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Health Education As A Strategy For Early Prevention Of Sexually Transmitted Diseases Human Immunodeficiency Virus

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Abstract

Background: *In 2021, 203 cases of HIV infection, or 58% of the estimated 350 people, were found in Sigi District. Commitment and collaboration from every sector continue to be carried out to achieve "three zero" HIV by 2030. IEC is the right strategy to prevent HIV at all levels of society, and effective communication strategies are used to deliver messages. This activity aims to increase the knowledge of school-age children related to HIV.* ***Methods:*** *This activity was carried out with the concept of socialization using the educational method for 2x45 minutes with 63 middle school-age students in the Palolo District, Sigi Regency. Measuring the knowledge of respondents was carried out by interviewing them using a questionnaire. By comparing the pre-test score with the post-test score for each question item, the higher the post-test score, the better the level of success achieved.* ***Results:*** *The results obtained indicate that the majority of students easily accept and understand HIV-related material about the meaning, transmission, risks, and prevention of HIV. Informational and educational communication through appropriate animation media can make it easier for students to learn about HIV and provide them with a good understanding of the virus.* ***Conclusion:*** *This activity concludes that students already have good knowledge about HIV after participating in socialization activities with educational methods using visual aids and media.*

Keywords: *education, HIV, infectious, information, knowledge;*

1. INTRODUCTION

The United Nations Program on HIV and AIDS (UNAIDS) informs about HIV data around the world. As of 2018, as many as 37.9 million people suffer from HIV, and there have been 770,000 people who have died due to AIDS (Kemenko, 2020). In the last three years, the spread of HIV disease in Indonesia has resulted in 50,282 new cases Sutrasno, Yulia, Rumana, & Fannya, (2022), and in 2019, with an expected increase to 543,100 cases in 2020 (Shanti, 2021).

In 2021, based on the P2P Directorate General's report, the Indonesian Ministry of Health March showed a total of 558,618 cases Ismayanti & Suryamah, (2022), and in 2022, it will continue to experience a significant increase; until June, it will reach 519,158 new cases, and it is estimated that this will continue to increase (CNN, 2022). The results of HIV estimates and projections show that more than one million Indonesians will be infected with HIV in 2025. The estimated number may increase if efforts to accelerate the response to HIV and AIDS are not carried out immediately (Indonesian Ministry of Health, 2020).

In 2022, the State of Indonesia will rank first with the highest HIV cases in the Southeast Asia region. According to the Ministry of Health of the Republic of Indonesia, the majority of HIV patients are between the ages of 20 and 40 (Dihni, 2022). Central Sulawesi Province, which is one of the regions in Indonesia, has spread HIV, reaching 367 cases in 2020, this has increased by 18% since 2019. The estimated

number of HIV-positive people in Central Sulawesi Province is 2,519 (59.53%), with up to 500 deaths (DINKES Prov. Sul-Teng, 2021).

Sigi Regency is demographically part of Central Sulawesi Province, which has a high HIV prevalence. According to data from the Sigi District Health Office, there were as many as 203 cases of HIV infection, or 58% of an estimated 350 people, from 2002 to 2021 (Muhammad Hajiji, 2022). The government of Sigi Regency continues to raise related collaboration commitments by each sector to realize three zeros for HIV by 2030 (Moh Salman, 2022). The Sigi District Government has appealed to all participants in the HIV response to implement a communication, information, and education (IEC) strategy. CIE activities are the right strategy to prevent HIV at all levels of society and control HIV transmission (Harian Mercusuar, 2022).

An effective communication strategy is used to deliver messages that have been designed as an effort to prevent HIV transmission in the community. With this communication strategy, the community can easily accept the directions or ideas given (Trimanah & Sendjaja, 2004). According to Nathalia, her research results suggest that a good communication strategy can be carried out by determining the suitability of targets for the use of communication media (Nathalia, 2017). The low level of student knowledge regarding HIV/AIDS is due to a misunderstanding regarding the media of transmission and the method of transmission of HIV, even though the information has been provided by the school, it is still not comprehensive (Reswari, Mutyara, Lidyana, & Sadikin, 2016).

Middle school-aged children are people of the right age to be given education related to HIV early, as a means of breaking the chain of transmission. Based on the description regarding HIV, a community service program was carried out with the title "Health Education as a Strategy for Early Prevention of Sexually Transmitted Diseases and Human Immunodeficiency Virus" as an effort to reduce the prevalence rate of HIV transmission through social health education activities for middle school-age children. This activity aims to broaden school-age children's knowledge about HIV so that it is easy to recognize and prevent it.

2. LITERATURE

Human immunodeficiency viruses (HIV) are lentiviruses that are found all over the world. Because they enter the body and stay there for an extended period, they are frequently referred to as "slow viruses". They have the amazing capacity to encode information into the host cell's DNA and to replicate in non-dividing cells (Onah et al., 2022).

Antiretroviral treatment (ART) can be used to treat human immunodeficiency virus (HIV) infection, which is a chronic condition. Self-management, like that of other chronic illnesses, is critical for people living with HIV (PLWHA) to improve their physical and mental health and preserve social interactions throughout therapy (Katz & Jha, 2019) (Swendeman et al., 2009). HIV is identified as HIV-1 and HIV-2, both strains of the virus; HIV-1 is the most virulent, pathogenic, and dominant variant worldwide. When individuals discuss HIV without defining the kind of virus, they typically mean HIV-1. HIV-1 protease is an important enzyme involved in the replication of HIV-1, which causes acquired immunodeficiency syndrome (AIDS) (Huang et al., 2014) (Douek, Roederer, & Koup, 2009).

HIV education initiatives for the general public and other high-risk groups have been expanded in partnership with other international organizations such as the United

Nations Joint Program on HIV/AIDS (UNAIDS) and the United Nations Population Fund. Furthermore, public awareness of HIV is growing. General awareness programs, however, may not be enough to reduce the HIV pandemic and de-stigmatize the disease (Wu & Scott, 2020).

Since 2011, HIV testing and diagnosis have been identified as a priority policy for national HIV control. Since then, the number of HIV tests and HIV cases diagnosed in medical care settings has increased significantly (Wu & Scott, 2020). Over the last three decades, the global epidemics of human immunodeficiency virus (HIV) infection has changed remarkably around the world (Wang et al., 2016).

Strict public health measures (such as travel restrictions, lockdowns, and social isolation) implemented to curb the COVID-19 epidemic will also help prevent new HIV infections. This includes high-risk individuals and occupations such as sex workers (commercial and non-commercial) and those working in long-distance transportation services (Melaku & Assefa, 2020).

3. METHODS

This service activity uses educational methods with animation media in discussion groups to increase school-age children's knowledge of HIV and make it easier for them to remember, making it easier to prevent it early. The event lasted five days, from July 20 to July 25, 2022. Participants in the socialization consisted of 63 students from middle schools in Grade 3 middle schools. It has been carried out in Palolo District, Sigi Regency, and Central Sulawesi Province. Figure 1 depicts the stages and processes of activities.

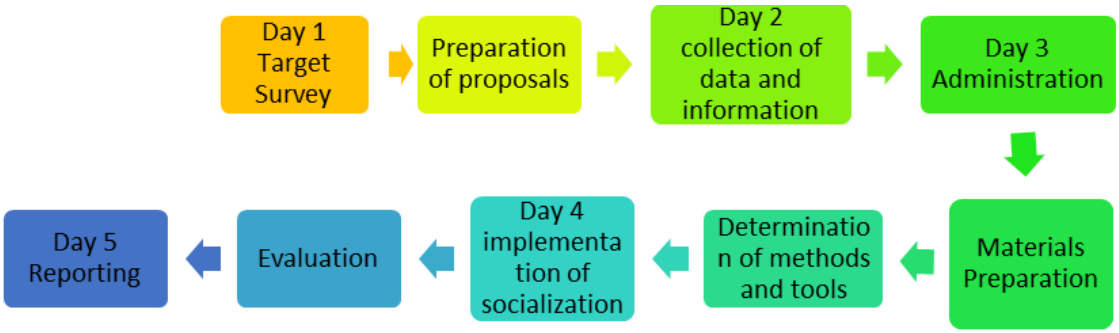

Figure 1. Flowchart of community service activities

This activity is carried out with an estimated time of 2 x 45 minutes for each session and is divided into two sessions. The facilities and infrastructure used to support this activity are portable computers, LCD projectors, pointers, leaflets, banners, materials, halls, and projector screens. The sub-topics given are related to methods of transmission, risks, and methods of prevention. The delivery of material is provided with anime drawing aids to facilitate the educational process.

Measuring respondents' knowledge related to HIV before being given education was carried out by interviewing them and having them fill in questions that were given scoring conditions on a questionnaire consisting of questions related to the sub-topics. For measuring participants' knowledge after being given education, other things were done. namely, interviews using the same questionnaire as before. To assess the difference or level of success of educational activities, an analysis is carried out by comparing the pre-test scores with the post-test scores for each question item answered by the participants in the educational activities. The post-test score is compared to the

pre-test score; if the post-test score is greater, then it indicates a good level of success; the higher the difference in score, the better the level of success achieved.

4. RESULTS

Based on the community service program, which was carried out in Palolo District, Sigi Regency, for middle school-age children, related to the education of the infectious disease human immunodeficiency virus (HIV), which was carried out on July 20–25, 2022, in Palolo sub-district, with the socialization method, information is obtained regarding the characteristics of the participants and the level of knowledge of the participants regarding HIV-infected diseases, before and after participating in the socialization method.

Participant Characteristics

The characteristics of the participants who took part in the socialization consisted of age and gender, with a total of 63 people. The distribution can be seen in Figure 3 below.

Table 1. Participant Characteristics

Category	N=63	%
Age		
17 Years old	16	25,39
16 Years old	30	47,61
15 Years old	17	27
Gender		
Male	29	46
Female	34	54

Based on the data in Table 1, it can be seen that the participants who took part in the socialization were 63 people, where the majority of the participants were 16 years old and were female.

Participants' knowledge pre-test

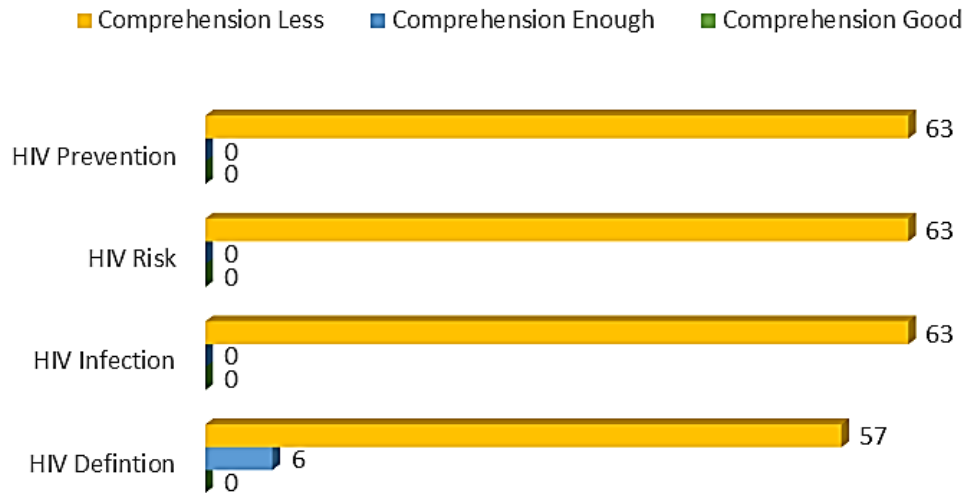

Figure 2. Results of participants' pre-test assessment of HIV

Based on the results of the assessment in Figure 2, Information was obtained that the socialization participants regarding HIV infectious disease had insufficient knowledge regarding this matter, both in terms of definition, modes of transmission, risks, and ways of preventing HIV disease.

The Educational Process With Media

Figure 3. The process of participants taking part in HIV education with the media

Participants' knowledge post-test

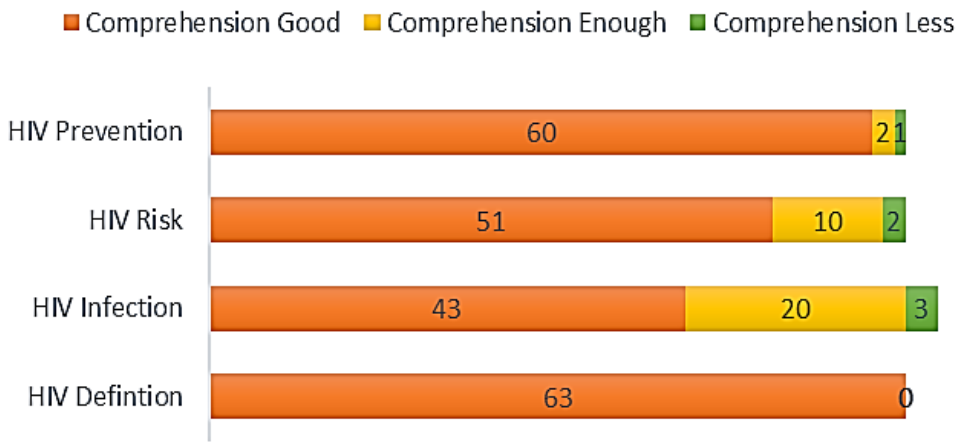

Figure 4. Results of participants' post-test assessment of HIV

Based on the data obtained in Figure 4. It can be seen that socialization participants who have participated in education related to HIV infectious diseases have overall better insight compared to those who did not participate in socialization, especially regarding

the definition of HIV and its prevention. This shows the participants' good comprehension and illustrates the success of the activity's implementation.

5. DISCUSSION

This activity showed good results, where the post-test score of the activity was higher than the pre-post score. This meant that students at the junior high school level still really needed education on HIV infection, besides the fact that the design of the material could determine the success rate of the activity that was carried out. This is supported by several related studies, namely Reswari in the results of his research, he explained that most school students have poor knowledge regarding HIV, this is because there are still misconceptions regarding the media, ways of transmitting HIV, and HIV information sources (Reswari et al., 2016).

Agustinawaty's research results show that more than half of the respondents easily understand matters related to HIV transmission, and more than half have a negative attitude toward HIV infection (Agustinawaty, Lestari, & Wisaksana, 2017). Health education about HIV/AIDS has a positive effect on student perceptions. The results of the pre- and post-test related to students' perceptions of HIV/AIDS show a significant difference that shows a better improvement (Rahmayanti & Susilowati, 2021). Lenny Lusia Situmeang, in her research results, that there is an influence related to health promotion on increasing knowledge and reducing stigma related to HIV/AIDS (Situmeang, Syarif, & Mahkota, 2017).

While the results of other studies are aligned, such as according to Listyana & Rohmah, the results of their research showed that education related to HIV/AIDS provided to students proved effective in increasing students' knowledge about HIV (Listyana & Rohmah, 2021). Health education through the media of HIV booklets affects the behavior of young students in preventing the transmission of HIV disease; the media has been adapted to educational goals so that there has been a change in knowledge as expected (Wulandari, Sitorus, & Fitria, 2020).

6. CONCLUSION & SUGGESTION

The activity gave good results by increasing the insight and knowledge of junior high school students regarding HIV. The health education method with the group discussion model, using leaflets and material media, is one technique that is suitable for providing health education. After participating in disease education about HIV transmission in socialization activities, it is hoped that students will no longer be taboo regarding HIV and infectious diseases. It is hoped that middle school-age students will be able to prevent transmission or reduce the risk of HIV transmission at an early stage.

7. ACKNOWLEDGMENT

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