

# Analysis of hypertension health services in the working area of the Padangsidempuan City Health Office

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## ABSTRACT

The low achievement of hypertension services in the work area of the Padangsidempuan City Health Office needs to be analyzed on the level of knowledge and attitude of patients, the availability of facilities and infrastructure, and the support of health workers. System components are also analyzed to find out how input, process and output elements are in hypertension services. The research method combines quantitative and qualitative methods sequentially. A sample of 107 respondents was taken proportionally random sampling in the hypertensive population aged  $\geq 15$  years. The results of the study revealed that 42.1% of patients had low knowledge, 62.6% of patients had a negative attitude, and 57% of the support of health workers was negative. In the system analysis, (input elements) are known to be inadequate in the availability of human resources and the availability of funds. It was concluded that public attitudes, support of health workers, human resources and inadequate budgets have a relationship with low hypertension service achievement. The author's recommendations include the importance of improving public attitudes through more optimal education. The role of the government must be more decisive on the availability of human resources and consistently provide support for the hypertension program budget.

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## INTRODUCTION

Based on WHO data in 2015, around 1.13 billion people in the world have hypertension, meaning that 1 in 3 people in the world are diagnosed with hypertension. This number continues to increase every year, it is estimated that by 2025 there will be 1.5 billion people affected by hypertension, and it is estimated that every year 10.44 million people die from hypertension and its complications (Dinkes Provsu, 2022).

In Indonesia, the increase in the prevalence of hypertension is shown through data from the results of Riskesdas in 2013 to the results of Riskesdas 2018, which has increased from 25.8% to

34.1% (Kemenkes RI, 2019) (Kemenkes RI, 2022). Symptoms of hypertension include dizziness, headache, sudden bleeding from the nose, sore neck, and others (Ekasari et al., 2021). This disease is often referred to as the killer disease because sufferers do not know that they have hypertension. Patients come for treatment after organ abnormalities arise (Pradono et al., 2020). Hypertension is also known as heterogeneous group of disease because it can affect anyone from different age groups, social and economic (Depkes RI, 2006). Controlling hypertension is a public health priority, but health systems in many low- and middle-income countries are not in the right position to achieve the WHO goal of reducing cases by 25% by 2025 (Tisdale et al, 2021). The Government of Indonesia in overcoming the problem of hypertension has developed national policies and strategies for the prevention and management of hypertension including 3 main components, namely hypertension prevention, hypertension promotion and prevention, and management of hypertension services. Health efforts need to be implemented through organizational structure patterns in supporting the implementation of community-based control programs (Depkes RI, 2006). The Ministry of Health of the Republic of Indonesia has prepared a strategic plan (Renstra) as a reference for regions in determining the program of activities that must be carried out in dealing with hypertension problems. Referring to the Strategic Plan of the Ministry of Health, local governments through Regional Apparatus Organizations (OPD) prepare a Work Plan (Renja). From the Renja that was prepared, a legally valid work document was established to be implemented, namely in the form of a Budget Implementation Document (DPA) which was used as a basis for OPDs to carry out work. In the DPA of the regional apparatus/Health Office, a program and activity is stipulated to deal with hypertension problems, namely through public health efforts programs, with health service activities for hypertension patients. Hypertension health services include blood pressure measurement, education, making referrals if needed and pharmacological services when blood pressure is more than 140 mmHg. Health services for hypertensive patients is one of the indicators of basic services in the health SPM that must be fulfilled by local governments. The performance achievement of local governments in fulfilling the quality of service of each type of basic service in the health SPM must be 100% (Menkes RI, 2019).

North Sumatra Province has carried out health service activities for hypertension patients at the age of  $\geq 15$  years. The regencies/cities that have the highest success in 2021 are Medan City reaching 100%, South Nias Regency reaching 96.99%, Central Tapanuli Regency reaching 92.88%, Simalungun Regency reaching 91.46% and Deli Serdang Regency reaching 88.34% (Dinkes Provsu, 2022). Meanwhile, the city of Padangsidempuan reported in 2020 that the achievement was only 5.05%. In 2021, the achievement was only 17.95% (Dinkes Kota Padangsidempuan, 2022). In 2022, the achievement is only 31.04% (Dinas Kesehatan Kota, 2023). Basically, every stage in hypertension service activities in Padangsidempuan City has been carried out according to existing rules as should be in other regions in North Sumatra. However, it was mentioned that the low achievement of hypertension services was caused by the difficulty of inviting the community or patients to have regular health check-ups due to the busyness and activities in people's daily lives. Patient compliance to carry out treatment is considered one of the main factors of low achievement because many of them feel that they are in good condition so that there is no need for examination or treatment.

Previous research includes, research Asi et al., (2022) at the Palangkaraya City Health Center, Put forward inhibiting factors in the implementation of minimum service standards for hypertension patients, namely inadequate human resources. Research Zudi et al., (2021) about the analysis of the implementation of SPM in the health sector at the Guntur I Health Center in Demak Regency, found several inhibiting factors, namely the inadequate number of human resources. The human resources in question are health workers, administrative personnel, and computer programmers. Primiyani et al, (2019) in Solok City revealed that the factors inhibiting low achievement are low community visits, limited facilities and infrastructure, lack of socialization across programs and sectors, monitoring and evaluation that have not been optimally carried out.

Identifying problems can be done by analyzing the system, generally using input approaches (people, technology, infrastructure, policies, costs and so on), processes (stages of planning, implementation, management and performance of health services), outputs (environment, behavior, access and quality of services that will affect the final results) (Arifin et al., 2016).

## RESEARCH METHOD

This study uses a combination method combining quantitative and qualitative methods sequentially. Quantitative methods play a role in obtaining measurable quantitative data that can be descriptive, comparative, associative, comparative-associative and structural. Furthermore, qualitative methods play a role in complementing quantitative data so that the research results are more complete, more accurate and there are new findings (Ambiyar & Muharika, 2019) (Arianto, 2020). The research was carried out in the work area of the Padangsidempuan City Health Office, starting from August 2023 to December 2023. The study population is all target of hypertension patients aged  $\geq 15$  years who are in the working area of the Padangsidempuan City Health Office, which is 50,633 people spread across 10 health centers. The sample needed was 107 people obtained through calculation using the lemeshow formula. The sampling technique is carried out through probability sampling, which is proportional to the magnitude of which is very likely to be proportional to that in the population. This technique is used because the population has inhomogeneous elements and has proportional strata. The sample represents the age group  $\geq 15$  years old male and female, elementary to college education level, employment group, and income below or above the regional minimum wage. The quantitative approach is carried out through univariate analysis and bivariate analysis, with a computerized process presented in the form of a frequency distribution table. The variables studied were the implementation of hypertension health services, knowledge and attitudes of the people with hypertension, facilities and infrastructure, and support for health workers. Bivariate analysis was carried out to see the relationship between two variables, namely independent variables and dependent variables. The type of statistical test used to determine the relationship between the two variables is the chi square test with a degree of 95% confidence, where  $p < \alpha$ , and  $\alpha = 0.05$ . If  $p \leq 0.05$ , it means that there is a significant relationship between the independent variable and the dependent variable. If  $p > 0.05$  means that there is no significant relationship between the independent variable and the dependent variable. The use of the chi-square test is based on testing the research hypothesis, whether two categorical variables are interrelated. A qualitative approach is carried out to analyze a system, namely how the input, process and output elements in hypertension services are. Researchers explore various possibilities that occur from the cause of the problem. Data collection was carried out by means of triangulation, namely through face-to-face in-depth interviews with informants to explore the information needed, data was collected from several relatively similar questions to several different groups of informants. Data was also obtained from observations in the field, and document reviews at the Health Office and its network. Informants are determined through the purposive sampling method, which is the selection of informants who are considered to know the problem of hypertension services more broadly and in-depth and can be trusted as a source of data in research. There are 12 informants. The results of this study can be generalized to other areas outside of Padangsidempuan City, allowing the findings to be applied to different time periods by increasing people's participation in the research to help produce more complete results.

## RESULTS AND DISCUSSIONS

### Univariate Analysis

#### Knowledge of the Hypertension Community

**Table 1.** Frequency distribution of public knowledge levels on hypertension health services in the work area of the Padangsidempuan City Health Office

Variable	$f(n = 107)$	%
Knowledge		
Low	45	42,1
Tall	62	57,9

Almost half (42.1%) of people with hypertension have a low level of knowledge. In line with research Pratiwi et al., (2020) stated that 57.6% of hypertension patients at the GKI West Java Primary Clinic had a low level of knowledge. In the study, it is described that the level of knowledge about a disease causes a person to be aware of how to control the disease to achieve a healthy concept. Ihwatun et al., (2020) stated that the higher the level of knowledge, the more obedient to treatment. A person who has knowledge about hypertension, such as the symptoms caused, management, and prevention of hypertension, as well as knowledge about hypertension treatment will certainly prefer to control himself in order to comply with treatment and of course choose to take advantage of the health services provided.

Information was obtained by hypertension patients from the neighborhood where they live, family, friends, neighbors, mass media, both print and electronic media. In line with research Ramadani et al., (2017) revealed that some people know hypertension health services from their families and the rest from social media. Information was also obtained from health workers, but they admitted that what was conveyed was still not understood by them. On the contrary, health workers admitted that they have made efforts to increase public knowledge through the provision of information and education about hypertension, such as prevention, control, healthy lifestyle and regular health check-ups. Meiriana et al., (2019) explained that the level of knowledge and understanding of the community that is quite good in the chronic disease management program has increased the number of people who are diligent in participating in health counseling activities every month and increasing efforts to utilize the health services provided.

#### Attitude of the Hypertension Community

**Table 2.** Frequency distribution of public attitudes towards hypertension health services in the working area of the Padangsidempuan City Health Office

Variable	$f(n = 107)$	%
Attitude		
Negative	67	62,6
Positive	40	37,4

Most hypertensive patients (62.6%) have a negative attitude towards hypertension health services. In line with research Setiarini, (2018) stated that (58%) hypertension patients in the Dangung Health Center area have a negative attitude about hypertension.

The results of in-depth interviews with informants were known that the attitude of people who received anti-hypertension treatment did not comply with the advice and recommendations of health workers in consuming drugs according to schedule until they were completely due to forgetting to take medicine, feeling that their condition was healthy so that the remaining medicine did not need to run out, and there were also those who were afraid of the side effects of drugs that could damage other organs of the body and chose to consume traditional medicine. People do not carry out routine examinations either at the Puskesmas or at the Posbindu because of their daily activities, busyness, distance to service facilities, lack of companions to service facilities, and some

are not ready with the results of the examination so they decide not to come when they feel that their condition is fine. In line with research Limbong dan Agustina (2023) which revealed that people will only go to the Puskesmas if they have experienced several complaints. Submitted by Deguire et al., (2019) that in general in Canada the level of awareness of adults remains stable over time and has a high level of concern for the hypertension status they experience, good awareness determines attitudes in the use of services provided in hypertension control efforts. Consistent and disciplined intervention by health workers in improving their capacity, and also expanding the scope of screening is expected to be able to generate high awareness so that a large number of hypertension sufferers hidden among the general population are more likely to be identified, educated, which ultimately is able to improve public attitudes and increase the use of hypertension health services and also improve the achievement of activity programs Hypertension. As expressed by Tahan et al., (2024) that increasing the compliance of hypertensive patients in carrying out treatment can be influenced by education.

### Availability of Facilities and Infrastructure

**Table 3.** Frequency distribution of availability of facilities & infrastructure in hypertension health services in the working area of the Padangsidempuan City Health Office

Variable	<i>f</i> ( <i>n</i> = 107)	%
Availability of Facilities & Infrastructure		
Not available	9	8.4
Available	98	91.6

The availability of facilities and infrastructure is almost all (91.6%) available, and very few (8.4%) are in the unavailable category. Information was obtained that hypertension control manuals have been provided at the Health Center, the number is not much, it has been distributed to the community or hypertension sufferers, although not always because some people or hypertensive people are not interested. Facilities & infrastructure in each Puskesmas are adequate and function properly, such as tension meters and several other supporting tools for Posbindu activities, the implementation of recording the results of the implementation of Posbindu PTM, namely cards towards health Non-Communicable Disease Risk Factors (KMS FR-PTM) and record books, KIE (Communication, Information and Education) media such as flip sheets, leaflets and brochures. Other research also states that the facilities and infrastructure used in Prolanis services at the Jetis Health Center in Yogyakarta City are available and sufficient (Meiriana *et al.*, 2019). In line with research Utami et al., (2021) which states that the hypertension service program is inseparable from the availability of complete and well-functioning facilities and infrastructure to support the success of the program and activities. Limbong dan Agustina (2023), stated that health promotion media such as brochures, leaflets, beneners and banners have an important role in providing education to the community, especially hypertension patients.

### Healthcare Worker Support

**Table 4.** Distribution of frequency of health worker support in hypertension health services in the working area of the Padangsidempuan City Health Office

Variable	<i>f</i> ( <i>n</i> = 107)	%
Healthcare Worker Support		
Negative	61	57.0
Postif	46	43.0

Officer support is mostly negative (57%). Information from hypertension patients states that the services obtained are not satisfactory because the service is considered unfriendly, uncaring, some feel afraid of the response as if ignoring, some become distrustful of the services provided because of the negative response received and finally prefer traditional medicine.

Regarding education, some hypertension sufferers said that it is still difficult to understand the information conveyed by health workers. Information about the obstacles experienced by officers is that additional personnel are needed to carry out the program, which is one of the regional priorities. The arrogance of service and the attitude that seems to be neglectful in providing services indicates that the support of officers is still lacking. The provision of education must be easy to understand so that the message is conveyed well and is able to correct all wrong information. Submitted by Sakinah et al., (2021) that the support of health workers can be seen from their attitudes and behaviors, which are factors that strengthen or encourage people's behavior to comply with treatment and conduct routine examinations.

### Hypertension Health Services

**Table 5.** Distribution of frequency of hypertension health services in the working area of the Padangsidempuan City Health Office

Hypertension Health Services	F	%
Bad	55	51.4
Good	52	48.6
Sum	107	100.0

Most (51.4%) of hypertension health services in the work area of the Padangsidempuan City Health Office are in the poor category. Referral actions have been taken, not all hypertension sufferers must be referred, in mild conditions patients must continue to undergo examination and treatment at basic service facilities or health centers. Referral actions are only carried out to hypertension patients who are really qualified and worthy of referral, for example really bad conditions, and also conditions that have not improved after previous visits, examinations or treatments. Improving standard services has the potential to improve problems and be able to accelerate hypertension control. Its implementation includes increasing compliance and community control. The manager or person in charge of the program and the implementing officer must better understand their respective performance to improve the achievements of the.

The role of leaders also affects the health services provided. Mutual interaction between leaders and officers is expected to create good communication and be able to have an impact on ease and smoothness in the implementation of the program. As stated by Wahyuni dan Farida (2021), that improving and improving the quality of health services can affect the improvement of the quality of public health.

### Bivariate Analysis

#### The Relationship between Public Attitudes and Hypertension Health Services

The results of the analysis showed that the positive attitude of the community to get good hypertension health services was greater (62.5%) than the negative attitude (40.3%). Statistically, this difference is significant ( $p = 0.43$ ), so it can be concluded that there is a relationship between the attitude of people with hypertension and the implementation of hypertensive health services, with OR = 2.469 (CI = 1.104 - 5.523), which means that people with hypertension who have a positive attitude are 2.469 times more likely to get good hypertensive health services. In line with research Dalyoko et al., (2011) stated that there is a relationship between community attitudes and hypertension control efforts at the Elderly Posyandu in the working area of the Mojosongo Boyolali Health Center. Research conducted by Ramadhani et al., (2023) said that public awareness to conduct examinations at the Health Center is one of the obstacles in achieving the SPM target. The community does not play an active role and does not support the health programs run by the Health Center. The patient's attitude is feedback on the services he receives. A positive attitude can lead to better compliance. Interest, enthusiasm and concern in utilizing services are routinely driven by good service quality.

### **The Relationship between Health Worker Support and Hypertension Health Services**

The results of the analysis showed that positive support for getting good hypertension health services was greater (93.5%) compared to those with negative staff support (14.8%). Statistically, this difference is significant ( $p = 0.001$ ), so it can be concluded that there is a relationship between the support of health workers and the implementation of hypertension health services in the work area of the Padangsidempuan City Health Office. In line with research Sakinah et al., (2021) stated that there is a relationship between health worker support and control compliance with health services in the elderly with hypertension. He explained how the role of health workers is closely related to the treatment compliance of hypertension patients. In line with research conducted in China by Yuan et al., (2016) that there is a link between the support of health workers in primary services to the hypertension services provided. Good support is associated with positive effects in hypertensive patients, including increased knowledge related to hypertension, improved treatment, and better blood pressure control. Ramadani et al., (2017) mentioned that good service affects a person in making a decision to come to take advantage of the health services provided. Professional interaction between healthcare professionals and patients can provide feedback to patients after getting information about the diagnosis, explaining the cause of the disease and treatment procedures. The better the service provided, the more often patients visit. Good communication can improve good relations between health workers and hypertensive patients, so that patients get their own satisfaction in receiving treatment, and tend to regularly seek treatment from health services.

#### **System Analysis**

##### **Input Components**

- a. Availability of Human Resources, human resources in hypertension health services in the work area of the Padangsidempuan City Health Office are still insufficient. From the information obtained, it is known that human resources in hypertension health services have a double burden of duties and responsibilities. Based on the review of documents on the Puskesmas personnel data, it is known that all of them need IT personnel to support recording and reporting. 9 Puskesmas need public health workers to support health promotion, counseling or education. All health centers need additional nurses to support the smooth running of hypertension health services. Research Asi et al., (2022) explained that the influential indicator in the success of hypertension health service activity programs is the inadequate availability of human resources, such as nurses, midwives and doctors. Research conducted by Limbong & Agustina (2023), explained that hypertension health services need to be improved in terms of the availability of health workers. There is a need for an evaluation of the main tasks of health workers to avoid double workload in order to maximize hypertension services provided.
- b. Availability of Funds, the availability of funds is quite limited. Based on the provisions of Law No. 36 of 2009, the health budget of the district/city government is allocated a minimum of 10% of the Regional Revenue and Expenditure Budget (APBD) outside of salaries. The amount of the health budget is prioritized for the benefit of public services which is at least 2/3 of the health budget in the State Budget and Regional Budget (President of the Republic of Indonesia, 2009). From the review of documents on the Padangsidempuan City Health Profile, information was obtained that the total Padangsidempuan City Budget in 2022 was IDR 809,084,971,194,-. The budget allocation for the health sector is IDR 117,892,816,335 (14.6%) of the total APBD. Based on the DPA of the Padangsidempuan City Health Office, information was obtained that of the total APBD for the 2022 fiscal year, the total budget obtained by the Padangsidempuan City Health Office excluding salaries was IDR 30,824,316,868,-. The budget allocated to overcome the hypertension problem is IDR 1,876,087,029 with details of regional funds of IDR 364,087,640 (1.18%) and BOK funds of IDR 1,511,999,389 (4.9%) of the total existing ceiling. Allocate a budget to overcome the problem of hypertension of Rp1,876,087,029,- divided into several

activities. Cazabon et al., (2022) mentioned that the budget for programs and activities should be based on needs assessment, available resources, development of hypertension treatment guidelines and other policies. The budget must be comprehensive and able to support all activities in it, including human resources, training, and other operational costs to start and maintain the program. At the Juwiring Health Center, the budget or funds in the implementation of hypertension service activities are sourced from the BOK and also supported by village funds budgeted by the village government (Istiqomah & Indrawati, 2022). The synergy between the Puskesmas and the PTM program manager at the Health Office will provide a great opportunity to plan budget needs according to the needs of the program, considering that the budget allocation is obtained through the planning process every year.

- c. Availability of Facilities and Infrastructure, the availability of facilities and infrastructure such as guidebooks, KIE media, recording forms, tension meters exist and function properly. The results of the observation found a tension meter and several other supporting tools for the implementation of the recording of the results of the implementation of the PTM Posbindu, such as the card to be healthy for Non-Communicable Disease Risk Factors (KMS FR-PTM) and recording books, KIE (Communication, Information and Education) media such as flip sheets, leaflets and brochures. In line with research Diana et al., (2023) said that the availability of facilities and infrastructure in hypertension health services in Gunungkidul is sufficient. Facilities and infrastructure are an important part of launching a hypertension program. Medications and blood pressure monitors must be available and able to function properly. The selected blood pressure measuring device must be validated accurately, durable and affordable for the program.
- d. Metho, the method is carried out through prevention and control efforts such as the implementation of Posbindu activities every month, health promotion efforts, screening for early detection of risk factors, special protection, community control efforts and individual control efforts at the Health Center as well as recording and reporting. The results of observations in the field found that the methods carried out were carried out through screening efforts for early detection of risk factors, health measurement and examination, health promotion, treatment carried out in services at Puskesmas and Posbindu activities in villages and sub-districts. Jing et al., (2015) In his research in China, he stated that the method of improving hypertension services is carried out through two aspects, namely continuous and complete hypertension screening, and the second is to expand the population coverage for residents who rarely visit health care facilities.
- e. Policy, the policy refers to central regulations and regional policies, namely Permenkes No. 71 of 2015, Permenkes RI No. 4 of 2019, Strategic Plan of the Health Office and RKPD of Padangsidempuan City. Based on the review of documents at the Padangsidempuan City Health Office, namely in the field of disease prevention and control, it was found that the document Permenkes No. 71 of 2015, Permenkes of the Republic of Indonesia No. 4 of 2019 was found. The Health Office Strategic Plan document and also the RKPD are found in the information and public relations program subdivision. In line with research Diana et al., (2023), that the policy in hypertension health services in Gunungkidul refers to central and regional regulations, namely Permenkes Number 4 of 2019 concerning Technical Standards for the Fulfillment of Basic Service Quality in SPM in the Health Sector and Regent Regulation Number 100 of 2019 concerning Operational Guidelines for the Fulfillment of SPM in the Health Sector. Suparman (2020), stated that all officers related to the implementation of programs and activities need to know clearly about the standards and policy objectives. Public policy must have clear and measurable standards and goals to achieve all its goals, on the contrary, public policy with unclear goals will cause misunderstandings and conflicts among officers or implementers of programs and activities.

### Process Components

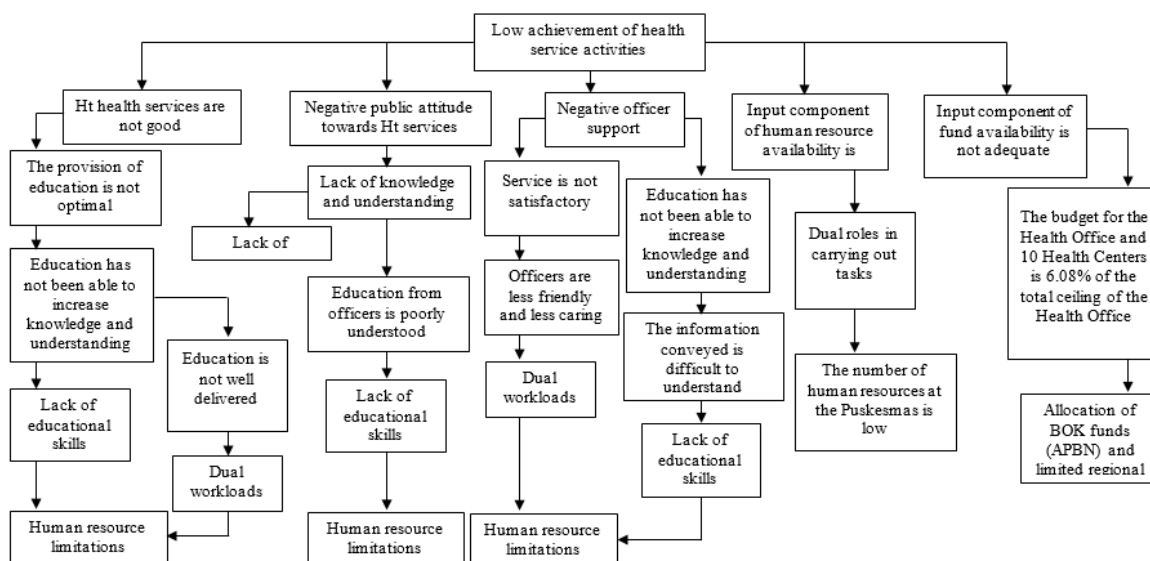
- a. Planning, in hypertension health services in the work area of the Padangsidempuan City Health Office follows the procedures provided by the central and regional governments. Based on the review of documents at the Padangsidempuan City Health Office, documents were found in the planning for the preparation of program and activity budgets, namely the RKA, RKPD and Strategic Plan documents of the Health Office. Research Maula (2020) said that the planning process for hypertension services at the Mayong I Health Center was carried out according to the minimum service standards from both the Health Center, the local Health Office and the Ministry of Health. Research Istiqomah & Indrawat (2022) explained that the planning process for hypertension health service activity programs begins with planning health human resources involved in the PTM and Prolanis Posbindu programs, planning the budget or funds used, planning the place and time of implementing program activities. Research Astuti & Soewondo (2019) said that the planning of hypertension service programs in Depok City uses a combination of top down and bottom up approach which refers to the Strategic Plan document.
- b. Organizing, is carried out through the pattern of organizational structure, with a decree issued by the head of the work unit. The observation results found that the officers carried out their respective duties and responsibilities in providing services to hypertension patients such as measuring and examining patients, providing therapy, providing education and also responsibility in recording and reporting. Based on the review of the document, it was found that there was a decree from the Head of the Health Center for program managers in hypertension health services which became the basis for officers in carrying out their duties and responsibilities in hypertension health services. Maula (2020), stated that the organization was carried out internally and externally by the Health Center. External organizing is carried out in the form of socialization to health cadres, Village Heads, Heads of RT/RW and other community leaders. Organizing internally, namely through the appointment of a manager or person in charge of the program at the Puskesmas based on the Decree issued by the Head of the Puskesmas.
- c. Implementation, the implementation is carried out by organizing Public Health Efforts (UKM) through Posbindu activities and organizing Individual Health Efforts (UKP) at Puskesmas. The provision of health services to hypertensive patients includes blood pressure measurement, education about lifestyle changes or medication compliance, making referrals if needed and providing pharmacological therapy if blood pressure is more than 140 mmHg. The implementation of Posbindu activities is carried out by adjusting the place and time so that it is easy for the community to reach. By utilizing the available facilities, the time and place of the implementation of Posbindu activities are agreed with the village/sub-district officials, in line with the research Istiqomah & Indrawati (2022), that the time and place of the implementation of the PTM Posbindu are carried out according to the agreement and availability of the implementation site in each village. Recording and reporting activities are carried out online through the ASIK application and are also supported by manual reports in the form of hardcopies. Each Health Center records and reports that will be submitted to the Health Office before the 5th of each month. Astuti & Soewondo (2019) explained in his research that recording and reporting activities through the use of the Keluarga Sehat web application experienced obstacles in terms of data input or input, and also limited internet signals. Regardless of how the data is collected, officers at service facilities must prepare reports based on manually collected data or integrated software programs. The minimum report usually includes data on the number of patients enrolled, the number of patients treated, the proportion with controlled blood pressure, and the follow-up rate of patients. Establishing a reporting process and schedule will facilitate the analysis and interpretation of program results (Cazabon et al., 2022). Campbell et al., (2018) Explain that process and

structure evaluation can assess whether a program has the key components needed to improve blood pressure control. The frequency of continuous blood pressure assessments can be a very simple and persuasive indicator in reflecting the efficiency of hypertension management services (Jing et al., 2015).

- d. Monitoring and Evaluation, are carried out every quarter. Program managers from the Health Office conduct monitoring & evaluation to all health centers in Padangsidempuan City according to a predetermined schedule. Based on the review of documents on the DPA of the Padangsidempuan City Health Office, it was found that monitoring & evaluation is one of the activities in the hypertension service activity program on the list that must be carried out every quarter. Monitoring and evaluation activities are certainly not just routine activities that are carried out only to complete the annual work schedule in accordance with what is contained in the DPA of government work agencies, more than that, the routine implementation of monitoring and evaluation should be able to find problems that are worthy of being raised and to find solutions to the problems found. With the accuracy of the data and the problems found, it will greatly facilitate the increase in the achievement target of the activity program.

#### **Output Components**

Information on the output component of hypertension health services in the work area of the Padangsidempuan City Health Office is about the results of achievements in health service activity programs that have low achievements. Based on the review of documents at the Padangsidempuan City Health Office, namely the Document on the Achievement Report of the PTM Program in the Field of Disease Prevention and Control and the Renja Evaluation Report of the Padangsidempuan City Health Office, it was found that the results of the hypertension health service activity program were always low and far from the 100% target. The achievement in 2020 was only 5.05%, in 2021 it was only 17.95%, and in 2022 it was 31.04%. Research Zhao et al., (2020) explained that in China there is still a large gap in the quality of hypertension management compared to developed countries in the west. As in Europe, Japan and North America more than 80% of hypertension sufferers are aware of their hypertension, more than 80% receive anti-hypertensive treatment, and more than 60% of their hypertension is well controlled, but in China it is found that only 68.3%, 62% and 28.6% are respectively. This quality gap may be due to weaknesses in the service delivery system. Study Ramadhani et al., (2023), concluded that the obstacles in the implementation of hypertension services at the Health Center are inadequate facilities and infrastructure, poorly trained health workers, recording and supervision are not carried out regularly, lack of coordination between cross-program and cross-sectoral, insufficient number of human resources, target selection is not optimal, and external factors are still lacking public awareness. With these several obstacles, the results of the 100% achievement target based on the Minister of Health Regulation No. 4 of 2019 are still difficult to achieve. In Gunungkidul, hypertension services in achieving the SPM target have obstacles such as targets that have not used real data on hypertension patients, the number of targets that are not comparable to the human resources of the Health Center, and the low awareness of hypertension patients to carry out routine treatment at health facilities. These obstacles affect each other which affects the results of the health SPM achievement of hypertension services (Diana et al., 2023).



**Figure 1.** The problem of low achievement in the implementation of hypertension health services in the work area of the Padangsidimpuan City Health Office

## CONCLUSION

The conclusion obtained from the results of the analysis of the low achievement of hypertension health services in the working area of the Padangsidimpuan City Health Office is that the positive attitude of the community to get good hypertension health services is greater (62.5%) than the negative attitude (40.3%). Statistically, this difference is significant ( $p = 0.43$ ), so it can be concluded that there is a relationship between the attitude of the hypertensive community and the implementation of hypertensive health services. Positive staff support for getting good hypertension health services is greater (93.5%) compared to negative staff support (14.8%). Statistically, this difference is significant ( $p = 0.001$ ), so it can be concluded that there is a relationship between the support of health workers and the implementation of hypertension health services. There is no relationship between the level of knowledge of the hypertensive community and the availability of facilities and infrastructure with the implementation of hypertension health services. System analysis on the input component found that the availability of human resources was inadequate, the funds budgeted in the activity program were limited.

The recommendation offered by the author is that the Health Office and its network must strengthen coordination with cross-program and cross-sectoral to mobilize the public to be more concerned and willing to play an active role in efforts to prevent and control hypertension. More optimal, consistent and sustainable education is carried out to the community to increase understanding of hypertension so as to improve people's attitudes in utilizing the services provided. It takes innovation and creativity about health promotion methods to change the pattern of education so that it is better liked by the community. The Regional Government needs to carry out annual periodic activities to update the knowledge and skills of all human resources so that each officer has better competence and understanding. Regional Governments must pay attention to and review the needs and distribution of human resources within the Health Office by considering the suitability of the number and skills of human resources based on actual needs. To obtain more optimal budget support, the Health Office must consistently advocate with regional and legislative heads and establish partnerships with related cross-sectors. Advocacy and coordination also need to be carried out to issue laws, special regulations or regulations that support intervention in improving the results of program and activity achievements in the future.

## References

- Ambiyar, & Muharika. (2019). Metodologi Penelitian Evaluasi Program. *Bandung: Penerbit Alfabeta Bandung*. 1(7). 1-202
- Arianto, P. (2020). Metode Penelitian Kualitatif. Yogyakarta: *Penerbit Komunikasi UIN*.1(6). (1-121).
- Arifin, S., Rahman, F., Wulandari, A., & Anhar, V. yulia. (2016). Dasar-Dasar Manajemen Kesehatan. *Banjarmasin: Psutaka Banua*.
- Asi, F. A. E., Suryoputro, A., & Budiyono. (2022). Analisis Implementasi Kebijakan Standar Pelayanan Minimal (SPM) Penderita Hipertensi Di Puskesmas Kota Palangka Raya. *JKM (Jurnal Kesehatan Masyarakat) Cendekia Utama*, 10(2), 232-245.
- Astuti, T. S. R., & Soewondo, P. (2019). Analisis Kesiapan Pembiayaan Hipertensi, Diabetes Melitus dan Gangguan Jiwa dalam Mendukung Program Indonesia Sehat dengan Pendekatan Keluarga (PIS PK) Tahun 2018-2020. *Jurnal Ekonomi Kesehatan Indonesia*, 2(3), 2018-2020.
- Campbell, N. R. C., Ordunez, P., Dipette, D. J., Giraldo, G. P., Angell, S. Y., Jaffe, M. G., Lackland, D., Martinez, R., Valdez, Y., Maldonado Figueredo, J. I., Paccot, M., Santana, M. J., & Whelton, P. K. (2018). Monitoring and evaluation framework for hypertension programs. A collaboration between the Pan American Health Organization and World Hypertension League. *Journal of Clinical Hypertension*, 20(6), 984-990. <https://doi.org/10.1111/jch.13307>
- Cazabon, D., Farrell, M., Gupta, R., Joseph, L., Pathni, A. K., Sahoo, S., Kunwar, A., Elliott, K., Cohn, J., Frieden, T. R., & Moran, A. E. (2022). A simple six-step guide to National-Scale Hypertension Control Program implementation. *Journal of Human Hypertension*, 36(7), 591-603.
- Dalyoko, D. A. P., Yuli, K., & Ambarwati. (2011). Faktor-Faktor Yang Berhubungan Dengan Kontrol Hipertensi Pada Lansia Di Pos Pelayanan Terpadu Wilayah Kerja Puskesmas Mojosongo Boyolali. *Jurnal Kesehatan*, 4(1), 201-214.
- Dequire, J., Clarke, J., Rouleau, K., Roy, J., & Bushnik, R. (2019). Blood pressure and hypertension. *Health Reports*, 30(2), 14-21. <https://doi.org/10.25318/82-003-x201900200002>
- Departemen Kesehatan RI. (2006). Pedoman teknis penemuan dan tatalaksana penyakit hipertensi. *Direktorat Pengendalian Penyakit Tidak Menular. Jakarta: Depkes RI*.
- Diana, S. S., Jati, S. P., & Fatmasari, E. Y. (2023). Faktor-Faktor yang Mempengaruhi Tercapainya SPM Kesehatan pada Pelayanan Penderita Hipertensi di Kabupaten Gunungkidul. *Jurnal Kebijakan Kesehatan Indonesia*, 12(1), 1. <https://doi.org/10.22146/jkki.80694>
- Dinas Kesehatan Kota Padangsidempuan. (2022). Profil Kesehatan Kota Padangsidempuan Tahun 2021. *Padangsidempuan: Dinas Kesehatan Kota*.( 6). 71-82.
- Dinas Kesehatan Kota Padangsidempuan. (2023). Profil Kesehatan Kota Padangsidempuan Tahun 2022. *Padangsidempuan: Dinas Kesehatan Kota*. 1-23.
- Dinas Kesehatan Provinsi Sumatera Utara. (2022). Profil Kesehatan Sumatera Utara Tahun 2021. *Sumut: Dinas Kesehatan Provinsi Sumatera Utara*.
- Ekasari, M. F., Suryati, E. S., Badriah, S., Narendra, S. R., & Amini, F. I. (2021). Hipertensi: Kenali penyebab, Tanda Gejala Dan Penangannya. *Jakarta: Hipertensi*, 28.
- Ihwatun, S., Ginandjar, P., Saraswati, L. D., & Udiyono, A. (2020). Faktor-faktor yang Berhubungan dengan Kepatuhan Pengobatan pada Penderita Hipertensi di Wilayah Kerja Puskesmas Pudukpayung Kota Semarang Tahun 2019. *Jurnal Kesehatan Masyarakat*, 8(3), 352-359.
- Istiqomah, & Indrawati, F. (2022). Penerapan Fungsi Manajemen pada Pelaksanaan Standar Pelayanan Minimal Penderita Hipertensi. *Higeia Journal of Public Health Research and Development*, 6(3), 337-349. <http://journal.unnes.ac.id/sju/index.php/higeia>
- Jing, F. Y., Cheng, W. H., Chong, L. Y., & Hua, Z. W. (2015). Hypertension screening and follow-up management by primary health care system among chinese population aged 35 years and above. *Biomedical and Environmental Sciences*, 28(5), 330-340. <https://doi.org/10.3967/bes2015.047>
- Kemkes RI. (2019). Buku pedoman manajemen penyakit tidak menular. *Direktorat Jenderal Pencegahan dan Pengendalian Penyakit*.
- Kemkes RI. (2022). Profil Kesehatan Indonesia 2021. *Jakarta: Kementerian Kesehatan Republik Indonesia*.
- Limbong, M. I. P., & Agustina, D. (2023). Analisis Pelaksanaan Standar Pelayanan Minimal ( SPM ) Pada Penderita Hipertensi di Puskesmas Tegal Sari Medan. *Jurnal Pendidikan Tambusai*, 7(2), 21464-21474.
- Maula, I. N. (2020). Pelaksanaan Standar Pelayanan Minimal pada Penderita Hipertensi. *Higeia Journal of Public Health Research and Development*, 4(Special 4), 799-811. <http://journal.unnes.ac.id/sju/index.php/higeia>

- Meiriana, A., Trisnantoro, L., & Padmawati, R. S. (2019). Implementasi Program Pengelolaan Penyakit Kronis (Prolanis) Pada Penyakit Hipertensi Di Puskesmas Jetis Kota Yogyakarta. *Jurnal Kebijakan Kesehatan Indonesia*, 08(02), 51-58. <https://jurnal.ugm.ac.id/jkki/article/view/37546>
- Menteri Kesehatan Republik Indonesia. (2019). Peraturan Menteri Kesehatan Republik Indonesia Nomor 4 Tahun 2019 Tentang Standar Teknis Pemenuhan Mutu Pelayanan Dasar Pada Standar Pelayanan Minimal Bidang Kesehatan. *Menteri Kesehatan Republik Indonesia*.
- Pradono, J., Kusumawardani, N., & Rachmalina, R. (2020). Hipertensi : Pembunuh Terselubung Di Indonesia. *Jakarta: Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI*.
- Pratiwi, W., Harfiani, E., & Hadiwiardjo, Y. H. (2020). Faktor-Faktor Yang Berhubungan Dengan Kepatuhan Dalam Menjalani Pengobatan Pada Penderita Hipertensi Di Klinik Pratama GKI Jabar Jakarta Pusat. *Seminar Nasional Riset Kedokteran*, 1(1), 27-40.
- Primiyani, Y., Masrul, & Hardisman. (2019). Analisis Pelaksanaan Program Pos Pembinaan Terpadu Penyakit Tidak Menular di Kota Solok. *Jurnal Kesehatan Andalas*, 8(2), 399-406. <https://doi.org/10.25077/jka.v8.i2.p399-406.2019>
- Ramadani, F., Junaid, J., & Farzan, A. (2017). Analisis Program Pemecahan Masalah Penyakit Hipertensi Menggunakan Aplikasi Projectlibre Di Puskesmas Benua-Benua Kota Kendari Tahun 2017. *Jurnal Ilmiah Mahasiswa Kesehatan Masyarakat Unsyiah*, 2(6), 198168.
- Ramadhani, S., Sutiningsih, D., & Purnami, C. T. (2023). Kendala Pelaksanaan Standar Pelayanan Minimal Bidang Kesehatan pada Penderita Hipertensi di Puskesmas : Literature Review. *Media Publikasi Promosi Kesehatan Indonesia (MPPKI)*, 6(4), 553-560. <https://doi.org/10.56338/mppki.v6i4.3209>
- Sakinah, A. S., Utomo, W., & Agrina. (2021). Hubungan Dukungan Keluarga Dan Peran Tenaga Kesehatan Dengan Kepatuhan Kontrol Ke Pelayanan Kesehatan Pada Lansia Penderita Hipertensi Selama Pandemi Covid-19. *Bimiki*, 9(2), 99-108.
- Setiari, S. (2018). Hubungan Tingkat Pengetahuan dan Sikap Penderita Hipertensi terhadap pengendalian hipertensi di puskesmas Danguang. *Menara Ilmu*, XII(8), 141-148.
- Suparman, A. (2020). Implementasi Kebijakan Program Pelayanan Kesehatan Dalam Rangka Menurunkan AKI Dan AKB Di Puskesmas Sukaraja Kabupaten Sukabumi (Studi Empiris pada Puskesmas Sukaraja Kabupaten Sukabumi). *Jurnal MODERAT*, 6(4), 868-891.
- Tahan, Nasution, S. Z., & Siregar, F. L. S. (2024). Pengaruh Edukasi Keluarga Terhadap Pengetahuan Keluarga Dan Kepatuhan Penderita Hipertensi. *Journal of Telenursing (JOTING)*, 6(2), 1797-1804.
- Tisdale, R. L., Cazabon, D., Moran, A. E., Rabkin, M., Bygrave, H., & Cohn, J. (2021). Patient-Centered , Sustainable Hypertension Care: The Case for Adopting Different Service Delivery Models for Hypertension Services in Low- and Middle-Income Countries. *Global Heart*. 16(1), 1-7.
- Utami, G. E., Dwimawati, E., & Pujiati, S. (2021). Evaluasi Pelaksanaan Program Penyakit Hipertensi Di Puskesmas Bogor Utara Kota Bogor Provinsi Jawa Barat Tahun 2018. *Promotor*, 4(2), 134-144.
- Wahyuni, N., & Farida, A. (2021). Analisis Implementasi Standar Pelayanan Minimal Bidang Kesehatan Di Puskesmas Curug, Kota Serang. *Journal of Baja Health Science*, 1(02), 179-190.
- Yuan, L., Lei, W. J., Chang, Z. X., Dan, L., Hui, S. W., Feng, L. X., & Jing, W. (2016). Effectiveness of Adherence to Standardized Hypertension Management by Primary Health Care Workers in China: a Cross-sectional Survey 3 Years after the Healthcare Reform. *Biomedical and Environmental Sciences*, 29(12), 915-921. <https://doi.org/10.3967/bes2016.123>
- Zhao, Y., Oldenburg, B., Zhao, S., Haregu, T. N., & Zhang, L. (2020). Temporal Trends and Geographic Disparity in Hypertension Care in China. *Journal of Epidemiology*, 30(8), 354-361.
- Zudi, M., Suryoputro, A., & Arso, S. P. (2021). Analisis Implementasi Standar Pelayanan Minimal Bidang Kesehatan Di Puskesmas Guntur I Kabupaten Demak. *JKM (Jurnal Kesehatan Masyarakat) Cendekia Utama*, 8(2), 165. <https://doi.org/10.31596/jkm.v8i2.681>