

Blood Pressure Control Education in Hypertension Patients in the Balowerti Community Health Center Area, Kediri City

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ABSTRACT

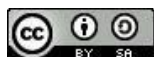
The crude death rate in the Balowerti Health Center area in 2020 was 7.28/1000 population, hypertension was the second highest cause of death for the population. From the community service of the Balowerti Health Center Performance Assessment 2023, it was found that the percentage of people with hypertension whose blood pressure was under control only reached 15.6% of the target of 63%. The aim is to provide information or an overall picture regarding strategies for controlling blood pressure so that the target of reducing systolic and diastolic pressure (less than 140/90 mmHg) can be achieved within a period of 1 year. The analysis uses fishbone diagrams to indentify problems, the USG (Urgency, Seriousness, Growth) method to determine problem priorities and SWOT analysis (Strength, Weakness, Opportunity, Threat) to identify strategies in determining intervention plans. Based on the results of the fishbone, USG and SWOT analysis, the implementation strategy that can be implemented is educate patients and the community about the importance of controlling blood pressure, by collaborating with other programs such as Elderly Integrated Service Post, Integrated Coaching Post Non-Communicable Disease, Chronic Disease Management Program.

Keywords: blood pressure control, education, hypertension

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INTRODUCTION

Hypertension is called a silent killer. Many people with hypertension do not feel any symptoms or are asymptomatic. This can increase the risk factors for diseases such as coronary blockage, heart failure, cerebrovascular disease, and kidney failure (Tommy, 2019). WHO in 2015 stated that 1.13 billion people in the world suffer from hypertension. This means that 1 in 3 people in the world are diagnosed with hypertension and 2/3 of them come from developing countries (WHO, 2015).

Based on the East Java Health Service Profile in 2018, it was found that the percentage of hypertension was 22.71% or around 2,360,592 people, with a proportion of men of 18.99% (808,009 people) and women of 18.76% (1,146,412 people) (East Java Health Service, 2018). Based on the East Java Health Service Profile in 2019, the estimated number of people with

hypertension aged ≥ 15 years in East Java Province is around 11,952,694 people, with a proportion of men of 48% and women of 52%. Of this number, 40.1% or 4,792,862 residents received health services for hypertension sufferers (East Java Health Office, 2019).

The CDR (crude death rate) in the Balowerti Health Center area is 7.28/1000 population, where hypertension is the second highest cause of death. Hypertension sufferers must routinely check their blood pressure at a health service center with an interval of 3 months if systolic blood pressure is 140-159 mmHg and diastolic 90-99 mmHg, and once every 2-4 weeks if systolic blood pressure is > 160 mmHg and diastolic > 100 mmHg (Martins, Atallah, & da Silva, 2012). However, from the results of the 2023 Balowerti Health Center Performance Assessment (PKP), it was found that the percentage of hypertensive patients whose blood pressure was under control only reached 15.6% of the target of 63%. Based on the results of the data review above, the cause of the problem is the lack of public knowledge about the importance of controlling blood pressure in hypertensive patients, so it is necessary to increase educational efforts for the community.

METHODS

This research uses qualitative methods with a descriptive approach to analysis. Data collection is conducted through direct field observations, where primary data is obtained via interviews with key informants. The analysis utilizes a fishbone diagram to identify various potential causes contributing to a specific problem or effect. The identified problems are then categorized into several factors, including human resources, materials, machines, methods, financial resources, and the environment. A discussion session is conducted to analyze the root causes of the problem, structured using 6M (Man, Method, Money, Material, Mother Nature, Machine) and 5S (Surroundings, Suppliers, Systems, Skills, Safety) frameworks (Kusnadi, 2020).

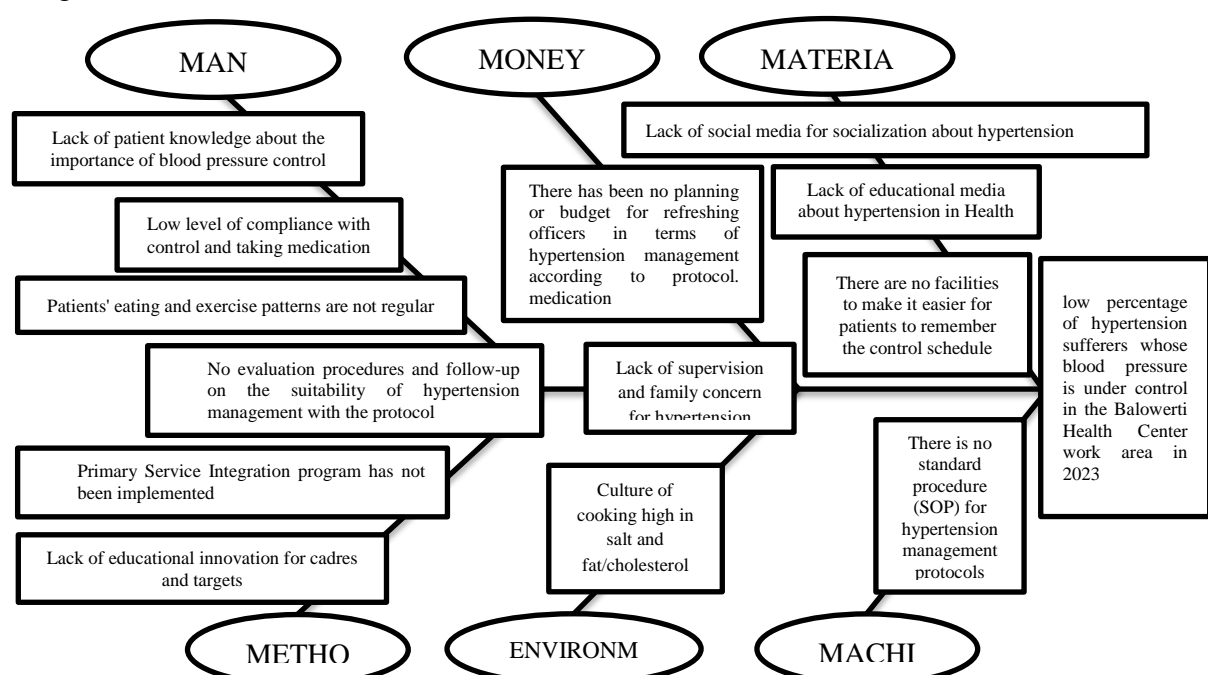
Make it into point form: 1) Agree on a problem statement. 2. Identify the category of the cause of the problem (6M, 5S or other). 3. Find potential causes by brainstorming. 4. Study and agree on the most likely causes. 5. Describe the results of the problem assessment in the form of a fish head with its spines. 2) Based the identification of factors causing problems with fishbone analysis, then prioritization of problems is carried out with the world ultrasound here is an abbreviation from USG (Urgency, Seriousness, Growth). In this method, each problem is assessed for its level of risk and impact. The highest value is considered a priority problem that must be resolved immediately. The scoring step using the ultrasound method begins with making a list of root problems, making a matrix table of problem priorities with scoring weights of 1-5 (Wardani & Minarno, 2021). 3) Based on the prioritization of problems, then an intervention plan was determined in this study using SWOT analysis (strength, weakness, opportunity, threats) of internal and external factors in the Balowerti Health Center. Following problem prioritization, an intervention plan is developed using SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) to assess internal and external factors at the Balowerti Health Center. This analysis is structured using: a. IFE (Internal Factor Evaluation) Matrix to identify major strengths and weaknesses. b. EFE (External Factor Evaluation) Matrix to identify opportunities and threats. c. IE (Internal-External) Matrix to determines the strategic position of the health center. 4) All factors that have been collected are then given weights and ratings, as well as scores from the results of multiplication of weights and ratings. The score results determine which quadrant is the position of the Balowerti Health Center, to determine strategies that can be used in problem solving efforts.

RESULTS

Identification of problems decreasing the achievement of hand hygiene compliance of service providers at the Balowerti Public Health Service is categorized using 4M +1E, namely man, method, material, machine, environment. The descriptions of 4M+1E (man, method, material, machine, environment) that have been discovered include:

1. Man
 - a. Lack of patient knowledge about the importance of blood pressure control
 - b. Low level of compliance with control and taking medication (Patients do not control / take medication if there are no complaints)
 - c. Smoking behavior is still high in patients and their environment
 - d. Patients' eating and exercise patterns are not regular
2. Money
 - a. There has been no planning or budget for refreshing officers in terms of hypertension management according to protocol.
3. Method
 - a. Lack of educational innovation for cadres and targets/communities
 - b. No evaluation procedures and follow-up on the suitability of hypertension management with the protocol
 - c. Primary Service Integration program has not been implemented
4. Material
 - a. Lack of social media for socialization about hypertension.
 - b. Lack of educational media about hypertension in Health Centers
 - c. There are no facilities to make it easier for patients to remember the control schedule
5. Machine
 - a. There is no standard procedure (SOP) for hypertension management protocols.
6. Environment
 - a. Lack of supervision and family concern for hypertension sufferers
 - b. Culture of cooking high in salt and fat/cholesterol

Diagram Fishbone



Based on the identification of the factors causing the problem of decreasing the achievement of hand hygiene compliance of service providers at the Balowerti Health Center with fishbone analysis, then prioritization of problems was carried out using the ultrasound method (urgency, seriousness, growth). Here, prioritization of problems with ultrasound method.

Table 1. Priority of Problems with Ultrasound Methods

No	Indicator	Priority Value			Scor	Rank
		U	S	G		
1	Lack of patient knowledge about the importance of blood pressure control	9	8	8	576	III
2	Low level of compliance with control and taking medication (Patients do not control / take medication if there are no complaints)	9	8	9	648	I
3	Smoking behavior is still high in patients and their environment	7	8	8	448	
4	Patient diet and exercise patterns are not regular	7	8	8	448	
5	No planning and budgeting for refreshing officers in terms of hypertension management according to protocol	8	7	8	448	
6	Lack of social media for socialization about hypertension.	8	8	7	448	
7	Lack of educational media about hypertension in the Health Center	8	9	8	576	IV
8	No facilities to make it easier for patients to remember control schedules	8	8	8	512	V
9	Lack of educational innovation for cadres and targets / communities	8	7	8	448	
10	No evaluation procedures and follow-up on the suitability of hypertension management with the protocol	8	8	8	512	VI
11	Primary Service Integration program has not been implemented	8	8	8	512	VII
12	No standard procedure (SOP) for hypertension management protocols	9	9	8	648	II
13	Lack of supervision and family concern for hypertension sufferers	7	7	8	392	
14	Cooking culture that is high in salt and fat / cholesterol	7	7	8	392	

From the USG results, it was found that the priority for solving the problem of "Low Percentage of Hypertension Sufferers Whose Blood Pressure is Controlled in the Balowerti Health Center Area in 2023" is based on the following order:

1. Low level of compliance with control and taking medication (Patients do not control / take medication if there are no complaints)
2. The absence of a standard procedure (SOP) for hypertension management protocols
3. Lack of patient knowledge about the importance of blood pressure control
4. Lack of educational media about hypertension in the Health Center
5. The absence of facilities to make it easier for patients to remember the control schedule
6. The absence of evaluation procedures and follow-up on the conformity of hypertension management with the protocol
7. The Primary Service Integration program has not been implemented

By using SWOT analysis, Puskesmas Balowerti will be able to identify strengths, weaknesses, opportunities and obstacles to achieving the vision, mission and goals of the organization.

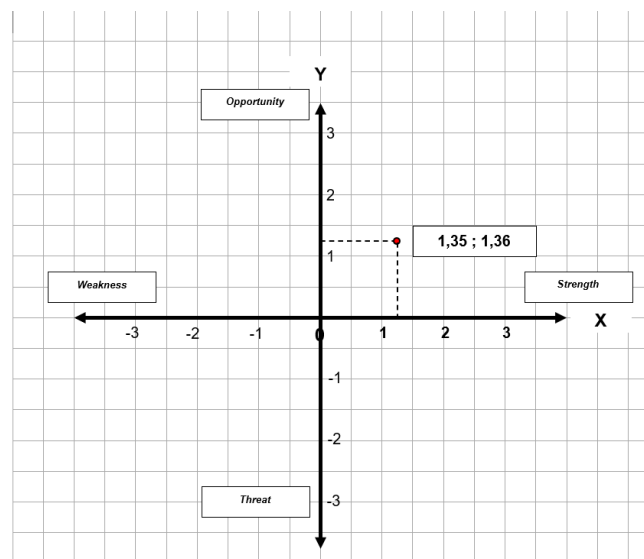
Thus the strategy and technical implementation of activities will be sharp and in accordance with the objectives

The following is a SWOT analysis of the Balowerti Health Center, referring to the 2023 Balowerti Health Center Development Plan document (Balowerti Development Plan, 2023).

STRENGTH (S)		WEAKNESS (W)	
-	Mempunyai tenaga yang ramah kompeten (dokter, perawat/ bidan wilayah)	-	Health center location in densely populated areas
-	Mempunyai kebijakan sejalan dengan pemerintah	-	Lack of doctors and nurses
-	Memiliki akses internet dan teknologi	-	Limited space
-	Mempunyai media komunikasi dengan masyarakat (IG, kotak saran)	-	Many health center programs and reports
-	Tarif pelayanan terjangkau	-	Not yet implementing ILP so that UKM and UKP activities are not yet integrated
-	Kompetensi dan ketrampilan pegawai masih bisa ditingkatkan		
OPPORTUNITY (S)		THREAT (T)	
-	Many companies in the work area that can be invited to collaborate, support the health center program	-	Reporting of services by the network is less compliant (do not know the health center program)
-	Full support from the government	-	Information in the digital era is very rapid, some are true, some are not
-	Networks have great potential to be invited to collaborate	-	Health centers have not become the first choice for treatment/consultation
-	Community trust The level of community participation in the health center program is quite high	-	Lack of public understanding of the impact of uncontrolled blood pressure
-	Support from the village government including the implementation of UKBM	-	The economic and educational levels of the community in the work area vary greatly (a different approach is needed)
-	There are still opportunities to improve cadre skills		
-	The geographical area is not too large and easy to access		

Table 2. IFAS and EFAS SWOT Analysis Scoring Results

Internal Factors	
Strenght	2,20
Weakness	0,85
IFAS	1,35
External Fctors	
Opportunity	2,16
Threat	0,80
EFAS	1,36



Cartersian/XY diagram the position of Balowerti Health Center is a result of SWOT analysis, is in quadrant 1, which means that this condition supports aggressive growth (growth-oriented strategy). The health center has good strengths and can take advantage of existing opportunities.

DISCUSSION

The results of the implementation of community service activities in general can be seen based on the following components: 1) Success of the target number of counseling participants. The success of the target number of training participants can be said to be very good. All invited participants came at the invitation of the Health Center. 2) Achievement of Health Counseling Objectives. 3) The achievement of counseling objectives can be said to be good. There is an increase in knowledge from participants about the importance of controlling blood pressure in people with hypertension. 4) Achievement of planned material targets. The achievement of planned material targets can be said to be good. All training materials can be delivered by the team with limited time. The materials that have been delivered: (a) understanding hypertension, (b) symptoms of hypertension, (c) Factors that influence hypertension, and (d) How to control blood pressure in people with hypertension. All of these materials can be delivered by the service team within the specified time. 4) Participants' ability to master the material. The participants' ability to master the material can be said to be good. Delivery of material using the lecture method and continued with two-way discussion.

CONCLUSION

Balowerti Health Center has sufficient strength and opportunity to support this government program aggressively. Several factors of poor performance achievement in controlling hypertension must also be intervened so that there is no increase in mortality or morbidity of hypertension. The achievement figure for the Percentage of Hypertension Sufferers whose Blood Pressure is Controlled in the Balowerti Health Center area is one of the problems with the largest gap among other Individual Health Effort targets. After going through various discussions and analyses, increasing the coverage of the Percentage of Hypertension Sufferers whose Blood Pressure is Controlled in the Balowerti Health Center area is: 1) Increasing Education efforts to the Community. 2) Provision of Educational Media at the Balowerti Health Center and its network. 3) Provision of BAKTI Cards (Balowerti Actively Controls Hypertension) to make it easier for hypertension sufferers to remember the control schedule and make it easier for officers to monitor blood pressure. With such efforts, it is hoped that the achievement of blood pressure control in hypertension sufferers will be in accordance with the target so that the death rate due to hypertension can be reduced.

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