Formation of Health Volunteer for Integrated Non-Communicable Diseases (Posbindu PTM)
Services in Geblagan, Tamantiro, Kasihan, Bantul

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Abstract. Integrated Non-Communicable Disease Development Post (POSBINDU PTM) is an activity for monitoring and early detection of integrated PTM risk factors (heart disease, diabetes, lung disease, asthma, and cancer). The target of Posbindu PTM activities is 15-59 years (productive age) with the hope that if they are healthy at productive age, then they can become quality elderly. The problem faced by Indonesian people who are of productive age is that they do not know that they have hypertension or diabetes mellitus, because they are often asymptomatic early in the course of the disease. The service is carried out by identifying the Padukuhan Geblagan community who have the potential to become Posbindu PTM health volunteer. The selected health volunteers are then given training related to Posbindu PTM activities. This training begins with the provision of material related to Posbindu PTM, providing material related to the types of diseases that are included in non-communicable diseases, providing material related to how to identify non-communicable diseases, providing material related to the technical implementation of Posbindu PTM, demonstrating the implementation of Posbindu PTM and redemonstrating the implementation of Posbindu. The result of this activity is that Posbindu PTM health volunteer have been trained with a 5- table system with a total of 20 people. PTM Posbindu health volunteers who have received training can carry out Posbindu PTM activities properly. The health volunteers that were formed consisted of all levels of society, RT administrators, PKK administrators and community leaders. The Padukuhan Geblagan PTM Posbindu has been launched by the Tamantirto Village Government, witnessed by the Kasihan 1 Health Center staff and named the Posbindu PTM SEHAT (Sehat, Enerjik, Hidup, Aman, Tentram).

Keywords: Posbindu, Non-communicable Diseases, health volunteer

1 Introduction

Non-Communicable Diseases (PTM) in society are increasing because many of them have the wrong lifestyle. One of them is an unhealthy diet. Eating foods that contain too much salt is a risk factor for PTM. This PTM incident also occurred in the community at Padukuhan Geblagan, Tamantirto Village, Kasihan District, Bantul. The high PTM in the

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Padukuhan Geblagan community is influenced by the lack of knowledge about PTM and the trivialization of a disease. The results of the data are health problems in the form of diabetes mellitus and hypertension in adulthood. The results of interviews with several residents showed that there were residents who had a history of hypertension and diabetes mellitus, but still often consumed foods that were too salty or too sweet. The community also lacks knowledge about hypertension and diabetes which can cause quite severe problems for their health. In the community there is no integrated non-communicable disease development post-program (Posbindu PTM).

Integrated Non-Communicable Disease Development Post (POSBINDU-PTM) is an activity for monitoring and early detection of integrated NCD risk factors (heart disease, diabetes, lung disease, asthma, and cancer). The target of Posbindu PTM activities is 15-59 years (productive age) with the hope that if they are healthy at formative age, then they can become quality elderly. High blood pressure (hypertension) and diabetes are examples of NCDs that are often encountered. If PTM is not treated, it will get out of control and cause fatal complications. Complications due to hypertension and diabetes mellitus are blindness, irregular heart rhythm, and heart failure. The problem faced by Indonesian people who are of productive age is that they do not know that they have hypertension or diabetes mellitus, because they are often asymptomatic early in the course of the disease.

The 2018 Basic Health Research (RISKESDAS) prevalence of hypertension based on the population aged 18 years and over was 25.8% and the prevalence of diabetes mellitus based on laboratory tests was 6.9%. Hypertension and diabetes mellitus in the early stages often do not cause symptoms. If a person has symptoms, it is often discovered too late or complications have occurred. Based on Riskesdas (2018), almost 2/3 of people with hypertension and diabetes mellitus do not know high blood sugar if they do not take measurements and examinations.

Early detection and monitoring of NCD risk factors can be carried out in various places such as through PTM Posbindu activities and at first-level health facilities (FKTP). Early detection is carried out by weighing body weight and measuring height to determine body mass index (BMI), abdominal circumference, and blood pressure and by checking blood sugar, uric acid and cholesterol.

2 Methodology

The implementation to solve this problem is by forming Posbindu PTM health volunteer. Health volunteers are selected from elements of society who are dedicated to devoting themselves to community activities. The activity that was carried out for the first time was to approach partners and to find people who had the potential to become Posbindu PTM health volunteer. Communities who have potential are then given training related to Posbindu PTM which includes implementing a 5 table system, interviewing risk factors, measuring risk factors, and checking blood pressure. Following this, role play and technical demonstrations were carried out for the implementation of Posbindu PTM.

3 Results and Discussion

The implementation of community service activities is carried out through the preparation, implementation, and evaluation stages. The implementation phase is carried out by coordinating between the service team and related partners and stake holders. Partners said that if there were no activities in their area to detect non-communicable diseases, the results of interviews with several residents showed that there were residents who had a history of hypertension and diabetes mellitus but still often consumed foods that were too salty or too sweet. The service team also coordinated with stake holders, namely Kasihan 1 Community Health Center and Tamantirto Village Administrators. The results of this
coordination showed that there was no Posbindu PTM as a means for the Geblagan Padukuhan community to carry out early detection of non-communicable diseases. The results of the service team held deliberations with the head of the Geblagan hamlet and community leaders to identify people who had the potential to be trained and made Posbindu PTM health volunteers.

The identification effort obtained 20 people from the community who were willing to become Posbindu PTM health volunteers, consisting of community leaders, PKK administrators and RT administrators. The health volunteers who have been selected are then trained regarding the implementation of Posbindu PTM. This training begins with giving a pretest to all participants. The training materials consist of Risk Factors for Non-Communicable Diseases, Risk Factor Interviews, Risk Factor Measurement, and a 5-table system in Posbindu PTM. The training ended with a technical demonstration of Posbindu PTM implementation and working on posttest questions. In accordance with the guidelines for the implementation of Posbindu PTM from the Ministry of Health (2014), a cadre is someone who because of his skills or abilities is appointed, selected and or appointed for the development of public health in a place. Health education by providing material related to non-communicable diseases to health volunteer is an effort to convey health messages to the community, groups or individuals in the hope of increasing knowledge about health even better (Binoriang, 2019).

![Figure 1: Meeting with selected PTM Posbindu Health volunteer](image1)

**Table 1: Pretest and Postest Values of Posbindu PTM Health Volunteer**

<table>
<thead>
<tr>
<th>Average Value</th>
<th>Pretest</th>
<th>Postest</th>
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<tr>
<td></td>
<td>5.8</td>
<td>7.9</td>
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Primary data 2023 (n: 20 respondents)

Based on Table 1, the results show that health education related to health volunteer knowledge about Posbindu PTM has increased. This is in accordance with research conducted by Huriah (2020) that community-based health education can increase knowledge. Health education must always be carried out by health workers to the community or health health volunteer (Ferry & Makhfudi, 2019). One of the tasks of the cadre is to become an extension of the health workers at the Puskesmas, so that they can become a bridge in providing health information.

![Figure 2: Pretest process before training](image2)
Empowerment by the service team for Posbindu PTM health volunteer is a form of health promotion strategy. The training provided to health volunteers is one form of effort to increase the knowledge, skills, and attitudes of health volunteers related to non-communicable diseases. One of the strategies used in improving skills is by demonstrating how to measure risk factors for non-communicable diseases and conducting simulations related to the technical implementation of Posbindu PTM with a 5-table system. The observation results showed that health volunteers were able to demonstrate how to measure risk factors for infectious diseases by measuring blood pressure. In addition, health volunteers are also able to simulate the implementation stage of Posbindu PTM with a 5 table system.

![Figure 3: Presentation of materials, and demonstration of NCD risk factor measurement](image)

The implementation of monitoring and evaluation is carried out by strengthening before the launching event of Posbindu PT. The consolidation is carried out by conducting simulations related to how to implement Posbindu PTM with a 5-table system, conducting risk factor interviews, and measuring risk factors to conducting health education. Through monitoring activities, the quality of each program or activity can be assessed and then improved in the next program. In this stabilization activity, health volunteers are still afraid when trying to measure blood sugar levels, so they still need assistance. Further monitoring was carried out during the launching of Posbindu PTM. The health volunteers in carrying out their duties at the launch were more prepared, but were constrained by the queuing process from the number of participants present. So, it is necessary to make a queue number so that the participants who attend it can be more orderly.

Program evaluation was carried out for each activity and it obtained some results, including there was an increase during the cadre knowledge training activities related to Posbindu PTM. The next evaluation was carried out at the time of stabilization, and the results obtained were that the health volunteers were still afraid of checking their blood sugar, so they still needed to be assisted. The last evaluation was carried out at the launching of the PTM Posbindu, and the health volunteers were able to carry out their duties according to the 5 Posbindu PTM table system, but there was still a queue of PTM Posbindu participants.

![Figure 4: Launching and Implementation of Posbindu PTM](image)

### 4 Conclusions

The community service activity of forming PTM Posbindu health volunteer in Padukuhan Geblagan, Tamantirto, Kasihan, and Bantul can be concluded that:

a. There are PTM Posbindu health volunteers who have been trained with a 5-table system with a total of 20 people.
b. PTM Posbindu health volunteers who have received training can carry out Posbindu PTM activities properly.

c. The health volunteer that were formed consisted of all levels of society, RT administrators, PKK administrators and community leaders.

d. The Padukuhan Geblagan PTM Posbindu has been launched by Tamantirto Village Administrator, witnessed by the Kasihan 1 Health Center staff and named the SEHAT PTM Posbindu (Healthy, Energetic, Alive, Safe, Peaceful).

Acknowledgement

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