

Upskilling and Reskilling Non-Communicable Disease Cadres for Increasing Chronic Disease Management

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Abstract

Purpose: Non-communicable diseases (NCDs) are often chronic diseases, with the incidence rate increasing every year. All elements are involved in the prevention and management of NCDs. Likewise, NCDs posbindu cadres are the spearhead in the community. This community service aims to improve the knowledge and skills of NCDs posbindu cadres in efforts to prevent, early detect, manage and report NCDs.

Method: The method used in community service uses a knowledge transfer approach, science and technology diffusion, asset-based community development and participatory action programs. All cadres of NCDs and Puskesmas were involved in this activity. The program implementation procedure is preceded by socialization, implementation, monitoring and evaluation.

Practical Application: The implementation of upskilling and reskilling cadre activities is carried out in 2 stages. There are improving cognitive knowledge with structured education, then the next stage is skill improvement with early detection demonstrations using medical devices.

Conclusion: This Upskilling and rekskilling activity for posbindu cadres can improve the knowledge and skills of NCDs posbindu cadres.

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Introduction

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Non-communicable diseases (NCDs) that are not well managed can develop into chronic diseases, in the sense that the condition will continue to persist and worsen over time. Non-communicable diseases that can become chronic include Diabetes Mellitus, heart disorders, kidney disorders, stroke and cancer (malignancy). NCDs are also the leading cause of death worldwide (WHO, 2020). Riskesdas 2018 reported an increase in these health problems from Riskesdas in 2013. Cancer prevalence rose from 1.4% to 1.8%; stroke prevalence increased from 7% to 10.9%; and chronic kidney disease increased from 2% to 3.8%. Based on blood sugar tests, diabetes mellitus rose from 6.9% to 8.5%; and the results of blood pressure measurements, hypertension increased from 25.8% to 34.1% (Ministry of Health of the Republic of Indonesia, 2022). This data is strengthened by WHO in 2022 where out of the total population in Indonesia, which is 270,600,000, there are 1,386,000 deaths due to NCDs and it is estimated that the percentage of deaths due to NCDs reaches 76%. Death is caused by heart disease, cancer, chronic lung disease and diabetes mellitus (WHO, 2020)

The prevalence of NCDs based on risk factors is not doing physical exercise at 10.6%, smoking behavior at 12.7%, obesity at 50%, and overweight (8.1%). Overweight and obesity are associated with insulin resistance and metabolic syndrome (Kuruvilla, 2023). Indonesia is one of the countries that faces the Triple Burden or the burden of various disease problems. One of them is PTM, which tends to continue to increase every year. The management and prevention of health problems has not been maximized, making health problems continue and become chronic. It is evident that the burden of chronic diseases in Indonesia is increasing in Indonesia so that there is a need for management from the smallest areas such as posbindu or village-level integrated service.

Pos Pembinaan Terpadu (Posbindu) Mawar is located in the village of Glagah Kulon which is the outermost area on the north side of Kudus regency, with the closest access to the Health Center is the Rejosari Health Center as far as 6.6 km. Posbindu Mawar is under the auspices of the Glagah Kulon Village Government and is a forum for the participation of the Glagah Kulon community in promotional and preventive efforts to detect and control non-communicable diseases. Among the non-communicable diseases that are increasingly worrisome today are diabetes mellitus (DM), hypertension, obesity and even heart disease. The current members of the rose posbindu are 50 people with hypertension, 60 people with hypertension and DM, 30 people with hypertension and obesity, 10 people with hypertension, DM and heart disease. The number of Aggota posbindu is decreasing compared to 2020 which reached 150 people. This is because there are 10 members who died, and 70 other people no longer routinely participate in posbindu activities (Lestari & Efendi, 2020)

The activities carried out by Posbindu Mawar are health condition checks such as blood pressure checks, weight weighing, and height measurements with a frequency of 8 times a year. Blood sugar checks are carried out 3 times a year, cholesterol measurement 1 time a year. This blood sugar and cholesterol check is adjusted to the availability of tools and materials. Joint sports activities are carried out 2 times a year. The Village Government can only budget for this Posbindu activity 8 times a year. The flow of Posbindu activities in each activity cannot be carried out comprehensively, including 5 tables: 1) registration, 2) interviews, 3) measurement of height, weight, BMI, abdominal fat, 4) blood pressure, blood glucose, cholesterol 5) education/counseling (Amanda & Dameria, 2023). The Mawar Posbindu is managed by 5 cadres where these cadres also concurrently serve as toddler posyandu cadres and also elderly posyandu. Cadres have not received upskilling and reskilling of health cadres, from 5 years ago only 1 training was carried out in 2020 on DM. Simple examination measures, interviews for chronic disease screening have not been carried out by cadres (Haris., Pabanne, F.U., Syamsiah, 2022).

The main problem faced by Posbindu Mawar is the lack of knowledge and skills of cadres about the management of simple chronic diseases and screening of at-risk groups in the community. Examination activities are not carried out periodically so that it is difficult to

monitor disease control of Posbindu members, and the motivation of members is also decreasing to participate in Posbindu activities so that this can worsen their health conditions. Based on the social aspect of the community, the problem faced is the lack of public awareness to control chronic diseases which is characterized by low participation in posbindu activities. From the management aspect, the problems that can be identified are the lack of frequency of activities from the minimum standard, which is once every 1 month, and the absence of upskilling and reskilling activities of cadres since the last 5 years.

The solution offered by the service team is knowledge transfer and diffusion of science and technology with community empowerment in Glagah Kulon Village, Dawe, Kudus. The formation of chronic disease health guides and cadres is the right solution, activities can be carried out looking at the existing potential. The purpose of the formation of a guide is to get an example of a person who has a chronic non-communicable disease but can control the disease so that this guide can motivate group members to always control their disease because this disease will be suffered throughout their lives (Anggarawati & Lestari, 2022). Meanwhile, upskilling and reskilling cadres aim to form cadres who specifically carry out chronic disease management with previous capacity development so that the activities carried out are more directed and prevent overload of cadre workloads. Cadres play a very important role in controlling the risk factors of NCDs in the surrounding community in the NCDs posbindu

The purpose of this community service activity is to improve the quality of life of members of the rose posbindu by controlling chronic diseases and increasing the capacity and capabilities of cadres through the formation of chronic non-communicable disease guides and cadres.

Method

The method used in community service uses several approaches, namely the knowledge transfer approach, science and technology diffusion and asset-based community development. There are 4 measurable indicators in the implementation of service to target partners, namely increasing the knowledge and skills of partner members about chronic disease control, the formation of guides as an effort to improve the quality of life of partner members, increasing the frequency of Posbindu activities initiated by the community and the formation of health cadres with increased knowledge of chronic disease management.

The program implementation procedure includes several stages, including: 1) Socialization stage, at this stage the implementation team conducts socialization of the community partnership program to partner group members to provide an explanation of the scope of activities, rights and obligations of group members and post-program governance so that this program can be sustainable; 2) Implementation Stage, this stage will be carried out by first using knowledge transfer, through the stages of counseling and structured training, at this stage cadres are equipped with chronic disease control. The details of the introduction at this stage are equipped with basic knowledge related to chronic non-communicable diseases such as hypertension, diabetes, obesity and heart disease. After knowing about chronic infectious diseases, cadres are given provisions related to the prevention and management of chronic diseases including monitoring treatment, simple clinical examinations, and referral efforts. Through science and technology diffusion, partners are given training in the use of medical devices for simple examinations such as sphygmomanometers, glucometers, and abdominal fat meters.

The next approach is asset-based community development. The first step is discovery, at this stage the community is encouraged to find strengths that can be used in overcoming the problems faced. Dream, find the desire that the community wants to achieve to overcome the problem of chronic diseases in their area, Design, bridging the community to form and increase the potential of health cadres, Define, recruiting potential health cadres from the community so that health cadres are formed without playing a dual role, Destiny,

establishing the organizational structure of chronic disease health cadres that are separate from posyandu cadres for toddlers and the elderly

In order to support the success of the implementation of this program, partners consciously participate by participating in counseling and training activities until they provide a place. This community service is carried out by the participatory actions' programs approach method where all group members participate. Program evaluation is carried out in stages at the end of each stage of activity implementation. The evaluation is aimed at finding out the output obtained by group members after the treatment given. To ensure the sustainability of the program, coordination is carried out with the Puskesmas and Village Head in the implementation of activities and periodic monitoring of activities by the implementer for up to 6 months or until the group can be independent in the implementation of activities. In the next stage, both internal and external monitoring will be carried out on the entire series of activities starting from preparation to implementation stage.

Result

Posbindu Mawar is located in the village of Glagah Kulon which is the outermost area on the north side of Kudus regency, with the closest access to the Health Center is the Rejosari Health Center as far as 6.6 km. Posbindu Mawar is under the auspices of the Glagah Kulon Village Government and is a forum for the participation of the Glagah Kulon community in promotional and preventive efforts to detect and control non-communicable diseases. The results of the Focus Group discussion activities found that the problems faced were the low participation of the community in posbindu activities and the lack of efforts to improve the capabilities of cadres for 5 years.

The activities carried out are upskilling and reskilling the knowledge and skills of NCDs posbindu cadres. The material presented included the posbindu policy, implementation, early detection and management of NCDs as well as the safety and health of social workers

Figure 1. Implementation of cadres upskilling and reskilling



Source: Private Documentation

The activity was carried out for 2 days where the first day focused on learning activities with the aim of increasing cadre knowledge. The results of this activity can be seen in the following diagram

Figure 2. Knowledge of NCD's Cadres Before and after training

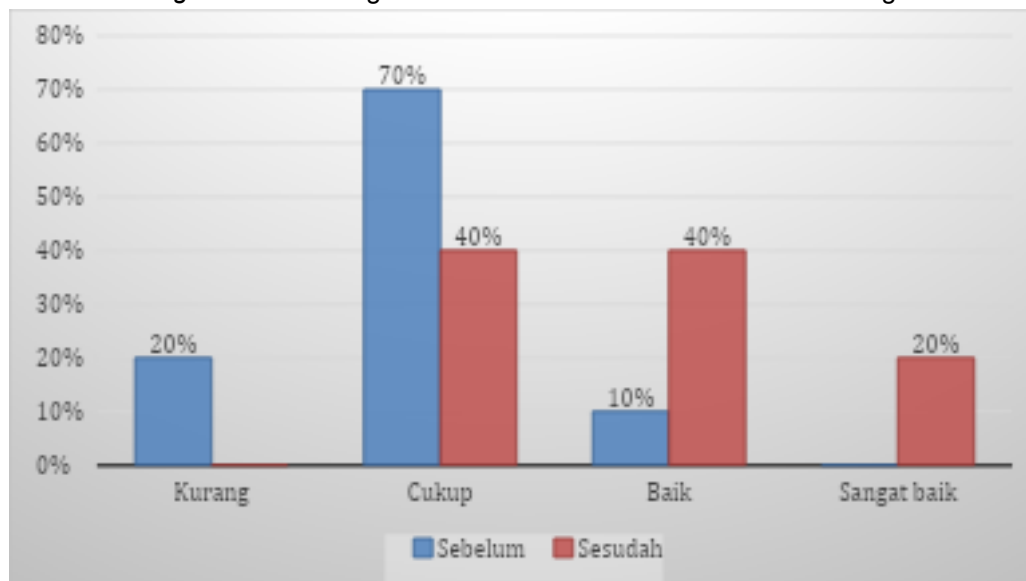
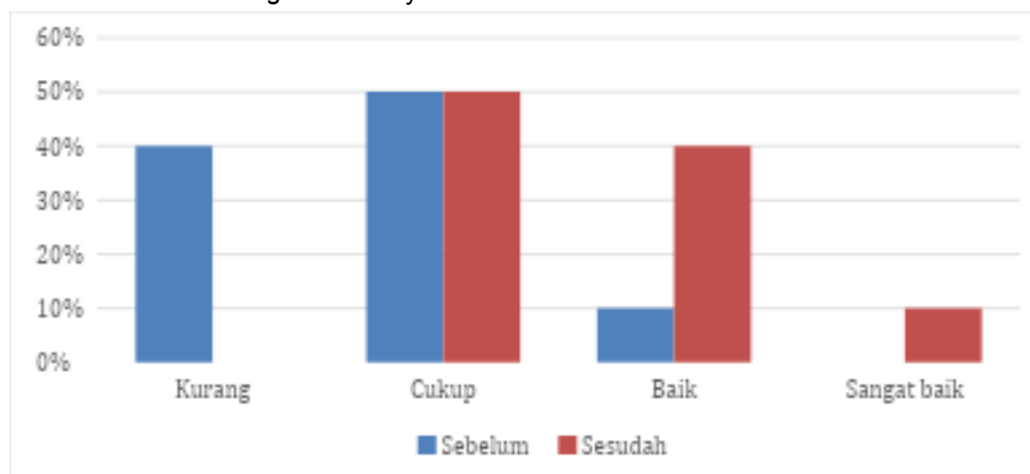


Figure 3. Early Detection skills of NCD's Cadres



Discussion

This cadre training activity received a positive response from both the Health Center and cadres. The enthusiasm of cadres in the activity was very high. The results of the activity showed that there was an increase in knowledge from the original, less than 20%, enough 70%, good 10% to less than 0%, 40%, enough 40%, good 40% and very good 20%.

Cadres are the spearhead in the implementation of NCDs Posbindu, starting from coordinating the implementation of posts, mobilizing the community to participate, monitoring and measuring risk factors, reporting monitoring results and follow-up such as providing information, education and referrals (Dewi, Sabarani, Aini, 2022). Posbindu cadres are part of the members of the community group who have been trained and formed in a communication forum related to public health guidance services by and for the community who have strategic value in developing human resources from an early age. The role of cadres is very important in the implementation of NCDs Posbindu activities, starting from the

role of implementing, coordinating, driving, monitoring and reporting NCDs case. The existence of cadres can create an independent society in the prevention of disease risk factors, one of which is non-communicable diseases. The role of cadres can also connect communication between health workers and the community, so that it can reduce non-compliance with health care (Kaptiningsih, Suhartini, Rahmat, 2023)

Increasing the capacity of cadres needs to be taken with the first step of strengthening their commitment to becoming social workers. The goals and duties of a cadre need to be strengthened again so that cadres increase their interest and motivation in carrying out NCDs' posbindu activities. Furthermore, the knowledge of cadres also needs to be improved. Knowledge is very closely related to a person's attitude and behavior in acting. Cadre knowledge can form a positive attitude towards the posbindu program. Community involvement through the formation of health cadres is one of the health socializations to the community. This sector is an important aspect to realize a good economy in the long run.

Gibson in Notoatmodjo stated that the factors that determine a person's performance are grouped into three main variables, namely individual variables consisting of understanding of work, work experience, family background, socioeconomic level and demographic factors. The second variable is the organizational variable consisting of leadership, work design, organizational structure and finally the psychological variable consisting of perception of work, attitude towards work, motivation, personality (Notoatmodjo, 2015).

To support performance, NCDs cadres are equipped with knowledge of several NCDs diseases such as hypertension, diabetes mellitus, heart disease, lung disease, cancer and other degenerative diseases. The focus on preventing and overcoming some of these NCDs diseases must be carried out as early as possible considering that NCDs sufferers have a low quality of life, causing an increase in the burden of health costs and even increasing the mortality rate (Rahman et al., 2021).

The results of this training activity also showed that early detection skills of NCDs also increased. If you look at the results of the evaluation, the skills obtained before being given training are less than 40%, 50%, good 10% and after being given training it becomes enough 50%, good 40% and very good 10%. The material provided was in the form of measuring blood pressure, abdominal circumference, height, weighing weight, checking blood sugar, cholesterol and conducting a simple fat distribution analysis. Risk factor screening needs to be done considering that through early detection, disease complications can be prevented. Preventive and promotional efforts are important in controlling NCDs. Early detection can be done through body mass index (BMI) measurement, abdominal circumference control, blood pressure, and blood sugar (GDS). Body mass index (BMI) is the ratio of BB (kg) to TB (m²). An increase in BMI or a high BMI rate correlates with the incidence of coronary heart disease. Weight in the normal category as well as weight gain after the age of 18 are at increased risk of coronary heart disease in women. Abdominal circumference is a measurement made around the abdomen at navel level.

Health experts usually use abdominal measurements to find out if a person has weight-related health problems. The normal size of the abdominal circumference in men is 90 cm and 80 cm in women. The size of the abdominal circumference is related to a person's blood sugar levels. Likewise, research conducted by (Hita et al., 2022), that nutritional status and abdominal circumference have a significant and positive influence on blood pressure with an influence of 67%. High blood pressure is also called hypertension. Blood pressure in people with high blood pressure or more commonly known as hypertension is systolic ≥ 140 mmHg and diastolic pressure ≥ 90 mmHg. Blood pressure measurements are taken to determine whether a person has a risk of Hypertension. Blood pressure is an important factor in supporting the health level of everyone. Individuals who have poor nutritional status and high blood pressure will cause a risk of diseases such as heart attacks, strokes, kidney disorders, and sexual dysfunction (Hita et al., 2022). Current

blood sugar (GDS) and blood pressure checks are one of the efforts to carry out early detection so that the public can carry out prevention (Selano et al., 2020).

Conclusion

Cadre training activities with the theme of upskilling and retraining NCDs posbindu cadres went very well, the enthusiasm of cadres was also good. This activity has increased the knowledge of cadres about the NCDs posbindu policy, implementation of posbindu, early detection and recognition of NCDs diseases as well as the health and safety of social workers. The skills of cadres have also improved in measuring blood pressure, abdominal circumference, height, weighing weight, checking blood sugar, cholesterol and conducting simple fat distribution analysis. This program has a positive impact on supporting the performance of cadres in preventing, monitoring and managing NCDs through posbindu activities.

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