufferers (Dinas Kesehatan Kabupaten Humbang Hasundutan, 2019).

Humbang Hasundutan Regency is an area with a highland geographic location. The majority of people in mountainous areas work as farmers. People who work as farmers spend most of their day in the fields, after returning from work they spend more time watching TV. This can be one of the factors that causes people to lack utilization of health service facilities as primary facilities in preventive and curative efforts such as routine checking of blood pressure in people with hypertension. In addition, the majority of Humbang Hasundutan people are Toba Batak. One of the characteristics of Toba Batak tribe, which has become a habit that is difficult to change, is liking salty or high-salt foods. This behavior is one of the triggers for hypertension and as a result, cases of hypertension increase from year to year (Dinas Kesehatan Kabupaten Humbang Hasundutan, 2020).

There are numerous variables that can impact the utilization of wellbeing administrations in individuals with hypertension. Age is one of the components that can influence the utilization of wellbeing administrations. Moderately more seasoned age is more vulnerable to inveterate illnesses such as hypertension, coronary heart infection or cancer. Sickness due to age factor causes a high utilization rate of health services. In addition, economic status also shows the degree of family welfare. Established family income allows individuals to care more about health needs. The higher the level of a person's pay, the higher the level of utilization of wellbeing offices that are way better and more total in terms of offices and framework.

¹ P2PTM is an abbreviation of Indonesia term namely “Pencegahan dan Pengendalian Penyakit Tidak Menular” means Prevention and Control of Non-Communicable Diseases

² Pandu PTM is an approach to PTM (*Penyakit Tidak Menular* or Non-Communicable Diseases) risk factors for early detection and integrated monitoring of PTM risk factors implemented through Posbindu PTM activities in the community.

As is the case with access to health services, where access to health services can also be a factor that affects the condition of people with hypertension, for example the distance between where they live and health services. Where, a distance of more than 30 minutes increases the risk of hypertension by two times (Ningsih, 2017). It can be seen from the research which said that the distance between homes that are close to health services makes it easier for respondents to seek treatment so that they take medication more regularly according to doctor's recommendations. So, it can be said that accessibility is very influential in the utilization of health services (Erdiwan, 2020).

In addition, ownership of health insurance also affects hypertension sufferers to seek treatment. Health insurance is an important factor for today's society, where by having health insurance the community feels more protected if one day they are attacked by a disease because by having health insurance they can be freed from medical expenses (Djunawan, 2018). This is corroborated by research conducted by the distance to the Public Health Center, insurance ownership, and socioeconomic influences affect the motivation of hypertension sufferers to seek treatment at the Public Health Center.

Utilization of health services is very important for people with hypertension to maintain and improve their health. This is because hypertension is a disease that requires individuals to regularly check their blood pressure and take medication regularly. Hypertension makes individuals undergo lifelong medication because the disease cannot be cured, but it can be controlled. If not controlled, this will lead to an increased risk of heart disease, kidney failure, stroke or even death.

Everyone has different needs for health services. This can be influenced by the person's perception. Where a person's wrong perception of health and illness will lead to underutilization of existing health facilities (Agustina, 2019). If someone knows the correct perception of pain, he will always take advantage of health services and not wait for the illness to get worse first, so he will immediately go to health services. And if someone has the wrong perception of pain, he will postpone the need to get health services so he usually tries to self-medicate by buying medicine at stalls, drinking traditional herbal medicine or waiting for a serious illness to take advantage of health services.

Hypertension is one of the non-communicable diseases which is included in the health service targets set by Humbang Hasundutan Regency Health Office. The program that has been set is Posbindu PTM³. Even though the program has been running, there are still obstacles such as the activeness of sufferers to take part in health services. This program is still not getting optimal results because the Public Health Center staff cannot guarantee whether the hypertension sufferer is truly obedient to take his medicine regularly. In addition, the large number of cases of hypertension is due to the fact that many patients do not regularly control their blood pressure due to the long distance to the Public Health Center. There were also patients who felt well, only after having symptoms such as headaches and tingling did the patients come to the Public Health Center for treatment.

Cases of hypertension in Humbang Hasundutan Regency tend to increase from year to year. The increase in cases occurred because there were things that became obstacles in utilizing health services for people with hypertension in maintaining and improving health. So the formulation of the problem in this study is what factors influence the Utilization of Health Services at the Community Health Center for Hypertension Sufferers in Humbang Hasundutan Regency.

³ Posbindu PTM is monitoring activities and early detection of risk factors for integrated non-communicable diseases as well as disturbances due to accidents and acts of domestic violence managed by the community through integrated coaching.

Based on the foundation that has been depicted, it is vital to conduct investigate on the variables that impact the Utilization of Wellbeing Administrations at the Wellbeing Center for Hypertension Sufferers in Humbang Hasundutan Area.

RESEARCH METHODS

This research is a quantitative study with a Cross Sectional Study design (Singarimbun, Masri and Sofian Effendi, 2008).. The population in this study was from 3 Public Health Center, namely Saitnihuta Health Center, Hutapaung Health Center and Baktiraja Health Center, the number of people suffering from hypertension based on data from Humbang Hasundutan Regency Office was 14,586 people. The sample size in this study was 110 people.

Primary data is obtained directly from the source and given to researchers (Arikunto, 2010). Primary data collection is carried out using a questionnaire containing questions and answers that have been provided.

Secondary data was obtained to support the research results. Secondary data was obtained from the Humbang Hasundutan Regency Health Office (Arikunto, 2006). .

Dependent Variable

1. Utilization of Health Services
2. Hypertension Sufferers:
 - Capitalize
 - Not Utilizing

Independent Variable

1. Knowledge:
 - Fine
 - Less Good
2. Access to Health Services:
 - Fine
 - Less Good
3. Ownership of health insurance:
 - There is
 - None
4. Need for service:
 - Requires
 - No Need

RESULTS AND DISCUSSION

Table 1. Frequency Distribution of Univariate Result

Variabel	n=127	Persentase (%)
Knowledge		
Good	25	22,7
Medium	52	47,3
Not good	33	30
Access To Health Services		
Good	26	23,6

Medium	44	40
Not good	40	36,4
Ownership of Health Insurance		
Exist	92	83,6
Not Exist	18	16,4
The Need for Service		
Need	45	40,9
Less Need	57	51,8
No Need	8	7,3
Utilization of Health Services for Hypertension Sufferers		
Take advantage of Yankes ⁴	43	39
Less Utilizing Yankes	39	35,5
Not Utilizing Yankes	28	25,5

In the Knowledge variable, it was obtained that 52 people (47.3%) had moderate knowledge about the use of health services at Public Health Center for hypertension sufferers, then 25 people (22.7%) had good knowledge about the utilization of health services for sufferer hypertension. While the remaining 33 people (30%) had poor knowledge. Based on the variable Access to Health Services, 26 people (23.6%) classified as good access to health services, 44 people (40%) classified as moderate, and the remaining 40 people (36.4%) classified as poor. Based on Health Insurance Ownership, it was obtained that the majority of respondents had health insurance, totaling 92 people (83.6%), while the respondents who did not have health insurance were 18 people (16.4%). Based on the Need for Service variable, it was found that most of the respondents did not need service, namely as many as 57 people (51.8%), then as many as 45 people (40.9%) needed service, the remaining 8 people (7.3%) did not need service. Based on the variable Utilization of Health Services for Hypertension Sufferers, it was found that the majority of respondents used health services, namely as many as 43 people (39.1%), then as many as 39 people (35.5%) did not utilize health services, the remaining 28 people (25.5%)) did not take advantage of health services.

Table 2. Results of Bivariate Analysis

Variable	Utilization of Health Services for Hypertension Sufferers						p. value
	Utilizing		Not Utilizing		Total		
	n	%	n	%	n	%	
Knowledge							
Good	16	37,2	9	13,4	25	22,7	0,005
Not good	27	62,8	58	86,6	85	77,3	
Access To Health Services							
Good	6	14	20	29,9	26	23,6	0,068
Not good	37	86	47	70,1	84	76,4	

⁴ Yankes is based on the Regulation of the Minister of Health of the Republic of Indonesia Number 5 of 2022 concerning the Organization and Work Procedure of the Ministry of Health, the Directorate General of Health Services (Ditjen Yankes) has the task of carrying out the formulation and implementation of policies in the health service sector.

Ownership of Health Insurance							
There is	34	79,1	32	47,8	66	60	0,001
There isn't any	9	20,9	35	52,2	44	40	
The Need for Service							
Need	30	69,8	14	20,9	44	40	0,001
No Need	13	30,2	53	79,1	66	60	

The results of the chi-square test explain about the relation among of them show that of the 4 independent variables, there are 3 (three) variables that are significantly related to the Utilization of Health Services for Hypertension Sufferers, namely Knowledge (p-value = 0.005), Ownership of Health Insurance (p-value = 0.001), Need for Service (p-value = 0.001). This is indicated by the sig-p values of the 3 variables whose p.value is less than 0.05.

Relationship between Knowledge and Utilization of Health Services for Hypertension Sufferers

In this study there is a relationship between knowledge and the utilization of health services in health centers for people with hypertension with a p-value = 0.005.

Most of the respondents are less knowledgeable due to low education. It is also caused by the lack of information regarding the utilization of health services related to the prevention and control of non-communicable diseases including hypertension. This is due to the lack of counseling or outreach by health workers. However, respondents who had less or sufficient education also had good knowledge because they had received information about non-communicable disease control from counseling, outreach, posters and from the news (Nuraeni, E, 2019).

People who have higher education tend to regard health as an important matter, so they tend to utilize wellbeing administrations more than individuals who have moo instruction. This can be since people with higher instruction discover it simpler to get and retain data, whereas individuals with moo instruction are still impacted by their environment. The level of instruction had by the community does not essentially ensure that they will utilize health services, but or maybe information and data that impact a individual to form choices in utilizing wellbeing administrations. Research concerning the relationship between instruction and knowledge of BPJS⁵ participants in Rowosari Village and the utilization of health services at Rowosari Health Center, shows that there is a relationship between education level and health service utilization with a value of $p=0.017 < \alpha(0.05)$.

Education is the result of "knowing" that occurs after someone senses something. Knowledge (cognitive) may be an exceptionally imperative space for the arrangement of one's activities (Andersen, R,1968). Knowledge is obtained from experience, both own experience and the experience of others. Residents who already know the importance of using the Public Health Center for themselves are influenced by the great quality of benefit from wellbeing specialists in terms of giving wellbeing data or counseling to the community. The higher a person's knowledge allows that person to apply his knowledge and information obtained to others.

⁵ BPJS is an abbreviation of Indonesia term namely "*Badan Penyelenggara Jaminan Sosial*" means legal entity established to administer the social security program

Relationship between Access to Health Services and Utilization of Health Services for Hypertension Sufferers

The results of this study obtained respondents who stated that access to health services was good and did not utilize health services as many as 20 (29.9%) respondents and respondents who stated access to health services were not good and did not utilize health services as many as 47 (70.1%) respondents .

The p-value = 0.068 demonstrates that there's a critical relationship between respondents who expressed that get to to health administrations is nice and get to to wellbeing administrations isn't great with the utilization of wellbeing administrations for individuals with hypertension. Respondents who expressed that openness was simple had a 6.641 times lower chance of not utilizing wellbeing administrations at the Talu Wellbeing Center compared to respondents who expressed openness was troublesome. This investigate is in line with the investigate of (Irawan and Ainy 2018) and which state that there's a critical relationship between openness and utilization of wellbeing administrations. The theory of wellbeing benefit utility clarifies that a person's crave to utilize wellbeing administrations is additionally decided by supporting variables, one of which is the separate or availability of wellbeing administrations. The trouble of access and the long remove between the put of home and wellbeing administrations makes a individual unwilling to require advantage of wellbeing administrations coupled with the inaccessibility of open transportation to go to the Public Health Center.

Relationship between Proprietorship of Wellbeing Protections and Utilization of Wellbeing Administrations for Hypertension Sufferers

The outcomes about of this think about show that as numerous as 34 (79.1%) respondents who have wellbeing protections utilize wellbeing administrations and as numerous as 9 (20.9%) respondents don't have wellbeing protections and still utilize wellbeing administrations. The result of p-value = 0.001 means that there's a critical relationship between respondents who have health protections and respondents who don't have wellbeing protections in utilizing wellbeing administrations. Respondents who have wellbeing protections have a 4.132 times higher chance of utilizing wellbeing administrations compared to respondents who don't have wellbeing protections.

The outcomes about of this think about are in line with (Dafriani, P., & Prima, B., 2019) and (Fausiah, F., 2019). which state that there's a significant relationship between having wellbeing protections and utilization of wellbeing administrations. Wellbeing protections has the good thing about liberating participants from the trouble of giving cash stores, wellbeing costs can be observed and the accessibility of wellbeing information. Wellbeing protections includes an exceptionally critical part in keeping up open wellbeing, particularly when wiped out, where the community's require for wellbeing administrations will be met and wellbeing financing is more secure with wellbeing protections. Subsequently wellbeing protections influences the utilization of wellbeing administrations essentially.

Guarantees to cover health costs can come from insurance, both private insurance, social insurances and guarantees/subsidies from the Government such as Jamkesmas (*Jaminan Kesehatan Masyarakat/ Public Health Insurance*) program. Including social insurance in this case are *Askes*⁶ for civil servants, *Asabri*⁷ for the TNI-Polri (Indonesian National Armed

⁶ Askes is Health insurance is a type of insurance product that specifically guarantees the health or care costs of the insurance members if they fall ill or have an accident

⁷ Asabri is a State-Owned Enterprise engaged in Social Insurance and special pension payments for Soldiers, Police Members and Civil Servants of the Ministry of Defense of the Republic of Indonesia.

Force-Indonesian National Police) and *Jamsostek*⁸ for private employees. There is a guarantee Service fee payers are one of the causes of increased utilization of health services.

With regard to financing, it appears that there's a critical relationship between possession of wellbeing insurance/security and utilization of wellbeing administrations at the Public Health Center. Family units that have insurance/health protections have the opportunity 2.018 times (95% CI: 1.32-3.08) to require advantage of Public Health Center health administrations. There's a ensure payers of wellbeing care costs, counting wellbeing protections scope, is one of the reasons for expanding get to to or utilization of administrations.

The Relationship between the Need for Services and the Utilization of Health Services for Hypertension Sufferers

In this study, it was found that 53 (79.1%) respondents stated that they did not need services and did not utilize health services and as many as 14 (20.9%) stated that they needed services and did not utilize health services. The statistical test results obtained $p\text{-value} = <.001$, meaning that there is a significant relationship between respondents who know about perceptions of pain and respondents who do not know about perceptions of pain in utilizing health services. Respondents who said they knew about perceptions of pain had 8.736 times lower chances of not utilizing health services than respondents who said they did not know about perceptions of pain.

This inquire about is in line with investigate (Rabbaniyah, F., & Nadjib, M, 2019) (Fatimah, 2019), and (Riyanto, S., & Hatmawan, A. A. 2020). which state that there's a critical relationship between the recognition of ailment and the utilization of health administrations within the working region of the Talu Wellbeing Center. Discernment is the act of compiling, recognizing and deciphering data in arrange to supply an diagram and understanding of something. What is considered healthy for one person may not be perceived as healthy by another, due to differences in perception. Objectively a person is affected by a disease, and one of the functions of his organs is disturbed, but he does not feel pain. Conversely, a person feels pain but the results of a clinical examination show no evidence that he is sick

According to Andersen, R. M. (1968), people's perception of the concept of health and illness is closely related to behavior seeking treatment. The healthy-ill point of view will affect a person's use of health service facilities or not. In this study, respondents who had the correct knowledge of pain perception would always take advantage of health services and would not wait for their illness to get worse and seek health services. In contrast, respondents who had the wrong perception of illness would delay the need to obtain health services, who tried to self-medicate with over-the-counter medicines or waited for the illness to get worse before taking advantage of health services. Chairman of the Dinamika Umat Foundation, Hasan Basri Tanjung, said that there are two perceptions in dealing with pain in Islam, namely pain as a goal and pain as a punishment. Pain can occur as a result of human activity itself. For example, someone still eats food, even though he knows that food is dangerous and can affect health.

⁸ Jamsostek is an abbreviation from Indonesia term "Jaminan Sosila dan Tenaga Kerja" or Labor social security is a form of protection provided to workers and their families against various labor market risks.

CONCLUSIONS

1. There could be a relationship between information and utilization of wellbeing administrations at the Public Health Center for hypertension sufferers in Humbang Hasundutan Locale.
2. There is no relationship between access to health services and utilization of health services at the Public Health Center for hypertension sufferers in Humbang Hasundutan Regency.
3. There could be a relationship between the ownership of health insurance and the utilization of health services at the Public Health Center for hypertension sufferers in Humbang Hasundutan Regency.
4. There could be a relationship between the need for services and the utilization of health services in health centers for people with hypertension in Humbang Hasundutan Regency.

Suggestion

1. Health workers are expected to be able to go directly to the field or to the community to carry out more intensive counseling and outreach to the community regarding information about non-communicable diseases (PTM), especially in this case hypertension, so that people know more about the prevention and control of hypertension. So that people have more good knowledge to improve public health status. The Public Health Center is expected to become a health facility that can help and improve health services both in terms of providing services to people with hypertension and in terms of infrastructure and drug availability, so that people can more easily understand the flow and procedures for utilizing health services.
2. It is hoped that the community will participate and be proactive in every socialization, education and health promotion program so that they can increase knowledge about disease prevention and control which can be done to improve personal and family health status.

REFERENCES

- Agustina, S. (2019). Persepsi Sakit, Pengetahuan dan Kepuasan dengan Pemanfaatan Pelayanan Kesehatan di Public Health Center. *HIGEIA (Journal of Public Health Research and Development)*, 3(2), 274-285.
- Andersen, R. (1968). A behavioral model of families' use of health services. *A behavioral model of families' use of health services*, 1(25).
- Andersen, R. (1968). *Families' use Of Health Services: A Behavioral Model Of Predisposing, Enabling, And Need Components*. Indian; Purdue University.
- Arikunto, S. (2010). *Metode penelitian*. Jakarta: Rineka Cipta.
- Arikunto, Suharsimi. (2006). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Dafriani, P., & Prima, B. (2019). *Pendekatan Herbal Dalam Mengatasi Hipertensi*. Padang; CV Berkah Prima.
- Dinas Kesehatan Kabupaten Humbang Hasundutan. (2020). *Profil Kesehatan Kabupaten Humbang Hasundutan Tahun 2019 (Profil yang tidak dipublikasikan)*. Humbang Hasundutan; Dinas Kesehatan Kabupaten Humbang Hasundutan.
- Dinas Kesehatan Provinsi Sumatera Utara. (2020). *Profil Kesehatan Sumatera Utara Tahun 2019*. Accessed from [http://dinkes.sumutprov.go.id/common/upload/d9/93344c3888193ac75711f1fae30e9b_Buku persen20Profil persen20Kesehatan persen20 persen202019.pdf](http://dinkes.sumutprov.go.id/common/upload/d9/93344c3888193ac75711f1fae30e9b_Buku%20persen20Profil%20Kesehatan%20persen20persen202019.pdf)

- Djunawan, A. (2018). Pengaruh Jaminan Kesehatan Terhadap Pemanfaatan Pelayanan Kesehatan Primer Di Perkotaan Indonesia: Adilkah Bagi Masyarakat Miskin?. *Berita Kedokteran Masyarakat*, 5(12), 5. <https://doi.org/10.22146/bkm.37474>
- Erdiwan, E., Sinaga, J. P., & Sinambela, M. (2020). Analisis Faktor Yang Berhubungan Dengan Pemanfaatan Pelayanan Kesehatan Pada Peserta Bpjs Kesehatan Di RSUD Simeulue Tahun 2018. *Jurnal Kajian Kesehatan Masyarakat*, 1(2), 42-48.
- Fatimah, S. (2019). Faktor Pemanfaatan Pelayanan Kesehatan di Public Health Center. *HIGEIA: Journal of Public Health Research and Development*, 3(1), 121-131.
- Fausiah, F. (2019). Utilization of Healthcare Services to General Patient At Inpatient Unit of Anutapura General Hospital, Palu City. *Preventif: Jurnal Kesehatan Masyarakat*, 10(1), 35-44.
- Irawan, B. A. M. B. A. N. G., & Ainy, A. (2018). Analisis Faktor-Faktor yang Berhubungan dengan Pemanfaatan Pelayanan Kesehatan pada Peserta JKN di Wilayah Kerja Public Health Center Payakabung, Kabupaten Ogan Ilir. *Jurnal Ilmu Kesehat Masy*, 9(3).
- Kementerian Kesehatan RI. (2019). Laporan Riskesdas 2018. Jakarta: Badan Litbangkes, Kemenkes
- Kementerian Kesehatan RI. (2019). Pusat Data dan Informasi. Accesessed from <https://pusdatin.kemkes.go.id/resources/download/pusdatin/infodatin/infodatin-hipertensi-si-pembunuh-senyap.pdf>
- Ningsih, D. L. R., & Indriani, I. (2017). Faktor-faktor yang berhubungan dengan kejadian hipertensi pada pekerja sektor informal di pasar beringharjo kota Yogyakarta. Yogyakarta: Doctoral dissertation, Universitas' Aisyiyah Yogyakarta.
- Nuraeni, E. (2019). Hubungan Usia Dan Jenis Kelamin Beresiko Dengan Kejadian Hipertensi Di Klinik X Kota Tangerang. *Jurnal JKFT*, 4(1), 1-6.
- Rabbaniyah, F., & Nadjib, M. (2019). Analisis Sosial Ekonomi dalam Pemanfaatan Fasilitas Kesehatan untuk Berobat Jalan di Provinsi Jawa Barat: Analisis Data Susenas Tahun 2017. *Jurnal MKMI*, 15(1), 73-80.
- Riyanto, S., & Hatmawan, A. A. (2020). Metode riset penelitian kuantitatif penelitian di bidang manajemen, teknik, pendidikan dan eksperimen. Deepublish.
- Singarimbun, Masri., and Sofian, Effendi., (2008). Metode Penelitian Survei, Jakarta: LPES.