

Original Research Article

An implementation analysis on the program of hypertension disease service in Talaud islands district

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ABSTRACT

Background: The success of health services is an indicator of the success of national development. The success of hypertension services is influenced by various factors including human resources, financing, facilities, methods, the infrastructure used, and the process of achieving indicators. The purpose of this study was to analyze the implementation of the hypertension service program in Talaud district.

Methods: This type of research is qualitative research using in-depth interview techniques as well as observation. Informants in this study were the head of the non-communicable diseases (NCDs) section, the manager of the hypertension program, and the holder of the hypertension disease program at the community health center.

Results: The availability of human resources in implementing the hypertension disease program is in accordance with the needs, the infrastructure used is sufficient but the additional infrastructure is needed in the form of KIT of integrated coaching posts (Posbindu) and a budget for implementing hypertension services. Early detection of hypertensive patients is carried out through integrated coaching posts and services at the community health center. The realization of the target for hypertension services in Talaud regency has not been achieved due to the limitations of medicines and the lack of public awareness in conducting health checks to detect funds and treat hypertension.

Conclusions: The implementation of the hypertension disease program in terms of input and process is adequate. The output of hypertension services has not been achieved.

Keywords: Hypertension, Program, Implementation

INTRODUCTION

Health development in Indonesia continues to be carried out by involving various components including the government, the private sector, the community, professional organizations, and community organizations. The increase in life expectancy, the decrease in the prevalence of malnutrition, obesity, as well as infant and maternal mortality during childbirth are not in line with the prevalence of NCDs such as hypertension, diabetes mellitus, and ischemic heart disease.

In the last three decades, there has been a change in the burden of disease from communicable to NCDs.

Indonesia experienced a significant increase in cases of NCDs such as diabetes mellitus, hypertension, and ischemic heart disease. This happens due to changes in the socio-economic status of the community which leads to changes in lifestyle.¹ In 2016, about 71% of the causes of death in the world are NCDs which kill 36 million people per year. About 80% of these deaths occur in middle- and low-income countries. The 73% of deaths are currently caused by NCDs, 35% of which are due to heart and blood vessel disease. Basic health research in 2018 showed that there was an increase in the prevalence of high blood pressure in the population aged 18 years and over which increased from 25.8% to 34.1%.^{2,3} The prevalence of hypertension will continue to increase

sharply, it is predicted that in 2025 around 29% of adults worldwide suffer from hypertension.⁴

Hypertension is a non-communicable disease whose prevalence continues to increase. Previous research had been carried out by researchers in 2020, namely the factors related to the occurrence of hypertension in Talaud district due to the number of cases of hypertension which ranks first for NCDs in Talaud regency in 2019. With the number of cases that ranks first with the level of achievement of indicators that have not been met, then in this study, the researcher analyzed the implementation of the hypertension disease services program in Talaud district.⁵ The purpose of this study was to analyze the implementation of the hypertension service program in Talaud district.

METHODS

This research is qualitative research with in-depth interviews. The research was conducted in Talaud district from June to October 2022. The informants in this study were: Head of the NCDs section at the Talaud district health office, the hypertension program manager at the Talaud district health office, the hypertension program holder at the Lobbo community health center. In addition to in-depth interviews, observations were also made on the implementation of the hypertension program. Interviews in this study using Indonesian. Data analysis was carried out by triangulation of sources, namely by comparing the answers given by informants and triangulation of methods by the tracing existing documents.

This study was approved by the institutional ethics committee.

Table 1: Informant.

Informant	Gender	Education	Position
Informant 1	Female	Bachelor	Department head of non-infectious disease, public health office of the Talaud regency
Informant 2	Female	Bachelor	Holder of hypertension program at public health office of the Talaud regency
Informant 3	Female	Diploma	Holder of hypertension program at the Lobbo community health center

RESULTS

Input

Human resources

The availability and capabilities of human resources (HR) greatly affect the implementation of a program or activity. In the implementation of the service program for hypertension, the availability of human resources is sufficient. There are 3 people in the Talaud district health office who carry out the hypertension disease service program, namely the head of the field, the head of the section, and the program manager. The hypertension officer at the Talaud district health office is tasked with providing the needs of hypertension services at the community health center as well as monitoring and evaluating hypertension services. The availability of resources at the community health center for the implementation of hypertension disease services at the health center consists of doctors and program managers.

Based on the results of interviews, the implementation of the hypertension disease program at the community health center is carried out with services at the community health center and services at the integrated coaching post. When carrying out services at the integrated coaching post, health workers are assisted by health cadres in each village. Some of the cadres who assist in the implementation of the integrated coaching post have attended training and some have never received special training on hypertension. In carrying out activities, the cadres assist in the implementation of registration, weighing of weight and height, and also provide information about hypertension based on information submitted by health workers.

Infrastructure

The infrastructure used in the service of hypertension is the place for the implementation of the integrated coaching post, KIT of the integrated coaching post consisting of blood pressure measuring devices, scales, height measuring devices, kits of blood sugar, uric acid, and cholesterol test along with sticks. For the availability of infrastructure such as the KIT of the integrated coaching post, not all integrated coaching posts have their own tools, thus 1 KIT of the integrated coaching post can be used in several integrated coaching posts. The availability of blood sugar, uric acid, and cholesterol test sticks is sometimes unavailable.

Fund

Based on the results of interviews, the budget used in the implementation of the hypertension disease program, for monitoring and evaluation activities, reporting by health service officers, and the procurement of KIT of integrated guidance posts sourced from the special allocation fund of the ministry of health. Meanwhile, the budget used by

the community health center in the implementation of the program, especially for the implementation of the integrated coaching post, is sourced from the special operational assistance fund.

Implementation method

For the implementation of the hypertension disease service program, the community health center conducts screening of patients with early detection in the implementation of integrated coaching post activities with the 5-table method. After early detection, treatment of the patients is carried out at the community health center by the doctor on duty. The hypertension program manager at the health office monitors and evaluates the activities carried out by the program manager at the community health center and he/she then makes a report.

Process

The process of early detection and case finding

Based on the results of interviews, early detection was conducted with health services at the community health center and health services at the integrated coaching post. Case finding was carried out based on the results of the patient's blood pressure measurement, then followed by supporting examinations, namely weight and height examination, abdominal circumference examination, and examination of blood sugar, uric acid, and cholesterol. Early detection was carried out with a 5-table system, namely: the first table for registration, the second table for interviews, the third table for examination of weight, height and abdominal circumference, the fourth table for checking blood pressure, sugar, uric acid and cholesterol, the fifth table for risk factor identification and counseling.

Barriers encountered in early detection and case finding

Based on the results of interviews, there were still few

people who had the awareness to check themselves at the integrated coaching post. This is because those who were served at the integrated coaching post were at productive ages, namely 15 to 59 years old, most of whom felt that at their productive age they were not at risk of developing hypertension. Another obstacle is that the integrated coaching post did not provide medication, thus only a few people came to do the examination. The unavailability of medicines at the integrated coaching post in accordance with the technical instructions for the implementation of the integrated coaching post, namely the integrated coaching post only performs early detection. Another inhibiting factor is the lack of budget allocated during the implementation of the integrated coaching post. The way to overcome these obstacles is that the hypertension management officer continues to conduct socialization and counseling about the importance of carrying out routine health checks to detect disease. This socialization was also carried out by the health cadres in community.

Management of hypertension cases

Based on the results of interviews with patients diagnosed with hypertension either through screening at the community health center or at the integrated coaching post, treatment was carried out at the community health center. Hypertensive patients with complications or who experience an emergency were referred to a regional hospital or referred directly to a hospital in Manado.

Output

Based on the results of interviews, the target for hypertension services has not been achieved. From the target set, the realization of hypertension service achievement for the age >15 years is 57.8%. Some of the obstacles encountered in the service of hypertension are the lack of availability of medicines, limited budget, and lack of public awareness to check themselves to health service facilities.

Table 2: Interview results.

Question	Informant 1	Informant 2	Informant 3
The availability of human resources for the implementation of hypertension program	At district level, there are 2 hypertension management officers for puskesmas (Community health center) where in each puskesmas, there is 1 manager. In Talud regency, there are 21 pkm with 21 administrators.	The Puskesmas' personnel resources are complete; the district has division heads and administrators/ staff who assist in the management of hypertension PTM.	Human resources are available at the Puskesmas; there are doctors and health professionals in the field, as well as officials assigned to Posbindu (Integrated development post).
Parties involved in the hypertension program's implementation	For districts, there are 2 managers and heads of fields with the head of the service in charge.	In the district, only section heads, administrators and the head of the division are involved, while in the puskesmas, cadres are involved.	Doctors, program holders, and polyclinic officials are among available human resources at health center. Posbindu officers work on field. Because hypertension is most common condition, there should be enough officers.

Continued.

Question	Informant 1	Informant 2	Informant 3
Competence of human resources in implementing hypertension disease programs (whether they have ever attended training)	The hypertension program manager has never had special training in hypertension management, but he always consults with the province before implementing the program.	No training yet	There is only one program holder for Puskesmas. Training was not on how to manage hypertension, but rather on how to deploy Posbindu, including how to analyze and enter data in the ASIK program. All information is straight in entry.
Involvement of HR other than community health center officers in implementing the hypertension disease program. This is related to their involvement and whether they have attended training?	Aside from officers, we include cadres from the integrated development post (Posbindu) at Puskesmas. The cadres perform a blood pressure check at every Posbindu activity. Posbindu activities are the same as Posyandu, except for people aged fifteen to fifty-nine. In the execution of Posbindu, cadres and nurses work jointly to conduct inspections. From Table 1 forward, cadres received Posbindu training. They were also taught how to assess blood pressure as well as the theory of the hypertension.	Cadres have gone through training. Cadres' roles in the PTM screening process include socializing a healthy lifestyle to prevent hypertension and other PTM, as well as counseling and assisting health workers in implementing posbindu.	Aside from officers, there are PTM cadres in every village, but they have received no training. Posbindu cadres set up tables, then register and assist with weighing. Posbindu officers performed blood pressure measures, as well as blood tests and interviews. Training has not been implemented due to budget constraints.
Infrastructure facilities used in the implementation of the program	A tool, known as the posbindu kit, is available in each health center for community usage. Each health facility delivers an examination report to the community to determine the number of hypertension cases.	The infrastructure used is a building, while the posbindu kit facilities include blood pressure monitors, scales, abdominal circumference and height measurement tools, sugar, cholesterol and uric acid examination tools. There are 10 items prepared in the posbindu kit	Use Puskesmas equipment for Puskesmas. Use Posbindu KIT, which includes blood pressure, a tool to monitor sugar, cholesterol, and uric acid, for Posbindu. Posbindu KIT, on other hand, was only held this year; in past years, it employed its own tools. It is occasionally inhibited by the sticks when checking blood sugar, uric acid, as well as the cholesterol. Service sticks are frequently empty.
The completeness of infrastructure facilities	Infrastructure facilities are still in short supply. Every posbindu should have their own blood meter, but for a comprehensive report	Talaud district has complete infrastructure distribution across 141 villages and 12 sub-districts. A stick is held every year for blood tests.	People with high blood pressure are the most common type of hypertension, thus facilities and infrastructure must be expanded, particularly for implementation of early detection.
The party that prepares the infrastructure	The posbindu kit, which should have included a tension tool and scales, should have come from the center, but that will be offered next year.	Posbindu KIT was given by the health office through a proposal to the office planning team.	-

Continued.

Question	Informant 1	Informant 2	Informant 3
Availability of funds.	The hypertension program's budget is funded by DAK monies obtained from the center.	The budget is still lacking, funds have not been allocated for assistance to posbindu	Because there is no separate fund for hypertension, funds for hypertension are drawn from PTM funds that shared among other conditions, such as diabetes. The monies are provided by BOK and will only be used for Posbindu activities. Funding is currently scarce; monies are only available for Posbindu.
Source of funds used in program implementation	Funding source is adequate to carry out visiting activities in 21 community health centers.	From the central special allocation Fund	Health operational assistance and only for implementation of Posbindu
Utilization of funds	Visits to Puskesmas and Posbindu made to observe evaluation operations in field.	For Puskesmas monitoring and assessment and reporting	Posbindu
Program implementation method	The district received just reports from the Puskesmas but inquired about implementation and the number of cases.	Method is to screen for early detection by implementing Posbindu. Thus, ministry of health sets targets for every year and must meet those std through screening.	Puskesmas and Posbindu offer patient care. Only activity carried out at Posbindu is early diagnosis of hypertension. Treatment is provided at Puskesmas.
The SOP in implementing program	There are SOPs.	There are SOPs, but at the Puskesmas	SOP exists (documents don't exist)
The process of early detection and case finding of hypertension (using a 5 table system)	Opening services at Posbindu, puskesmas, hospitals, high schools aids in early detection. Early detection method at Posbindu doesn't use 5-table approach; instead, after detection, patient is told about ailment and referred to Puskesmas.	Early detection is carried out with a posbindu with 5 tables, namely registration or registration, checking blood pressure and scales, checking blood sugar, uric acid and cholesterol, counseling.	Outpatient visits to the Puskesmas and Posbindu hospitals are used for early detection. It is done using a desk system at Posbindu.
Obstacles encountered in the implementation of early detection and case finding	The community is still lacking awareness to come for a check-up	Many individuals believe it is simple to conduct examinations since the goal of Posbindu is productive age; many people believe they are healthy and do not conduct examinations at Posbindu. Another barrier is money and medication. There is no hypertension medicine at Posbindu; the medicine must be taken at Puskesmas, which makes people lethargic to go to Posbindu.	People still come to the puskesmas or posbindu when they are unwell because there is a dearth of community awareness. Another impediment is the weather.
Ways to overcome obstacles	Collaborating with the Health Promotion sector to carry out counseling about hypertension. Counseling is carried out at Posyandu and religious activities	Outreach to the community about hypertension to encourage people to be more active in performing health checks.	Puskesmas have helped by providing treatment at Posbindu. If we follow Juknis at Posbindu, however, we are not permitted to take medication, therefore it can only be detected early.

Continued.

Question	Informant 1	Informant 2	Informant 3
Programs conducted for the management of hypertension	Management is carried out at the health center	Early detection	Joint service with MCH/ family planning program for pregnant women
Obstacles encountered in management of hypertension	Reports from Puskesmas are frequently late.	Medical drugs	There are no drug barriers
Hypertension referral system	From the health center. Cases of hypertension in posbindu are referred to the Puskesmas for medicine, and if there is no improvement, the patient is referred to the hospital.	For patients who are detected at Posbindu, they are referred to Puskesmas and for hypertension with complications from Puskesmas, they are referred to regional hospital	Referrals from the Puskesmas are typically made to regional hospitals or a larger Puskesmas. The referred patient is a hypertensive with a loss of consciousness.
Indicators of achievement of hypertension		Smoking, high salt consumption, obesity, lack of activity, alcohol, and dyslipidemia are risk factor indicators.	75% indicator
Achievement of targets for hypertension		The target was not met due to a lack of drug availability at Puskesmas and a lack of outreach. The absence of drugs at the Puskesmas is owing to a paucity of medicines at the health office.	In terms of the target, it has been met. The key to meeting the aim is to serve patients until they are completely satisfied, thus whatever the Puskesmas can do must be done.

DISCUSSION

According to Notoadmodjo, health services are a sub-system of health services whose main purpose is preventive (prevention) and promotive (health improvement) services with the target of the community.⁶ As a system, health services consist of several elements that influence the realization of good health services consisting of input, process, and output elements.⁷

Human resources are the first and main factor in the development process and the achievement of organizational goals, HR (Human resources) is the driving force and implementer in the success of a program. Human resources are an integrated ability between the power of thought (mind) that has knowledge and experience with the physical power (skills) of each individual.⁸ In the input element, the availability of human resources in carrying out hypertension services in Talaud district is sufficient, both human resources at the district health office and human resources at the community health service center. In the management of hypertension prevention and control programs established by the ministry of health of the republic of Indonesia, cadres, social workers, community activists, and employees in the workplace can be involved in the early detection of hypertension.⁹ Resources in the implementation of hypertension consist of doctors, nurses, and cadres.

The availability of infrastructure is very supportive in the implementation of hypertension services. The availability of infrastructure will provide satisfaction not only to health workers but also to the patients with hypertension being served.¹⁰ Funding for hypertension services uses funds sourced from special allocation funds and special operational assistance funds. For the implementation of hypertension services, it is carried out by carrying out screening hypertension sufferers at the integrated coaching post (Posbindu) and treatment services for hypertension patients at the community health service center. Through the community health center and integrated coaching post, the community has easy access to detect or monitor their blood pressure.¹¹

Efforts to control NCDs, especially hypertension, are carried out for all people aged 18 years and over in two ways, namely control efforts in community and control efforts at community health centers.¹ Process of implementing screening of hypertension sufferers at integrated coaching post is in accordance with implementation guidelines, namely by conducting interviews, checking blood pressure, measuring weight and height and simple laboratory tests. Not only examining and registering patients but screening activities also provide education to the public about things that can be carried out to prevent hypertension.¹² Hypertension screening services in Talaud islands district are carried out by medical nurses and assisted by cadres. Treatment services for hypertension carried out by doctors.

Based on results of interviews, availability of human resources, funds, and infrastructure in the service of hypertension in Talaud district is sufficient but achievement of target for hypertension services in Talaud islands district has not been achieved. Some of factors causing non-achievement of service targets lack of public awareness to check themselves both for disease screening and treatment. Therefore, providing information about hypertension to public should be carried out continuously thus people can have awareness in checking themselves.

Limitations

Limitation of current study were still a lack of program holder informant at community health centers so for the further research it is necessary to add informants from other community health center.

CONCLUSION

The implementation of the hypertension disease service program in Talaud district is adequate in terms of the availability of human resources and infrastructure, but it is still necessary to add infrastructure and financing to the implementation of the hypertension program. The implementation of the hypertension service program is carried out with a community approach, namely the implementation of integrated coaching posts for early detection of hypertension and health services at community health centers for the treatment of hypertension. Public awareness of carrying out early detection of hypertension is still lacking, therefore it is necessary to continuously educate the public about the importance of early detection of hypertension thus the target coverage of hypertension services can be achieved.

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