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Efforts to empowerment the Community and Health Involunters Related to Non-Communicable Diseases (PTM) through Strengthening Posbindu

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ABSTRACT

Morbidity and mortality of Non-Communicable Diseases (NCD) tends to increase in the last few decades in Indonesia, including at the global level. Posbindu as a Community-Based Health Effort (UKBM) which is held in accordance with the abilities and needs of the community. This Community Service aims to empower cadres in early detection of PTM risk factors which is carried out through several activities including the establishment of PTM Posbindu, training of cadres on PTM Posbindu, and continued monitoring of PTM risk factors. The results of community service obtained data that there were differences in the level of knowledge of cadres about PTM Posbindu before and after being given additional material. There was 1 cadre (6.25%) with a decreased score after the intervention, 13 cadres (81.25%) experienced an increase in post-test scores, and 2 cadres (12.5%) with a fixed score. The intervention given to the cadres was in the form of knowledge about the PTM Posbindu which consisted of the role of cadres in the implementation of the PTM Posbindu, the concept of the PTM Posbindu which included definitions, types of non-communicable diseases, targets, objectives, risk factors for PTM, and the implementation of Posbindu activities by cadres. The conclusion of this community service is the formation of PTM Posbindu in Plosobuden Village, Deket District. Besides. there was an increase in the knowledge and skills of cadres to carry out early detection of PTM risk factors such as measuring blood pressure, weighing weight, measuring height, calculating body mass index, conducting random blood sugar checks, measuring abdominal circumference and cadres were able to fill KMS FR-PTM , conduct counseling and referrals to first-level health facilities, as well as record and report the results of PTM Posbindu activities.

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INTRODUCTION

Posbindu is one of the Public Health Efforts (UKM)which is oriented to promotive and preventive efforts in controlling Non-Communicable Diseases (NCD) by involving the community, starting from planning, implementation and monitoring and assessment. The community is involved as an agent of change as well as a resource that drives Posbindu as a Community-Based Health Effort (UKBM), which is held in accordance with the abilities and needs of the community (Kemenkes, 2020).

The implementation of the PTM program in most provinces still encounters obstacles, namely the lack of advocacy to Regional Leaders to carry out activities/movements to increase awareness and concern for the community to encourage individual behavior change. The public must be given an understanding that PTM is the Silent Killer which often does not give symptoms and complaints to a person, but is detected when the disease is chronic or at an advanced stage, so that every individual really needs to implement healthy living behaviors and carry out early detection or regular health checks. . These movements/activities need to be initiated by Regional Leaders and will be very meaningful if they can also become role models or catalysts for healthy living changes (Ministry of Health, 2020).

Increasing cases of Non-Communicable Diseases (NCD) will significantly impact the quality of life and individual productivity. This will also have an impact on the environment and the country, because chronic non-communicable diseases require a long time in treatment and large financing needs. related sectors (Lestari, R, 2020).

The Strategy for Combating Non-Communicable Diseases consists of 4 strategic areas in the prevention of non-communicable diseases, namely: Area 1: Advocacy, partnership and leadership; Area 2: Health promotion and risk reduction; Area 3: Health systems strengthening for early detection and management of NCDs; and Area 4: Surveillance, monitoring and evaluation and research (WHO, 2018)

Handling NCD problems requires comprehensive and holistic interventions, namely promotive, preventive, curative, and rehabilitative efforts, as a continuum of care. The strategic approach to reducing the burden of PTM is to increase promotive and preventive efforts through GERMAS culture, community empowerment in controlling PTM risk factors, and increasing multi-sectoral action. Public health monitoring, especially of productive age, becomes more effective(Lestari, R, 2020).

Non-communicable diseases (NCDs) are the leading cause of death in the world. WHO reports that 40 million people in the world suffer from non-communicable diseases in 2016, the main causes of which are cardiovascular disease, cancer, chronic respiratory diseases, diabetes and injuries. In line with global data, NCDs also contribute to 73% of deaths in Indonesia, of which 26% occur in adults. Directly proportional to Southeast Asia, the Western Pacific region also experienced an increase of 2.3 million (21.1%) compared to 2000, which was 8.6 million (WHO, 2018).

Overview of Morbidity and Mortality of Non-Communicable Diseases The trend of increasing non-communicable diseases that have occurred in recent decades at the global level has also occurred in Indonesia, both in terms of morbidity (morbidity) and mortality (mortality). The perception that non-communicable diseases are a problem in developed countries is not true. Estimates of causes of death related to non-communicable diseases developed by WHO show that cardiovascular disease is the highest cause of death in Southeast Asian countries, including Indonesia, which is 37 percent. More than 80 percent of deaths are caused by cardiovascular disease and diabetes and 90 percent of deaths from chronic obstructive pulmonary disease occur in lower-middle income countries.

Table 1. Estimation of the Proportion of Non-Communicable Diseases as a Cause of Death in Several SEARO Countries (WHO, 2014)

	Cardiovascular	Diabetes	Cancer	Injury	Breathing Chronicle	PTM other
Indonesia	37%	6%	13%	7%	5%	10%
India	26%	2%	7%	12%	13%	12%
Thailand	29%	4%	17%	11%	9%	12%
Myanmar	25%	3%	11%	11%	9%	11%
Nepal	22%	3%	8%	10%	13%	14%
Sri Lanka	40%	7%	10%	14%	8%	10%
Bangladesh	17%	3%	10%	9%	11%	18%

Based on the description of the problem of morbidity and mortality related to non-communicable diseases nationally in Indonesia, the impact can be estimated from an economic perspective. The publication of the World Economic Forum in April 2015 showed that the potential loss due to non-communicable diseases in Indonesia in the 2012-2030 period is predicted to reach US$ 4.47 trillion, or 5.1 times GDP 2012. This is very high compared to that experienced by India (USA). $4.32 trillion, 2.3 times India's 2012 GDP) and China (US$29.4 trillion, 3.57 times China's 2012 GDP). In Indonesia, these losses are the result of cardiovascular disease (39.6%) followed by mental disorders (21.9%), respiratory disease (18.4%), cancer (15.7%) and diabetes mellitus (4.5%) (WHO, 2018).

Indonesia is currently facing a double burden of disease, namely communicable and non-communicable diseases. Changes in disease patterns are strongly influenced, among others, by changes in the environment, community behavior, demographic transitionsfi, technology, economy and socio-culture. The increase in burden due to PTM is in line with the increase in risk factors which include increased blood pressure, blood sugar, body mass index or obesity, unhealthy eating patterns, lack of activity.fiphysical activity, and smoking and alcohol (Ministry of Health, 2019).

Data for non-communicable diseases from the Ministry of Health showed the following results: Asthma prevalence in the population of all ages decreased from 4.5% to 2.4%; Cancer prevalence increased from 1.4 per to 1.8 per mile, Stroke prevalence in the population aged 15 years increased from 7 to 10.9 per mile, chronic kidney disease 15 years increased from 2.0 per mile to 3.8 per mile, Diabetes Mellitus prevalence in population aged 15 years increased from 6.9% to 10, 9%, Activity prevalencefiPhysical deficiency in the population aged 10 years increased from 26.1% to 33.5%. The prevalence of low fruit/vegetable consumption in the population aged 5 years increased from 93.5% to 95.5%.

RESEARCH METHOD

Participants of the community service program are health cadres, community leaders and the community aged 15-59 years who have PTM risk factors in Plosobuden Village, Lamongan Regency. The implementation method includes the stages of preparation, implementation, and evaluation. The details of each stage are as follows:

Stage I (Preparation Stage)

a. Licensing stage
   Licensing is done by applying for a permit to the Lamongan District Health Office, which is sent to the Deket Health Center and Plosobuden Village.
b. Preparation phase
   The activities carried out are by preparing the equipment and supplies needed in service activities which consist of minimum standard equipment including; Posbindu PTM training module which consists of 8 series, weight measuring devices (scales), height measuring devices, abdominal circumference measuring tape (midline),

sphygmomanometer/tensimeter, random blood glucose, uric acid and cholesterol measuring devices and knowledge questionnaires of PTM Posbindu . For the implementation of recording the results of the implementation of the PTM Posbindu, a Card Towards Health Risk Factors for Non-Communicable Diseases (KMS FRPTM), and a notebook.

Phase II (Implementation Phase)

a. Orientation stage

The leader of the service team introduces himself and his team before the activity begins, explains the purpose and objectives of the activity, time contract, and explains the mechanism of implementing the activity

b. Working stage

PTM Posbindu activities consist of 2 main activities carried out for 2 months (July-August) namely the formation and training of Posbindu cadres; and evaluation activities for the implementation of Posbindu PTM in Plosobuden Village. In the report at the end of September, the service only reported the results of the formation, training of PTM Posbindu cadres, and evaluation of PTM Posbindu for 3 months. The formation and training activities consisted of 3 main activities, namely village level meetings, training for PTM Posbindu cadres, and launching PTM Posbindu.

1) Village level meeting

This activity began with a meeting with service partners, namely health workers from the Deket Health Center and community leaders including the hamlet head, RT head and health cadres. This activity aims to describe the PTM Posbindu program and ask for support and commitment from related parties regarding the establishment of PTM Posbindu

2) Cadre Training
The cadre training was held on the second day after the hamlet level meeting. This training begins with a pre-test and post-test of knowledge about PTM posbindu. Cadres are also taught about the skills of measuring weight and height, measuring abdominal circumference, and using the Card Towards Healthy Non-Communicable Disease Risk Factors (KMS FR –PTM).

3) Establishment of Posbindu PTM
This activity aims to introduce the PTM Posbindu program to the community and early detection of participants who attend the activity

Phase III (Evaluation of PTM Posbindu)
Evaluation of this activity is carried out by monitoring PTM Posbindu which is carried out every month after the 3rd month. With this program, it is hoped that the age group of 15 to 59 years can be more active in accessing community-based health services independently.

RESULTS AND DISCUSSIONS

Community service was carried out in Plosobuden Village, Deket District, Lamongan Regency on July 15 – August 15, 2022 with a series of activities ranging from advocacy and socialization, formation, training of cadres, and launching of Posbindu PTM. However, at the launch of the PTM Posbindu, not all people were willing to carry out early detection of PTM risk factors by reason of being afraid and feeling healthy. The series of activities started with conducting a Focus Group Discussion using online/zoom which was attended by the head of the Deket Health Center, the person in charge of the PTM Posbindu program, the person in charge of health promotion, village midwives and ponkesdes nurses, advocating and socializing about the PTM Posbindu. The devotees and the team did not find any significant obstacles during the series of activities, because community leaders and village heads provide full support and commitment to implementing PTM Posbindu in Plosobuden village which so far has not been implemented. In addition, the Head of

the Deket Health Center as the regional supervisor was also present and involved in the activity. This activity resulted in an agreement, namely the establishment of a PTM Posbindu in Plosobuden Village. Cadres involved in this activity also act as posyandu cadres for toddlers and the elderly. Before the training was given, the service team first gave a pre-test questionnaire to all cadres with the aim of knowing the level of knowledge of cadres about PTM posbindu. In addition, the Head of the Deket Health Center as the regional supervisor was also present and involved in the activity. This activity resulted in an agreement, namely the establishment of a PTM Posbindu in Plosobuden Village. Cadres involved in this activity also act as posyandu cadres for toddlers and the elderly. Before the training was given, the service team first gave a pre-test questionnaire to all cadres with the aim of knowing the level of knowledge of cadres about PTM posbindu. In addition, the Head of the Deket Health Center as the regional supervisor was also present and involved in the activity. This activity resulted in an agreement, namely the establishment of a PTM Posbindu in Plosobuden Village. Cadres involved in this activity also act as posyandu cadres for toddlers and the elderly. Before the training was given, the service team first gave a pre-test questionnaire to all cadres with the aim of knowing the level of knowledge of cadres about PTM posbindu, The characteristics of the cadres and the results of the questionnaire are presented in the table below.

Table 2. Distribution of Cadre Frequency by age, gender, education level, and occupation in Plosobuden Village, Deket District, Kab. Lamongan

Age	Amount	%
20 - 25	16	53
26 - 30	6	20
35 - 40	5	16
41 – 45	3	10
46 - 50	3	10
Total	**30**	**100**
Gender		
Woman	30	100
Total	**30**	**100**
Education		
SD/MI	0	
Junior high school/equivalent	2	7
High School/Equivalent	25	83
PT	3	10
Total	**30**	**100**
Work		
Employee	5	25
Housewife	25	75
Total	**30**	**100**

Source: Primary data, 2022

Based on table 1, more than half of the respondents (53%) are aged 20-25 years, all respondents are female, the education level of most of the respondents (83%) is high school / equivalent and most (75%) of the respondents have a job as a housewife. ladder. Referring to the cadre requirements, the ability to read and write is one of the requirements to become a cadre so that the elementary education level has met the cadre requirements. In addition, the type of work most cadres are housewives (87.5%). Work as housewives does not limit their role as cadres (Steege et al., 2018). The results of the training provided data that there were differences in the level of knowledge of cadres about Posbindu PTM before and after being given additional material. There is 1 cadre (6, 25%) with decreased scores after the intervention, 13 cadres (81.25%) experienced an increase in post-test scores, and 2 cadres (12.5%) with fixed scores. The intervention given to the cadres was in the form of knowledge about the PTM Posbindu which consisted of the role of

cadres in the implementation of the PTM Posbindu, the concept of the PTM Posbindu which included definitions, types of non-communicable diseases, targets, objectives, risk factors for PTM, and the implementation of Posbindu activities by cadres. Increased knowledge of cadres is influenced by several factors including education level, age, experience, and years of service as well as recording and reporting (Gurning, 2016). The education level of cadres in Deket Village is mostly high school/equivalent, but supported by the experience of being a cadre long enough to form knowledge in themselves. There is 1 cadre whose grades decreased after being given the intervention, based on the results obtained, this cadre has the youngest age compared to other cadres and has just become a cadre so that experience in training, additional material, and the ability to adapt to activities has not been widely obtained. In addition, the more mature a person's age, the better his knowledge. Most of the age of cadres in Plosobuden Village, Deket District are 20-25 years, this affects memory which tends to be good so they have positive attitudes and actions towards an object (Laraeni & Wiratni, 2014). Cadre training on the implementation of PTM Posbindu has proven to increase the knowledge and skills of cadres. There is an effect of increasing the ability of cadres in managing posyandu after being given training (Purnomo, 2014). Cadre training on the implementation of PTM Posbindu also teaches skills about the 5-table function consisting of registration, interviewing PTM risk factors for oneself and PTM risk factors in the family, measuring body weight, measuring height, measuring abdominal circumference, calculating body mass index, measuring blood pressure, random blood sugar level examination, use of KMS FR-PTM, and counseling and referrals. The cadres were given a simulation case and divided into 4 groups, from which they were asked to play a role in the implementation of the PTM Posbindu. All groups are able to solve the cases given and play a role in accordance with their duties during the PTM Posbindu activities.

CONCLUSION

This community service program has initiated the formation of the PTM Posbindu in Plosobuden Village, Deket District. In addition, there was an increase in the knowledge and skills of cadres to carry out early detection of PTM risk factors such as measuring blood pressure, weighing weight, measuring height, calculating body mass index, conducting random blood sugar checks, measuring abdominal circumference and cadres were able to fill KMS FR- PTM, conduct counseling and referrals to first-level health facilities, as well as record and report the results of PTM Posbindu activities. The expected end result is that the public is increasingly aware of the importance of early detection of PTM risk factors so that cross-sectoral roles are needed so that the sustainability of PTM Posbindu and the role of cadres in early detection is increasing.

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