

## **Increasing awareness among teenagers about preventing non-communicable diseases through the use of multimedia at Karang Taruna Wates**

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### *Abstract.*

Non-Communicable Diseases (NCDs) are currently a serious health problem in the world, because these diseases are one of the most common causes of death. Community empowerment in preventing PTM through community components, one of which is youth organizations or youth organizations which have an important role in taking part, is expected to be able to prevent PTM through various more interesting media. The aim of this community service is to provide PTM education through the use of multimedia. The method used is to convey information accompanied by posters, pictures and discussions. After providing education, it is hoped that youth organizations will be able to be more critical about PTM and be able to provide further education to the wider community, especially in the Wates area, by utilizing multimedia.

*Keywords: Non-communicable diseases, Karang Taruna, Multimedia*

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## **I. INTRODUCTION**

Non-Communicable Diseases (NCDs) are diseases that are not transmitted to other people by any form of contact, or in other words are diseases that are not caused by an infectious process (Sudayasa, 2020). The 2018 Riskesdas results show that there has been an increase in the prevalence of hypertension in the population aged over 18

years, namely from 25.8% to 34.1%. Then, it was also found that the prevalence of obesity in people aged 18 years and over increased from 14.8% to 21.8%. Not only hypertension, diabetes mellitus is also included in NCDs which not only cause premature death worldwide, but are also the main cause of blindness, heart disease and kidney failure. Indonesia is in 7th position in the 10 countries with the highest number of diabetes mellitus sufferers, namely 10.7 million.

Non-communicable diseases are known as diseases that cannot be spread from one person to another. There are four main types of non-communicable diseases, namely cardiovascular disease, cancer, chronic respiratory disease and diabetes. Modern lifestyles have changed human attitudes and behavior, including eating patterns, smoking, consumption of alcohol and drugs as a lifestyle so that sufferers of degenerative diseases (diseases due to decreased function of body organs) are increasing and threatening life. (Ministry of Health, 2019).

Non-communicable diseases arise from a combination of non-modifiable risk factors and modifiable risk factors. Risk factors that cannot be modified by an individual are age, gender, and genetics. Meanwhile, modifiable risk factors are factors that can be changed through the individual's own awareness and social intervention (Alifariki, 2015).

Prevention of non-communicable diseases can be done by providing education and early detection of risk factors, through organizing youth posyandu activities. Interventions in the form of practices such as training and mentoring are considered quite effective in optimizing the function of youth posyandu. A study reported that after being given the community empowerment program, it was found that there was an increase in knowledge and skills among cadres and other teenagers regarding the implementation of youth posyandu (Nurasiah, 2020).

In Permensos Number 25 of 2019 concerning Karang Taruna, Karang Taruna is an organization formed by the community as a forum for the young generation to develop themselves, grow and develop on the basis of awareness and social responsibility from, by and for the young generation, which is oriented towards achieving social welfare for society.

The flexible and easy nature of information technology brings benefits to village development to support the development of rural areas in the archipelago. The efficient and effective nature of information technology is an advantage for villages to be able to obtain all information that is developing in the global world. Through information technology, village development is expected to grow and develop significantly for the sake of creating welfare for residents in rural areas (Turmudi, 2020).

Health education is an effort to provide information, education, knowledge to someone who initially doesn't know, becomes aware, and those who initially know become more aware and even apply the information to themselves and the environment around them. Education is a planned effort for individuals, groups and society so that it does what the education provider expects. Education or also known as education is any planned effort to influence other people, whether individuals, groups or society, so that they do what is expected by educational practitioners (Kaderani, 2019). There are various forms of educational media, including audio and visual and audiovisual. Audiovisual media can directly display a combination of sound and image displays to help disseminate information. (Silalahi et al, 2018).

Currently in Indonesia social media is increasingly being used along with the rapid development of technology, social media often becomes a reflection for its users to represent themselves in terms of interacting, working together, sharing with teams, or communicating with other users so as to form strong social bonds collectively. virtual (Siregar, 2022).

Likewise with the Wates youth of Kediri Regency, the use of multimedia apart from being a means of interaction can also be used to promote health. Karang Taruna means a lot if socialization regarding their existence is always held. Through socialization and training, it is hoped that the role of youth who are members of youth groups will always be motivated to care more about their health and be responsive to preventing NCDs.

## **II. METHOD**

This service activity was carried out in Wates Village. The target of service activities is 20 youth organizations. Service activities go through several stages, starting

with a request for permission from the Wates Village Head. Contact the chairman of the youth organization for an agreement to carry out this service activity. The stages of this community service activity include 1. Socialization related to implementing community service activities with the theme Prevention of Non-Communicable Diseases using audio-visual videos. 2. Making advertisements or information related to non-communicable diseases. 4. Focus group discussion activity as a form of evaluation. The method used includes lectures related to Non-Communicable Diseases including symptoms, risk factors and ways to prevent them. The media used are LCD, laptop, power point and module.

### **III. RESEARCH FINDINGS**

Lecturers and students of the Pharmacy and Pharmacist Education Study Program from several institutions held community service activities in Wates Village, Kediri Regency. This activity is carried out by lecturers and also involves students. This community service activity was attended by representatives of the Village Head, community leaders and youth organizations.

Optimal activities require the support of ready resources such as youth organization skills, completeness of printed and electronic IEC media, and supporting infrastructure, as well as the participation of youth members. Based on the problem findings in the situation analysis, the majority of teenagers do not understand non-communicable diseases, both their causes and prevention. Apart from that, it is known that the lack of IEC media is owned. Therefore, the community service team and the chairman of the youth organization agreed to determine a program consisting of; 1) making IEC media in the form of videos and socializing adequate rest, 2) training cadres to provide education about PTM, 5) making printed IEC media in the form of posters or leaflets and socializing PTM

This empowerment-based activity is an educational and mentoring activity for the community to prevent non-communicable diseases, such as hypertension, stroke, heart disease and diabetes.

Starting with an introduction by the chairman, it was continued by the TIM members, namely lecturers and students. The socialization activity explains that the

service activity aims to provide training about PTM using multimedia as a form of awareness of PTM prevention.

Before training activities, participants must take a pre-test first. In this training, material was provided, including material about non-communicable diseases including risk factors, symptoms, types of non-communicable diseases and steps that must be taken to prevent the emergence of non-communicable diseases.



Figure 1. PTM outreach and prevention through the use of multimedia

#### IV. DISCUSSION

As a form of evaluation of this training activity, participants were given a pre-test and post-test, to find out teenagers' abilities regarding NCDs before and after being given counseling and the use of multimedia as a means of health promotion to prevent NCDs.

No	Indikator	Pre-test	Post Test
1	Knowledge	40%	90%
2	Skills	35%	80%

Table.1 Distribution of knowledge and skills of teenagers in Wates Village before and after being given training on PTM.

Improving the skills of Karang Taruna is carried out by providing material through lectures, questions and answers and discussions related to PTM material. Apart from using power points, training activities also provide modules with the hope that what has been conveyed through lectures can be studied or re-read even after the training and service activities have been completed. In this way, their understanding of the material that has been presented will not be quickly lost. Karang Taruna teenagers looked very

enthusiastic in taking part in this activity, they carried out questions and answers and the discussion was very interactive. This has a clear impact on increasing knowledge after the post test is carried out.

The involvement of youth cadres in community service activities is an embodiment of community participation in the health sector (Notoatmodjo, 2012). It is further said that community participation is a health service from, by and for the community (Notoatmodjo, 2010). In service activities, it can be seen that the level of youth participation in preventing NCDs is quite high, even the level of youth participation in preventing it reaches 100%. This shows that apart from understanding about PTM, teenagers have a positive attitude regarding the activities they have been given. Attitude is the willingness to act (Murti, 2018).

The use of multimedia can be through posters, advertisements, social media status, to see how much knowledge there is about Non-Communicable Diseases, with the hope of being able to provide education to other teenagers. Apart from teenagers, a TEAM of lecturers and students took part in this activity. They not only provide education to teenagers, but education is also provided to housewives and the elderly who live around where they live.

Non-communicable diseases no longer only affect the elderly but many teenagers also experience them. Diabetes Mellitus, Kidney Failure, and other types of non-communicable diseases. Risk factors for non-communicable diseases include lifestyle and diet. The current phenomenon is that there is a lot of ready-to-eat food and drinks available, making it easier for teenagers to get them. On the other hand, many of the ingredients contained in ready-to-eat foods such as preservatives, high salt and synthetic colorings are contained. Based on the results of research conducted by Warganegara & Nur, 2016, processed food or ready-to-eat food is food that is high in calories, high in fat and sugar as a risk factor for obesity compared to consuming vegetables and fruit.

The process of making audiovisual media such as videos really attracts the enthusiasm of youth cadres to get involved. In this way, it is hoped that the youth group will be enthusiastic in listening to the message of the importance of getting enough rest because it is played out by their peers. A study found that there was an effectiveness in increasing teenagers' knowledge after being given audiovisual media compared to

before. Videos can make it easier for audiences to visualize messages so they don't just rely on receiving messages in verbal form. During the pandemic, videos can overcome time and distance limitations so they can reach teenagers in a shorter time and a number of teenagers.

Evaluation given to participants through focus group discussion. This activity was attended by all teenagers who had taken part in previous training. This activity was carried out with the hope of getting input from participants regarding the activities that had been carried out, ranging from outreach activities, training to multimedia utilization activities. Some of the participants' input on the FGD activities were - They wanted continuity of service activities - One of them wanted to become a health cadre or posyandu but because he was studying he didn't have time to focus. Karang Taruna youth will later carry out activities aimed at preventing NCDs such as gymnastics. Providing education related to PTM by providing understanding to parents around where they live about the impact of PTM

## **V. CONCLUSION**

Community service activities targeting teenagers provide very significant behavioral changes, namely

1. Increased knowledge of Non-Communicable Diseases from 40% to 90%
2. Increase in multimedia use from 35% to 85%.
3. The level of youth participation in preventing non-communicable diseases has increased.

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