

EMPOWERMENT AND ASSISTANCE FOR PTM POSBINDU CADRES IN DETECTING RISK FACTORS FOR NON-COMMUNICABLE DISEASES IN RIVER COASTAL COMMUNITIES

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ABSTRACT

Data from the 2021 Banjarmasin City Health Profile, the prevalence of Hypertension in Banjarmasin was 28.49% in 2020, increasing to 35.39% in 2021, and the majority of type 2 diabetes mellitus in Banjarmasin also rose from 8.09% to 9.96%. The prevalence of NCDs, which contribute to death, requires the government to create a healthy society by reducing risk factors. Posbindu PTM is a community-based health effort that is promotive and preventive in the context of early detection and monitoring of major NCD risk factors, carried out in an integrated, routine, and periodic manner. Pekauman Community Health Center is a community health center with the broadest working area coverage and is densely populated unevenly. The long-distance traveled and only reached by water transportation means that strengthening the role of PTM Posbindu Cadres still needs to be optimized. The aim of implementing PkM is to increase cadres' knowledge about PTM in DM and Hypertension and improve cadres' skills in screening for PTM risk factors for communities on the river coast in Banjarmasin. The method used in this activity is empowerment by training and assisting cadres in carrying out health examination activities and counseling on PTM, especially Hypertension, and DM.

The results showed an increase in knowledge before and after training of 21.39 points with $p: 0.00$ and an increase in skills of 13.39 points with $p: 0.00$. Most cadres stated they had more confidence and enthusiasm to carry out their duties. During the health check, 46 residents at Posbindu Seberang Sungai Mantuil and 44 at Posbindu Basirih Selatan participated in activities carried out by cadres. The examination results were followed up with health and sports education with cadres and residents. It is recommended that Posbindu PTM be monitored after PPM activities by the Mantuil community health center, and similar PkM activities can be implemented at other Posbindu PTM in Banjarmasin City.

Keywords: Cadres, Mentoring, Empowerment, Posbindu, Non-Communicable Diseases

INTRODUCTION

Non-communicable diseases (NCDs), especially Diabetes Mellitus (DM) and Hypertension, in recent years, have shown an increase in incidence in society and have become a significant challenge faced in health services today (Rumahorbo H; Waluya NA, 2021). Banjarmasin is one of Indonesia's provinces with high rates of non-communicable diseases (NCDs), especially Hypertension and diabetes mellitus. High prevalence of hypertension and diabetes mellitus.

According to the 2021 Banjarmasin City Health Profile, the prevalence of Hypertension in Banjarmasin was 28.49% in 2020, increasing to 35.39% in 2021, and the majority of type 2 diabetes mellitus in Banjarmasin also rose from 8.09% to 9.96% (South Kalimantan Health Office Data, 2021). Data on the distribution of the top 10 diseases at district/city health centers in the city of Banjarmasin for the period January-December 2021 shows that Hypertension is still a non-communicable disease with a high prevalence and type 2 diabetes mellitus is in fourth place after ARI and

dyspepsia (Rikesdas, 2020). Unhealthy and unhealthy eating patterns, smoking behavior, psychosocial stress, lack of infrastructure, and limited affordability of health services trigger the high incidence of Hypertension in this region (Hudiyawati et al., 2022). The prevalence of NCDs, which contribute to death, requires the government to create a healthy society by reducing risk factors.

The form of PTM prevention program that the government has launched is CERDIK (Rikesdas, 2020). This program is oriented towards a healthy paradigm, where individuals increase their awareness of preventing NCDs through regular health checks, stopping smoking, exercising diligently, maintaining a diet, getting enough rest, and managing stress. The CERDIK program will be more optimal if integrated into Posbindu PTM activities (Ministry of Health, Indonesian Health Profile, 2016).

Posbindu PTM is a community-based health effort whose activities involve active community participation in the early detection, monitoring, and early follow-up of NCD risk factors independently and continuously. Posbindu PTM is also a community-based health effort that is promotive and preventive in the context of early detection and monitoring of main NCD risk factors, carried out in an integrated, routine, and periodic manner. Community cadres are given facilities and guidance in developing a forum for their role. They are equipped with knowledge and skills to recognize problems in their area and identify, formulate, and resolve them based on existing priorities and potential. In determining problem priorities, planning, implementing, monitoring, and assessing community activities need to be involved from the start.

Pekauman Community Health Center is a community health center with the broadest working area coverage, 10.65 km², covering 54.7% of the South Banjarmasin sub-district area. The population of the Pekauman Community Health Center working area is 57,400 people, with uneven population density. The Mantuil sub-district is the largest working area of the Pekauman Community Health Center, namely 5.05 km²; the active region can only be reached by water transportation (Kelotok). The long-distance traveled and only surpassed by water transportation means that

strengthening the role of PTM Posbindu Cadres still needs to be optimized. The aim is to provide productive services to the community by PTM cadres in the Mantuil River coastal area to prevent non-communicable diseases (PTM) from being carried out optimally.

It is essential for Posbindu PTM cadres in the Mantuil sub-district continuously to strengthen their role as motivators and providers of information related to PTM prevention and to be empowered through training and mentoring in carrying out risk factor detection activities such as measuring blood pressure and sugar in each work area of the Pekauman Community Health Center because it maximizes monitoring. The health of river coastal communities, especially those of productive age, to be more effective. This activity aims to increase cadres' knowledge about PTM in DM and Hypertension and improve cadres' skills in screening for risk factors for PTM in DM and Hypertension.

Objective

As for Purpose, this report is:

1. Documenting the activity process from preparation to evaluation.
2. Identify various obstacles during the activity.
3. As a guide for the implementation of future activities.

Time and place

This community service activity was carried out on September 2023 at Puskesmas Mantuil. Twenty-five people attended this activity for seminar and training cadres. Ninety residents were involved in screening for non-communicable disease factors.

Target

There were 25 health cadres, and 90 residents were examined for health risk factors.

Objective General

This activity aims to increase cadres' knowledge about PTM in DM and Hypertension and improve cadres' skills in screening for risk factors for PTM in DM and Hypertension.

Special Purpose

1. The activity targets include increasing cadres' knowledge, skills, and attitudes in carrying out PTM posbindu services,

identifying high-risk groups for diabetes and Hypertension in the community, and implementing health education for community members by trained cadres.

2. The output, in the form of improving the quality of Posbindu PTM management, increasing community participation in utilizing Posbindu PTM services, and continuity of optimal service by cadres together with health workers educational institution partners as companions for every month's health services at Posbindu PTM on a regular and scheduled basis.

METHOD

This Community Service activity method consists of several stages of activities that will be carried out in this activity, namely:

1. The activity began with outreach and advocacy to related parties, such as Posbindu PTM cadres and PTM program holders at the Mantuil health center. The socialization aims to obtain community support and commitment to strengthening the role of PTM Posbindu cadres in the Mantuil sub-district, as well as a common perception regarding the program that will be implemented, namely maintaining the function of PTM Posbindu cadres.
2. Empowerment begins with seminars on non-communicable diseases (Hypertension and Diabetes Mellitus) and training cadres to act as providers of health information in language that is easy for the public to understand using leaflets.
3. Furthermore, a workshop was held with training on using tools to detect risk factors for non-communicable diseases (PTM), such as measuring blood pressure, abdominal circumference, body weight, and blood sugar at any time.
4. Assistance to evaluate the knowledge, skills, and attitudes of trained cadres in counseling and risk factor screening to the community in the Mantuil River coast area of the Pekauman health center working area.

Partners in this Community Service are the Pekauman Community Health Center, which holds the PTM program and will

participate together with cadres and community service teams in coordinating with cadres holding PTM posbindu in the work area of the Pekauman Community Health Center, socializing the program that has been implemented with PTM posbindu cadres and working together to convey data related to obstacles and expectations in implementing the program with Posbindu cadres and involve shared perceptions regarding the community service team activities that will be held with partners, especially PTM Posbindu cadres.

Evaluation of program implementation is through continuous assistance from Pekauman Community Health Center partners for PTM Posbindu cadres due to coordination between the community service team and partners, in addition to being strengthened by an MOU between the community service team institutions and partners. After the activities are completed, the program's sustainability in the field will continue to be monitored and evaluated through ongoing activities from the community service institutions that have implemented the MOU.

This activity is carried out in a community service team consisting of a chairman tasked with initiating program ideas, compiling proposals, analyzing community needs, analyzing data from partners, and building networks with partners. Then, member one is charged with preparing the budget, administering correspondence, searching for supporting articles, preparing data collection, analysis, and field coordination. Member two is tasked with documenting photo and video activities, preparing technical activities in the area, and coordinating with the parties involved (students, cadres, community nurses, and the Pekauman Health Center). This activity also involves students as a team who will be tasked with assisting with the technical implementation of the action, the creative team, and editing photo and video documentation for publication.

This activity involves students so that it has the potential for reconciliation of credits for subjects related to the courses being

carried out, namely community nursing, three credits, and family nursing, two credits, so that it will be proposed following the applicable standard operating procedures (SOP) regarding recognition of student credits by coordinating with Head of PSIK Study Program and Vice Dean I academic field for recognition and decisions.

RESULTS AND DISCUSSION

Activity Results

A. PTM Posbindu Cadre Training

The training was attended by 25 cadres from Cahaya posbindu in the Mantuil Community Health Center working area under the Pekauman Banjarmasin Community Health Center. All participants were housewives with a majority of high school education. All cadres can complete scheduled activities. The training results are shown in Table 1. Table 1. Results of Mean Difference Test for Cadre Knowledge and Skills (n=25).

Test results	Knowledge			Skills		
	Mean ± SD	t	p	Mean ± SD	t	P
Pre-test	60.13± 5.23	223.72	0.13	65.53± 6.51	123.33	0.06
Post-test	81.52± 4.61	139.51	0.00	78.92± 5.89	167.86	0.00

The results of the training showed an increase in the value of knowledge about non-communicable diseases, especially Hypertension and diabetes mellitus, by 21.39 points and statistically showed a significant difference before and after training with p: 0.00. Likewise, the aspect of blood pressure measurement skills showed an increase of 13.39 points, with statistical tests showing that there was a significant difference after training with a p-value: 0.00. The attitude aspect shows a positive attitude towards the training attended by the cadres. From the results of collecting opinions, most cadres who participated in the movement expressed enthusiasm and became more confident in carrying out their duties at the PTM posbindu. Some of the reasons put forward are that training further enhances knowledge about PTM, sufficient training time, health

checks are trained and guided by PPM implementers, training provides direct outreach to the community, and the implementation of training is given in a relaxed but severe manner.



B. Cadre Assistance

After the training, all trained cadres carried out risk factor checks on all residents who came to the Cahaya postbindu in Kampung Benteng RT 06 Bromo Island, Mantuil sub-district.

The results of the risk factor examination of residents at Posbindu Cahaya are as follows:



Table 2. Frequency Distribution of Posbindu PTM Groups

No	Group Characteristics (n=90)		
1	Age		
	Mean	51.25	
	elementary school	6.37	
	Min-Max	23-76	
2	Gender		
	• Man	15	16.67
	• Woman	75	83.33
3	Education		
	• Not completed in	17	18.89

	primary school		
	• elementary school	34	37.78
	• JUNIOR HIGH SCHOOL	16	17.78
	• SENIOR HIGH SCHOOL	23	25.55
4	Work		
	• Farm workers	14	15.56
	• Self-employed	8	8.89
	• Employee	7	7.78
	• Doesn't work	9	10
	• RT's mother	52	47.77

From the characteristics of respondents in the two Posbindu PTM groups, most community members who participated in this program were women with jobs as housewives and primary school education—average age as a pre-elderly group (51 years).



Table 3. Frequency distribution of PTM Risk Factor examination results

No	Group Risk Factors (n=90)	
1	Abdominal Circumference	
	Mean	85.78
	elementary school	13.15
	Min-Max	70-102
2	Blood Pressure (Systolic)	

	≤ 120 mmHg (Normal)	35	38.89
	121-139 mmHg (Pre Hypertension)	15	16.67
	≥ 140 mmHg (Hypertension)	40	34.44
3	Blood Pressure (Diastolic)		
	≤ 80 mmHg (Normal)	42	46.67
	81.5-89 mmHg (Pre Hypertension)	28	31.11
	≥ 90 mmHg (Hypertension)	20	12.22
4	Body Mass Index (Ministry of Health Standards)		
	< 17 (Severe Deficiency)	BB 0	0
	17-18.4 (mild weight deficiency)	4	4.44
	18.5-25 (Normal)	44	48.87
	25.1-27 (advantages of Light BB)	22	24.44
	> 27 (excess weight)	20	12.25
5	When blood sugar		
	< 110 mg/dl (Normal)	60	66.67
	110-199 mg/dl (Pre Diabetes)	12	13.33
	> 200 mg/dl (Diabetes)	18	20

The results of risk factor examination by trained PTM cadres showed that the majority of the group was at the stage of Hypertension, obesity, and prediabetes, so the cadres provided health education accompanied by implementing nurses, nutritional counseling by nutritionists and PTM program holders for PkM activities. Health education includes implementing a balanced diet and regular exercise.



PTM disease is also called a catastrophic disease, namely a disease caused by an unbalanced lifestyle. It is dangerous because it causes expensive complications (Ministry of Health of the Republic of Indonesia, 2017). This group of diseases costs a lot of health compared to other diseases. NCDs can be controlled and prevented. Therefore, prevention is done with healthy living behavior, especially maintaining a diet, regular exercise, and an ideal body weight. Prevention of NCDs begins with recognizing and identifying various risk factors for NCDs in the community and managing them optimally. Various risk factors should be identified as early as possible and worked effectively with persistent and independent behavioral interventions. Community independence in managing their health, especially in building self-awareness and healthy living behavior with a community empowerment approach. To prevent the occurrence of NCDs, Health Education needs to involve all planned efforts to influence other people, whether individuals, groups, or society, so that they do what is expected by the perpetrators of health education or promotion (M.Isra, Warjiman, Chrisnawati, 2018). Empowering and assisting these cadres will increase the community's role in prevention and promotion.

CONCLUSIONS & SUGGESTIONS

Implementation of activities in empowering and assisting Posbindu PTM cadres in detecting risk factors for non-communicable diseases in the Banjarmasin River coastal community in the Pekauman Community Health Center working area shows success in increasing knowledge, skills, enthusiasm, and confidence of health cadres in carrying out NCD risk factor examinations and carrying out health education for residents at risk of PTM. Training and mentoring need to be supported to run sustainably and be implemented in river coastal communities.

Suggestions

- Routine implementation to refresh the knowledge and skills of Posbindu PTM cadres is regularly scheduled.
- Cadre formation from hard-to-reach places must be carried out so cadres can reach the community.

- Coordination of cadres with the community health center in procuring consumables for screening risk factors such as glucose test strips, uric acid, and cholesterol.
- Collaboration with health and CSR agencies in funding and implementing sustainable activities in promotive and preventive NCDs in the community.

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