

## **Empowerment of The Community Health Workers in Management of Posbindu for Non-Communicable Diseases in Sukamentri Village, Garut Kota District, Garut Regency**

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### **Abstract**

Non-communicable diseases are currently a major health problem and the biggest cause of death in the world. This problem arises caused of the behavior of people who do not understand how to prevent it. The right prevention strategy is to utilize the service and facility aimed at integrated human development called Posbindu, especially posbindu for non-communicable diseases. So that the posbindu non-communicable diseases function properly, community health workers must manage the posbindu non-communicable diseases in each hamlet in a village. This activity aims to increase community health workers' knowledge and ability to manage posbindu non-communicable diseases. The counseling target is community health workers in 1th Hamlet to 7th Hamlet Sukamentri Village, Garut Kota district, Garut Regency. The activity is carried out in two days, from May 17th until 24th, 2022. The stages of the activity consist of social and administrative preparation, implementation, and evaluation of activities. Preparation is done by surveying to see the community health problems. Implementation is done through health education and training. The activities went well according to plan. The results of the activity showed an increase in knowledge and skills of the community health workers in managing posbindu non-communicable diseases. The implementer of the activity is the counseling team consisting of lecturers, Guntur Community Health Center, and the students at Padjadjaran University.

**Keywords:** Health Cadre, Posbindu non-communicable diseases, Management.

### **INTRODUCTION**

Currently, around 73% of deaths are caused by non-communicable diseases (NCDs), including 35% due to heart and blood vessel disease, 12% due to cancer, 6% due to chronic respiratory disease, 6% due to diabetes, and 15% due to other non-communicable diseases. Every year NCDs are the biggest cause of death in all deaths that occur around the world. The high mortality rate of 80% occurs in developing countries (Arifin, Setyawan, and Warella 2021). The increase in deaths from NCDs in the future is projected to continue to occur due to changes in human behavior and the environment that tend to be unhealthy, especially in developing countries (Rahajeng et al., 2013).

Concerns about the increasing prevalence of NCDs have led to an agreement on a global strategy for preventing and controlling NCDs, especially in developing countries. NCDs have become a strategic issue in SDG 2030, so they must be a development priority in every country (Puspa, Jafar, and Alwi 2020). Indonesia is currently facing a double burden of communicable and non-communicable diseases. Disease patterns are strongly influenced by environmental changes, community behavior, demographic transition, technology, economy, and socio-culture. The increased burden due to NCDs is in line with the increased risk factors covering increased blood pressure, blood sugar, body mass index or obesity, unhealthy diet, lack of physical activity, smoking, and alcohol drinking habits.

Riskesdas in 2013 showed that 69.6% of diabetes mellitus cases and 63.2% of hypertension cases were undiagnosed. This situation intervenes difficult, complications occur, and even early death. The risk factors for this case are caused by several factors, such as smoking habits, lack of physical activity, and obesity (Pradono, 2018). According to Riskesdas 2013, the prevalence of

smoking habits (male and female smokers) is 36.3%, lack of physical activity at 26.1%, less consumption of vegetables and fruit at 93.6%, intake of foods that are at risk of NCDs such as sweet foods 53.1%, salty foods 26.2%, high-fat foods 40.7%, flavored foods 77.3% and emotional, mental disorders 6.0%. General obesity is 15.4%, and central obesity is 26.6% (Pradono, 2018).

While Riskesdas in 2018 showed an increase in key indicators of NCDs such as 1). The prevalence of high blood pressure in 18 years and over increased from 25.8% to 34.1%; 2). The prevalence of obesity in 18 years and over increased from 14.8% to 21.8%; 3). The smoking habits prevalence of 18 years and over increased from 7.2% to 9.1%; 4) Asthma prevalence in all ages decreased from 4.5% to 2.4%; 5) Cancer prevalence increased from 1.4 per mile to 1.8 per mile; 5) Stroke prevalence in 15 years and over increased from 7 to 10.9 per mile; 6) The prevalence of chronic kidney disease in 15 years and over increased from 2.0 per mile to 3.8 per mile; 7) Diabetes Mellitus prevalence in 15 years and over increased from 6.9% to 10.9%; 8) The prevalence of less physical activity in 10 years and over increased from 26.1% to 33.5%; and 9) The prevalence of low fruit and vegetable consumption in 5 years and over increased from 93.5% to 95.5% (Eriyani, Witdiawati, and Rosidin 2020).

The significant increase in NCD cases is estimated to increase the burden on the community and the government because the intervention requires large costs and high technology (Duha, Utami, and Rifai, 2021). The increase in the prevalence of NCDs has an impact on increasing the burden of health financing on the government and the community. People with NCDs require relatively expensive costs, especially if the condition develops into a chronic condition with complications. Data from the Center for Health Insurance Maintenance of the Ministry of Health of the Republic of Indonesia in 2012 showed that NCDs spent quite a large amount on medical expenses compared to the costs of all Communicable diseases (Rahajeng et al., 2013).

NCDs can be prevented by controlling the risk factors, namely smoking, unhealthy diet, lack of physical activity, and consumption of alcoholic beverages. The control of NCDs risk factors is an effort to prevent risk factors from occurring for those who do not have risk factors, return the risk of NCDs to normal again and or prevent the occurrence of NCDs for those who have risk factors, then for those who already have NCDs, the control aimed at preventing complications, disability, and early death and improve quality of life.

One efficient and effective NCD control strategy is empowering and increasing community participation. The community is given facilities and guidance to control NCD risk factors by being equipped with the knowledge and skills to carry out early detection, monitoring of NCD risk factors and follow-up. This facility is aimed at integrated human development, called Posbindu, especially Posbindu for NCDs. Posbindu for NCDs is a form of community participation in the early detection and monitoring of NCD risk factors. Their follow-up is carried out in an integrated, routine, and periodic manner. Activity Posbindu for NCDs is expected to increase the community's alert attitude toward NCDs risk factors to prevent the increase in NCDs cases. Changes in people's healthier behavior show this alert attitude and the use of health service facilities not only when sick but also in good health. Posbindu of NCDs is the community's participation in the early detection and monitoring of the Main NCDs risk factors, which are carried out in an integrated, routine, and periodic manner (Sicilia, Dewi, and Padmawati 2018).

The development of Posbindu for NCDs can be combined with the efforts that have been carried out in the community. Through Posbindu for NCDs, early prevention of NCDs risk factors can be carried out so that the incidence of NCDs in the community can be minimized. One of the strategies in improving the management of posbindu for NCDs is empowering community health workers as managers. The community health worker is provided with facilities and guidance in managing posbindu, equipped with knowledge and skills to increase community participation through early detection of NCDs (Lismayanti & Rosidawati, 2018).

Sukamentri Village is one of the villages under the guidance of Padjadjaran University in the District of Garut Kota. A survey conducted by students of Padjadjaran University shows that the biggest chronic disease in the area is hypertension. Other data from 1th Hamlet to 7th Hamlet were obtained data that be from 570 residents have a history of Hypertension (36%), Gastritis

(17.9%), Rheumatoid Arthritis (14.6%), Diabetes Mellitus (6.7%), Heart Disease and Stroke 3.5% each.

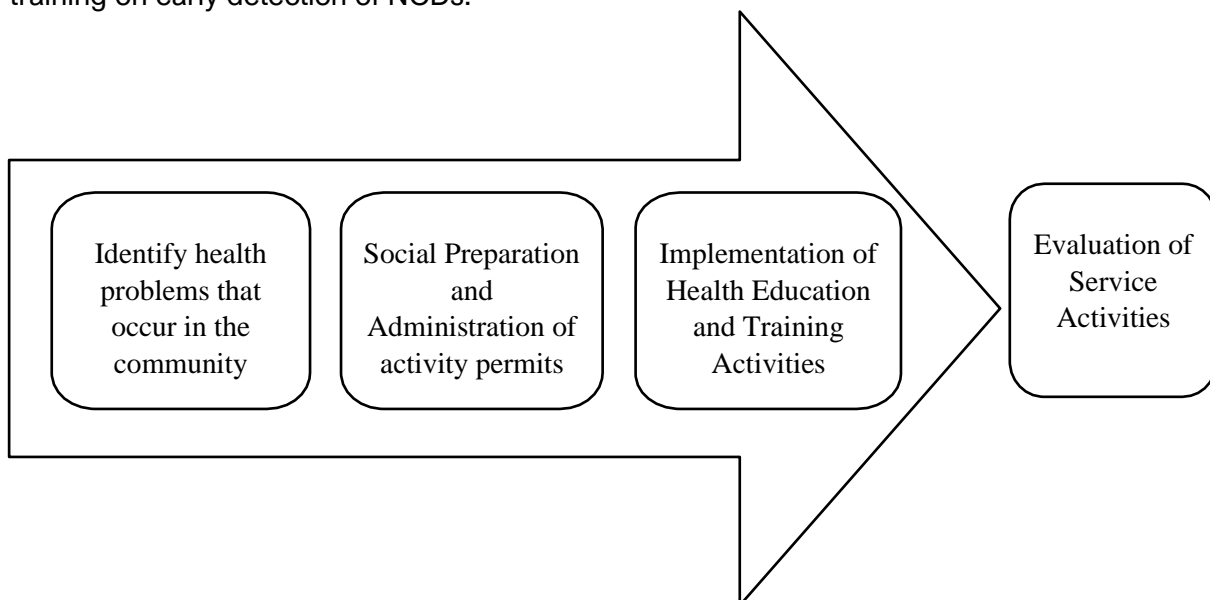
Based on this phenomenon, joint commitment is needed to reduce NCDs morbidity, NCDs mortality, and NCDs disability caused by NCDs through intensification of prevention and control of those. One of the important commitments is the proper management of Posbindu for NCDs to increase the coverage of the target who visit Posbindu. Based on this commitment, the team from Padjadjaran University, Guntur Community Health Center, and Sukamentri Village conducted training for community health workers about early detection and the management of posbindu for NCDs to a resident from RW 01 to RW 07 Sukamentri Village Garut Kota District Garut Regency.

The purpose of this service activity is that community health workers in 1th Hamlet to 07th hamlet Sukamentri Village have good knowledge in managing posbindu for NCDs and can detect NCDs early in the local community.

## METHOD

The first stage to resolving target problems is to take a social approach. Before the counseling activities were carried out, the counseling team met with the Head of the Guntur Community Health Center and the Head of Sukamentri Village. Then we surveyed to find out the public health problems there. One survey shows the high rate of hypertension and the low utilization of posbindu for NCDs. The survey results were discussed with the residents in the meeting. The meeting participants consisted of community leaders, community health workers, Guntur Community Health Center employees, the person in charge of the area, Sukamentri village, and the counseling team. The steps for this activity can be illustrated in the image below:

After finishing the social preparation, that be continued with administrative preparation. Administrative preparation begins with compiling and submitting a permit for community service activities. The next stage is the implementation stage, namely 1) Carrying out counseling to community health workers about various NCDs that often occur in the community. 2). Carry out counseling on the management of posbindu for NCDs to detect NCDs early, and 3). Carry out training on early detection of NCDs.



**Figure 1.** Stages of Community Service

## RESULT

Empowerment of community health workers in the management of posbindu for NCDs in Sukamentri Village was carried out for two days, on the 17th and 24th of May 2022, and was attended by 35 participants. Activities are carried out through health education and training for community health workers. Health education is carried out before training activities. Material

health education contains knowledge about NCDs such as hypertension, diabetes mellitus, rheumatoid arthritis, and other cardiovascular diseases. The documentation of this activity is shown in the appendix.

Another material is guidelines for the implementation and management of PTM Posbindu. Before the health education, a pretest was conducted, and after the health education, a posttest was conducted. The average value of the pretest results is 71 points, and the average post-test value is 89 points. There was an increase in knowledge after 18 points carried out health education. Another empowerment activity is the training of health cadres. The training measures height, weight, abdominal circumference and others as early detection of hypertension. Activities run smoothly according to the planned time. Another material is guidelines for the implementation and management of Posbindu for NCDs. Before the health education, a pretest was conducted; after the health education, a post-test was conducted. The average value of the pre-test results is 71 points, and the average post-test value is 89 points. There was an increase in knowledge after health education was 18 points. Another empowerment activity is the training of the community health worker. The training measures height and weight, abdominal circumference, and others as early detection of hypertension. Activities go smoothly according to the planned time.

## **DISCUSSION**

Based on these problems, empowering community health worker workers in the management of Posbindu for NCDs is a very appropriate effort. This empowerment activity will increase the understanding and ability of community health workers in managing Posbindu for NCDs as an early detection effort. With community health worker workers' increasing ability to manage Posbindu for NCDs, it will be a point that attracts people to come to Posbindu for NCDs. This condition is a good potential to increase community participation in using Posbindu for NCDs. With the increase in posbindu visits, it is easier to detect NCDs early. The sense of belonging to the community in carrying out early disease detection will increase. Empowerment activities for community health workers in the management of Posbindu for NCDs in the Work Area of the Guntur Community Health Center Garut Kota District in the form of health education and training for early detection of NCDs at posbindu.

Community behavior will support health if the individual community understands the behavior well. Through health education, it will be able to increase the knowledge of community health workers on the material presented. The counseling team carries out empowerment activities to increase community health workers' understanding of NCDs, especially hypertension, diabetes mellitus, rheumatoid arthritis, and other diseases. In addition, the community health worker will also increase their understanding of the management of Posbindu for NCDs.

Health education activities are carried out directly according to the planned time. Participants paid attention to the health education material which was provided. In the question and answer session, the participants actively asked questions. This situation shows that the community's health enthusiastically and seriously followed the event. It can be implemented according to the plan and have it go smoothly due to good coordination. We also coordinate with related parties, such as the village officer, the community health center officer, and the community health worker. According to L Green's theory (Notoatmodjo, 2019), predisposing factors can influence health behavior, enabling and reinforcing factors. One of the predisposing factors is knowledge. With adequate knowledge, the community health worker can form behavior that can increase the active participation of the surrounding community in each activity of Posbindu for NCDs. Health education is one of the efforts to increase knowledge (Suhendar, Rosidin, and Sumarni 2020).

Health education is an effort to increase health knowledge in the form of counseling with the aim that participants have knowledge and awareness about health through the program of healthy and clean-living behavior and can apply disease prevention. The average score before education was 71, and after education was 89, so there was an increase in knowledge of 18 points. This activity follows previous counseling activities, which showed an increase in the average score of

knowledge before and after the education was carried out (Rosidin, Sumarni, and Suhendar 2021).

After the knowledge of community health worker increases about NCDs and management of posbindu for NCDs as well as training in early detection of NCDs, the impact will increase the management of posbindu for NCDs properly and, in turn, will increase community participation in visiting posbindu for NCDs. Increased community participation in visits to posbindu for NCDs will make it easier for community health workers to detect NCDs early. With this training, community health workers can make early detection of NCDs such as electric blood pressure checks, height, and weight measurements, abdominal circumference measurements, and others. Early detection of NCDs in activities of Posbindu for NCDs, namely the implementation of 8 examinations such as targeted interviews, Measurement of Body Weight, Measurement of Height, Measurement of Abdominal Circumference, Measurement of Body Mass Index, Examination of Blood Pressure, Examination of Blood Sugar, and Examination of Total Cholesterol (Jayusman & Widiyarta, 2017).

Following the agreement with the Sukamentri Village community in the Guntur Community Health Center working area, the activity about early detection of NCDs risk factors would be carried out by trained community health workers. This is to research conducted by (Lestari et al., 2020) that community health workers who have been trained can be empowered in managing Posbindu for NCDs. Community health worker training on implementing Posbindu for NCDs has proven that it can increase the knowledge and skills of Community health workers. There is an effect on increasing the ability of community health workers to manage posyandu after they are given training on implementing Posbindu for NCDs. They are also taught about the function of 5 tables consisting of registration, weight measurement, height, abdominal circumference, blood pressure, and use of the card for the health of NCDs; patient health education is carried out.

## **CONCLUSIONS AND RECOMMENDATIONS**

Community service with the theme Empowerment of community health workers in managing of posbindu NCDs in Sukamentri Village, Garut Kota District, Garut Regency, consists of two activities, namely public health education about NCDs and management of Posbindu for NCDs, as well as training on early detection of NCDs at Posbindu for NCDs. The conclusions of this activity are: 1) There is an increase in knowledge of community health workers about NCDs and management of posbindu by 18 points. 2) There is an increase in the skills of community health workers in measuring height, weight, abdominal circumference, and others as early detection of hypertension.

The activities that have been carried out are expected to be independently sustainable by the community in the working area of the Guntur Community Health Center. We hope that the village head can carry out refresher training for community health workers in managing the posbindu for NCDs regularly using the village's budget. At the same time, The Guntur Community Health Center does follow up to provide health education and guidance to community health workers and the entire community in its working area.

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## APPENDIX



Figure 2. Preparation Stage

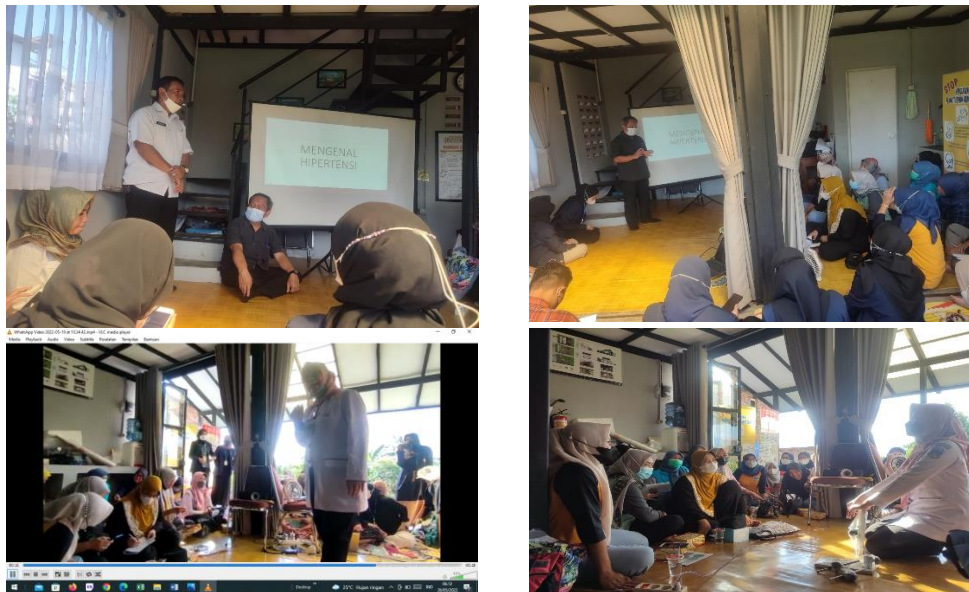


Figure 3. Implementation of Health Education



**Figure 4.** Training Implementation