Original Article

Analysis Of Health Services Utilization In Patients With Hypertension In The Working Area Of Puskesmas Antang, Makassar City

Ringgo Larengsi [1] , Muhammad Alwi Arifin [2] , Darmawansyah [2] , Indar [2] , Syamsuar [3] Muhammad Kardi Rais [4,] Anwar Mallongi[5]

[1] Master Program in Health Administration and Policy, Faculty of Public Health, Universitas Hasanuddin, Indonesia
[2] Department of Health Administration and Policy, Faculty of Public Health, Universitas Hasanuddin, Indonesia
[3,5] Department of Environmental Health, Faculty of Public Health, Universitas Hasanuddin, Indonesia
[4] Master Study Program in Health Administration and Policy, Sekolah Tinggi Ilmu Kesehatan Baramulih Pinrang, Indonesia

Correspondence Address:
Ringo Larengsi
South Halmahera, North Maluku, Indonesia Email: ringgolarengsi@gmail.com
DOI: 10.47750/pnr.2023.14.S03.02

Abstract

At the beginning of the Covid-19 pandemic, the service health experience declines healthcare that happens in almost all types of health service in Indonesia, both provided by primary and advanced healthcare facilities. This study aims to analyze factors of utilization service health in patients with hypertension in the Community Health Centers (Puskesmas) Antang.

This study uses a quantitative method with a cross-sectional approach. The total sample of as many as 160 participants with the technique taking purposive sampling, whatever data analysis using chi-square and multiple logistic regression test. This study is conducted at the Puskesmas Antang, Makassar City.

Research results are known there is a relationship between age (p=0.000), health insurance (p=0.000), and the perception of health-sick (p=0.001) to utilization service health in patients with hypertension. As for the type gender (p=0.298), an education level (p=0.839), occupation (p=0.249), length of suffering (p=0.686), and time wait service (p=0.703), there is no relationship to utilization service health in patients with hypertension. Based on multiple logistic regression test results, health insurance is the most influential factor to utilization service health in patients with hypertension, with a value of B=2.151 (95% CI 3.425-21.564). The expected results of the study are to become the source reference to influencing factors of healthcare utilization in patients with hypertension.

Keywords: Healthcare Utilization, Hypertension

INTRODUCTION

At the beginning of the Covid-19 pandemic, healthcare experienced a decline in the health service that happens in almost all types of healthcare in Indonesia, both provided by primary and advanced healthcare facilities. The decline in access to health services during the Covid-19 pandemic can be seen in the percentage of health service coverage that occurred in almost all health services. The health service with the most drastic reduction was primary-age child

healthcare. Public health services for productive and elderly-age healthcare also experienced a decline. The decline in productive age healthcare is mainly caused by the temporary suspension of health services by health facilities, especially the primary/first-level health facilities. This happens because most facilities have not made some adjustments to the implementation of health services. Meanwhile, the reduced coverage of elderly-age healthcare is also caused by the vulnerability of this group to exposure to the Covid-19. Healthcare for degenerative diseases like hypertension and diabetes mellitus also experienced a decline. The Covid-19 pandemic has also impacted the provision of services for people with Severe Mental Disorders or ODGJB (Orang dengan Gangguan Jiwa Berat). The decline in access to health services began to occur when the government announced that Indonesia was also experiencing cases of the Covid-19 pandemic. Access to health services is decreasing along with the increase in cases (Aeni , 2021).

Factors that identify and potentially influence somebody to utilize healthcare according to Lawrence Green in Notoatmodjo (2012) are (1) predisposing factors, which include knowledge, attitudes, beliefs, principles, values, traditions, and others), (2) enabling factors, which include the availability of facilities and infrastructure or healthcare facility for the community, (3) reinforcing factors, which include the attitude of the healthcare officers. According to Andersen (1975), determinant factors in the utilization of healthcare are defined into three categories: (1) predisposing characteristics such as gender, age, education, occupation, beliefs/culture, and others, (2) enabling characteristics (Notoatmodjo, 2012).

Patients with hypertension need care for a long period, so they are very involved with healthcare services. According to Satria (2020), this Covid-19 can attack almost whole circles of age, where a group of elderly-age and those with a chronic history of the disease have the risk of catching more bad complications from the disease. Patients with congenital or comorbid diseases are known to underlie the acceleration and severity of Covid symptoms, often even causing death. Research has shown that a large number of Covid-19 patients who died were related to comorbid factors (Satria, 2020).

Based on a submitted report (Indonesia, 2021), It is stated that hypertension as the most dangerous disease during the Covid-19 pandemic. The reason is that the latest data on Covid-19 patients show hypertension becomes the highest comorbid by 50.1 percent and can exacerbate the condition of Covid-19 patients. this is because the patients with hypertension have a low immunity which can make it easier for Covid-19 to infect them. Studies reveal that people with hypertension experience more heavy symptoms when infected because it could cause heart complications, stroke, and failure kidney (Latifin, Purwanto, & Wahyuni, 2020).

In January – August 2021, the total hypertension case in the Puskesmas Antang, Makassar city was 1,851 visitors or 54.6% of the total amount case disease no contagious, where amount of hypertension cases on August 2021 period, there were 268 cases confirmed as Covid-19 in the Manggala sub-district as their working area reached 5,032 cases as on August 28, 2021 (PKM Antang, 2021). Based on the description of where this covid-19 pandemic has impacted the sector health impact on patients with hypertension in need of care for long period and inconsistent to do healthcare service. Therefore, the researchers attracted in researching about Analysis of Health Services Utilization for Patients with Hypertension in the Working Area of Puskesmas Antang, Makassar City.

MATERIALS AND METHODS

This study uses a quantitative design with Cross-sectional design, which will be carried out in the work area of Puskesmas Antang located at Jl. Antang Raya No. 43 Antang, Manggala District, Makassar City, in April 2022. There are 160 respondents out of 268 sample population involved in this research, and purposive sampling was used as a technique. The sample criteria in this research are patients with hypertension who live in the work area of Puskesmas Antang, and willing to become a research respondent.

RESULTS

1. Univariate analysis

Table 4.1. Distribution of Respondents Characteristics to Patients with Hypertension in Puskesmas Antang, Makasar.

Characteristics	Frequency (n)	Percentage (%)
Age		
20-30 Years	19	11.9
31-40 Years	58	36.2
>40 Years	83	51.9
Gender		
Man	73	45.6
Woman	87	54.4
Education Level		
Did not school yet	14	8.8
SD	18	11.3
JUNIOR HIGH SCHOOL	44	27.4
SENIOR HIGH SCHOOL	71	44.4
College _	13	8.1
Occupation		
Not Working	12	7.5
Housewife (IRT)	17	10.6
Self-employed	37	23.1
Laborer / Peasant	43	26.9
Employee Private	37	23.1
PNS/TNI/POLRI/Lecturer	14	8.8

Source: Primary Data 2022

Based on the data in table 4.1, it is known that most of the respondents are >40 years old or 51.9% of the total respondents. The sex of the respondents was dominated by women with a total of 54.5%. The education level of the respondents was mostly high school, which was 44.4%. Meanwhile for their work, most of the respondents were laborers/farmers with a total of 26.9%, and entrepreneurs and private sector employees with a total of 23.1%.

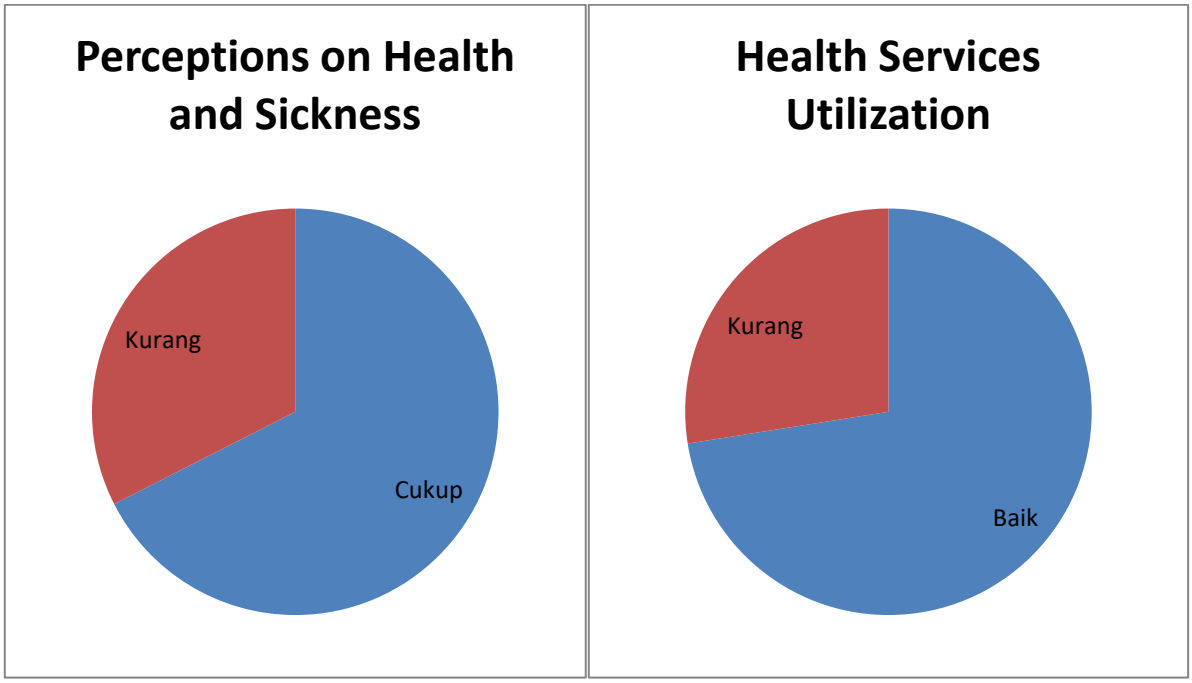
Table 4.2. Characteristics Distribution of Enabling Respondents in Patients with Hypertension at Puskesmas Antang, Makasar.

Characteristics	Frequency (n)	Percentage (%)
Long Suffered		
<1 Year	31	19.3
1-5 Years	86	53.8
>5 Years	43	26.9
Health Insurance		
Have	123	76.9
Not have	37	23.1
Waiting Time Service		
Suitable	98	61.3
Unsuitable	62	38.7

Source: Primary data 2022

The Table 4.2. shows that characteristics based on enabling factors are known to have suffered for a long time Hypertension mostly ranging from 1-5 years are 53.8%. The average health insurance status is 76.9%. and based on waiting time service most respondent state that it is suitable is 61.3%.

Table 4.3 Characteristics Distribution of Respondents Needs on Patients with Hypertension in Puskesmas Antang Makasar



Source: Primary Data 2022

Based on table 4.3 above, the characteristics according to people needs that are perceptions on health and sickness, most respondent state as good or 67%. As for utilization of health care, there are 72% of respondent state good.

2. Bivariate analysis

Table 4.4 Analysis of Predisposition Factor to Health Services Utilization to Patients with Hypertension in Puskesmas Antang Makasar

Variable	Utilization				Total		P –Value
	Good		Less				
	n	%	n	%	n	%	
Age							
20-30 Years	5	4.3	14	31.8	19	11.9	0.000
31-40 Years	43	37.1	15	34.1	58	36.3	
>40 Years	68	58.6	15	34.1	83	51.9	
Gender							
Man	50	43.1	23	52.3	73	45.6	0.298
Woman	66	56.9	21	47.7	87	54.4	
Education Level							
Not in school yet	9	7.8	5	11.4	14	8.8	0839
Elementary School	12	10.3	6	13.6	18	11.3	
Junior High School	34	29.3	10	22.7	44	27.5	
Senior High School	51	44.0	20	45.5	71	44.4	
College/University	10	8.6	3	6.8	13	8.1	
Employment Status							

Not Working	8	6.9	4	9.1	12	7.5	0.246
Housewife (IRT)	11	9.5	6	13.6	17	10.6	
Self-employed	29	25.0	8	18.2	37	23.1	
Laborer / Farmer	34	29.3	9	20.5	43	26.9	
Private Employee	22	19.0	15	34.1	37	23.1	
PNS/TNI/ POLRI/Lecturer	12	10.3	2	4.5	14	8.8	

Source: Primary data 2022

The Table 4.4. shows that the analysis of predisposition factor use chi on age level p=0.000, gender p=0.298, education level p=0.839, and employment status p=0.246. Therefore, It could be concluded that the predisposition and age factors have connection to utilization health service in patients with hypertension at the Puskesmas Antang.

Table 4.5 Analysis Enabling factor against Health Services Utilization to Patients with Hypertension in Puskesmas Antang, Makasar.

Variable	Utilization				Total		P –Value
	Good		Less				
	n	%	n	%	n	%	
Long Suffering							
<1 Year	23	19.8	8	18.2	31	19.4	0.686
1-5 Years	60	51.7	26	59.1	86	53.8	
>5 Years	33	28.4	10	22.7	43	26.9	
Health Insurance							
Have	103	88.8	20	45.5	123	76.9	0.000
Not have	13	11.2	24	54.5	37	23.1	
Service Waiting Time							
Suitable	70	60.3	28	63.6	98	61.3	0.703
Unsuitable	46	39.7	16	36.4	62	38.7	

Source: Primary Data 2022

Based on Table 4.5. it is known that enabling factors such as long suffering has a value of p=0.686 or has no relationship to utilization of health services, the second is ownership of health insurance with a value of p=0.000 or there is a relationship to utilization of health services, and the last is time waiting for service has a value of p=0.703 or there is no relationship to the utilization of health services.

Table 4.6 Analysis of Needs Factor to Health Services Utilization to Patients with Hypertension in Puskesmas Antang Makasar

Variable	Utilization				Total		P –Value
	Good		Less				
	n	%	n	%	n	%	
Healthy and Sick Perception							
Enough							
Not enough	87	75.0	21	47.7	108	67.5	0.001
	29	25.0	23	52.3	52	32.5	

Source: Primary Data 2022

Based on the data on Table 4.6. It is known that needs factor or the healthy and sick perception have value p=0.001, or there is connection among healthy and sick perception to service health utilization in patients with hypertension in the Puskesmas Antang .

3. Multivariate Analysis

Table 4.7 Multivariate analysis for multiple Regression Logistics on Analysis of Health Services Utilization to Patients with Hypertension in Puskesmas Antang, Makasar.

Variable	B	Wald	sign	Exp(B)	95% CI
Age	-1,036	11.133	0.001	0.355	0.193-0.652
Health Insurance	2.151	21006	0.000	8,594	3425-21564
Healthy and Sick Perception	0.674	2,365	0.124	1963	0831-4635

Source: Primary data 2022

Based on data table 4.7 above is known ownership health insurance is the most influential factor to service health utilization in patients with Hypertension in Puskemas Antang with value B = 2.151 (95% CI 3.425-21.564). Age level with value B = -1.036 (95% CI 0.193-0.652), and healthy and sick perception with value B = 0.674 (95% CI 0.831-4.635).

DISCUSSION

Andersen Model (1974) describes that health believe system model is health belief model. In this model, there are three main factors in service health utilization: predisposition characteristics), enabling characteristics, and need characteristics which later will be explained in results of this study (Notoatmodjo , 2012):

1. Predisposition Factor

The results of statistical tests using chi square are known that the age factor has value of p=0.000 (p>0.005) Therefore, it could be concluded that there is meaningful relationship among age to utilization healthcare on patients with hypertension in the Puskesmas Antang. This research result is in line with the research conducted by Irawan (2018), where age factor has some connection to utilization healthcare of the participants national health insurance in the working area of Puskesmas Payakabung with value p = 0.0001.

Age is one of the predisposing or internal factors that influence a person's behavior to make use of health services. The older a person is, the person's immune system will decrease and in old age the degree of disease experienced will be more severe, the tendency for the elderly to need more health services to cure the disease. The elderly will often visit health services, although there are several groups not in the elderly age category who often use health services (Irawan, 2018).

The statistical test results using chi square also found that the gender factor had a yield value of p = 0.298 so that gender did not have a significant relationship to the utilization of health services in patients with hypertension at the Puskesmas Antang, both male and female had a tendency to in utilizing existing health services.

Gender can influence the decision to seek treatment. This is because women need special health services, such as pregnancy health services and specific diseases that require women to utilize health services. Another study states that gender does not affect people's ability to take advantage of health services, both men and women have the same risk of utilizing health services at the Puskesmas and behavioral factors or local habits that can differentiate whether a person will utilize health services or not (Irawan , 2018).

The results of other studies also showed that the level of education had no significant relationship with the utilization of health services in hypertensive patients with a value of p=0.839. This result is also in line with research conducted by Basith (2020), that a person's level of education or knowledge does not affect the utilization of health services at the Puskesmas.

Education can affect a person's intellectual power in deciding something, including the use of the Puskesmas. Lack of education causes intellectual power to be limited so that behavior is still related to the surrounding circumstances, whereas someone with a higher level of education has a broader view of something and is easier to

accept new ideas or ways of life (Wardan, 2017). Education is an effort to persuade or teach people to want to take action (practice) to treat problems and to improve their health. Changes or actions to maintain and improve health produced by health education are based on knowledge and awareness through the learning process (Notoatmodjo, 2012).

The results of the study found that employment status had no relationship with the utilization of health services for hypertensive patients at the Puskesmas Antang with a value of p = 0.246. The results of this study are in line with research conducted by Irawan (2018), where the employment status factor has no relationship to the utilization of health services for participants in the national health insurance in the working area of the Puskesmas Payakabung with a value of p = 0.119.

Work is related to the occurrence of a person's illness where the onset of illness can be through several ways, namely the presence of environmental factors that can directly cause illness, stressful work situations, and the presence or absence of physical activity at work. This condition allows people who are already working to have a greater tendency to utilize health services, both medically and non-medically (Yuliana, 2012).

2. Enabling Factor

Statistical test results using chi square on the enabling factor found that the long-suffering factor had a value of p=0.686 or had no relationship to health service utilization, health insurance ownership p=0.000 or there was a relationship to health service utilization, and service waiting time p=0.703 or not There is a relationship with the utilization of health services.

Even though in this study the length of suffering did not have a significant relationship, a history of diseases such as hypertension is a disease that requires treatment for a long time. So that hypertensive patients require regular health services (Hildayanti, 2021).

In this study, ownership of health insurance has a relationship with the utilization of health services, where according to Masita (2015), health insurance is significantly related to consumption of services. The benefits of health insurance are that it frees participants from the difficulty of providing cash funds, health costs can be monitored, and health data is available. Perceptions of family health insurance that can be utilized at the Puskesmas, for example: Askes, Jamkesmas, BPJS. Health insurance has a very important role in maintaining public health, especially when sick so that the community's need for health services will be met and health financing will be more secure.

As for the results of this study on the waiting time factor in health services, it is known that the value of p = 0.703 or there is no relationship to the utilization of health services. This result contradicts research conducted by Basith (2020), that easy access to use health services has a close relationship to the utilization of health services at the Puskesmas with a value of p=0.000.

Waiting time is the total time spent by a patient waiting for an outpatient service starting from the first time the patient registers at the registration desk until the patient is examined by a doctor, and the time that elapses between the appointment time that has been set until the patient gets an evaluation. Long waiting times will reduce patient satisfaction and after patients feel dissatisfied, they will seek other better health services (David et.al, 2014).

3. Needs Factor

The results of the statistical test using chi square on perceptions of health and illness were p = 0.001, or there was a relationship between perceptions of health and illness on the utilization of health services in hypertensive patients at the Puskesmas Antang. The results of this study are in line with research conducted by Agustina (2019), that the perception of illness has a significant relationship to the utilization of health services at the Puskesmas p=0.012.

People tend to seek treatment at health services when they really can't do anything about it. People's perception that is wrong in responding to illness causes less utilization of existing health facilities even though the Puskesmas is in the area where they live. Wrong perception of illness will result in low utilization of health in Puskesmas (Irawan, 2018)

4. Most related factors to Health Services Utilization.

Multivariate test results using multiple logistic regression tests is known ownership of collateral health is the most influential factor to service health utilization with value B=2.151 (95% CI 3.425-21.564). Health insurance is

associated with service consumption significantly. The benefits of health insurance are that it frees participants from the difficulty of providing cash funds, health costs can be monitored, and health data is available. Perceptions of family health insurance that can be utilized at the Puskesmas, for example: Askes, Jamkesmas, BPJS. Health insurance has a very important role in maintaining public health, especially when sick so that the community's need for health services will be met and health financing will be more secure (Masita et.al, 2015).

According to Agustina (2019), the function of the National Health Insurance (JKN) is to provide comprehensive individual health service benefits which include health improvement services (promotive), disease prevention services (preventive), treatment and care (curative) and health restoration (rehabilitative), including drugs and consumable medical materials according to the necessary medical needs.

This is closely related to the respondent's knowledge of health insurance itself. Respondents' good knowledge of JKN can influence respondents' actions as JKN participants in utilizing health services. Vice versa, respondents with less knowledge about JKN will affect the lack of utilization of health services in accordance with the flow of services so that the JKN implementation program is less effective (Agustina, 2019).

BIBLIOGRAPHY

1. Aeni, N. 2021. The Covid-19 Pandemic: Health, Economic and Social Impacts. Journal R&D Vol. 17 No. 1 Month June 2021 Pgs 17-34
2. Agustina, S. (2019). Perception Pain, Knowledge and Satisfaction with Utilization Health Services at Health Centers. HIGEIA 3 (2) (2019)
3. Basith, ZA and Praameswari, GN (2020). Utilization Health Services at Health Centers. HIGEIA 4 (1) (2020).
4. David., Hariyanti, T., & Widayanti, E. (2013). Connection Lateness Arrival Doctor to Satisfaction Patients in Outpatient Installation. Journal Medical Brawijaya, 28(1): 31-35
5. Hildayanti, AN, Batara, AS, and Alwi, MK (2021). Determinants of Ability to Pay and Willingness To Pay Dues Participant Mandiri Health BPJS in the District Takabonerate (Study Cases in the District Island, Selayar). Journal of Public Health: Volume 11, Number 01, June 2021.
6. Irawan, B. and Ainy, A. (2018). Analysis Related Factors _ With Utilization Health Services to Participants National Health Insurance in Work Areas Public health center Payakabung, District Ogan Ilir. Journal Public Health Sciences, November 2018, 9(3):189-197
7. Latifin, K., Purwanto, S., & Wahyuni, D. (2020). Application Nursing Complementary "Cupping" In Control Hypertension during the COVID-19 Pandemic. Applicable Innovation of Engineering and Science Research (AVoER), 374-377.
8. Masita, A., Yuniar, N., & Lisnawaty . (2015). Related Factors _ with Utilization Health Services to Village Communities Tanailandu in the Work Area Public health center Kanapa Napa District Insight Regency Central Buton Year 2015. Journal Health Student Notoatmodjo, S. (2012). Health Promotion and Health Behavior. Jakarta: Rineka Create. Society, 1(3).
9. Satria, RMA, Tutupoho, RV, & Chalidyanto, D. (2020). Analysis Factor Risk Dead with Disease Comorbid COVID-19. Journal Nursing Silampari, 4(1), 48-55.
10. Wardana, BK, & Suharto. (2017). Relationship between Education and Knowledge BPJS participants in the Kelurahan Rowosari with Utilization Health Services at Health Centers Rowosari. Journal Medical Diponegoro, 6(1).
11. Yuliana, P., Dewi, AP, & Hasneli, Y. (2012). Connection Characteristics Family and Kind Disease to Utilization Health Services. Journal of Public Health, 2(1)