



## SCHOOL-BASED INTERACTIVE REPRODUCTIVE HEALTH EDUCATION TO IMPROVE ADOLESCENT UNDERSTANDING OF HIV/AIDS

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### ABSTRACT

**Background:** Adolescence is the genital period or puberty. At this time adolescents have increased curiosity and sexual desire, in contrast to the previous period, namely childhood. Adolescents have reproductive risk vulnerability, one of which is susceptible to accessing risky sexual behavior that has an impact on the transmission of sexually transmitted diseases, especially HIV/AIDS. Promotional and preventive efforts to increase understanding and awareness of adolescent reproductive health need to be carried out in particular to improve adolescent understanding of HIV/AIDS. This study aims to analyze the contribution of school-based reproductive health education in an effort to improve adolescents' understanding of HIV/AIDS. **Methods:** This study is a pre-experimental one group pre-post design study. Respondents in this study were adolescents in MTs 2 Jember aged 14-15 years who were randomly selected with a large sample of 44 adolescents. Data analysis in this study using descriptive analysis and comparative analysis using paired t-test. **Results:** The results showed an increased understanding of adolescents about HIV / AIDS, especially about the definition of HIV, the causes of HIV/AIDS, HIV / AIDS treatment, the stages of infection, the prevalence of people and how to prevent it. Most indicators of HIV/AIDS understanding improved after school-based interactive reproductive health education. Statistical test results showed a value of sig = 0.000 which means there were significant differences in adolescents' understanding of HIV/AIDS before and after Interactive Health Education. **Conclusions:** School-based interactive reproductive health education has an impact on improving adolescents' understanding of HIV/AIDS. However, these educational efforts need to be continued with the full support of the school.

**Keywords:** Adolescents, Understanding of HIV / AIDS, Reproductive Health Education

### INTRODUCTION

The disease is caused by the Human Immunodeficiency Virus that has existed since 1981 of two people who have homosexual relationship with comorbid pneumonia disease. The acquisition of

global cases within a day's makes the World Health Organization or WHO (World Health Organization) declared to be free of HIV AIDS in 2030 in accordance with the goals of SDG 3.3. which uses a different



strategy from all over the world (WHO, 2023).

Adolescents are ages that tend to have curiosity and dare to try new things so that if not directed will cause problems. Adolescents tend to try to solve problems on their own with minimal knowledge. Knowledge of adolescents about sexually transmitted diseases is lower as much as 31.11% compared to adolescents who do not have knowledge about HIV so potentially have cases of HIV disease among adolescents (Baderiah, 2018).

The Ministry of Indonesia recorded 526.841 HIV disease by adolescents with new cases every day in 2021. Adolescents showed a fairly high gain because it obtained as many as 27 thousand increase in cases. HIV disease also infected children under the age of 12 years as many as 12.533 confirmed (Kesehatan, 2022). Acquisition of these data can be more severe if the prevention and understanding of HIV disease is not done intensively in addition to the risk of behavior and habits in adolescents also affect the development of HIV cases. Behavioral factors and habits can be triggers adolescents do not know the early symptoms of HIV into the body.

According to the result of Survei Demografi Kesehatan Indonesia (SDKI) about 2% of adolescent girls aged 15-24 years and 8% of adolescent boys of the same age admitted that they had had pre-marital sexual relations, and 11% had unwanted pregnancies. These behaviors are very risky for HIV / AIDS in adolescents. Based on research conducted on adolescents at SMAN X Garut with 268 respondents stated that there are 37.3% of adolescents who have risky sexual behavior and 62.7% of non-risky sexual behavior (Purnama et al., 2020). One of the factors causing the High behavior of adolescents who are at risk of HIV / AIDS infection is the lack of knowledge of adolescents about

HIV/AIDS (Aryani et al., 2021). Adolescents prefer their sexual feelings and have less knowledge about the HIV disease. This behavior is supported by reading sources from the internet, books, magazines so that if not directed teenagers will try it and do not know that there are venereal diseases that will be caused.

Prevention of HIV/AIDS transmission can be done with promotional and preventive efforts as the main basis of prevention (Pohan et al., 2011). These efforts can be done by providing interactive reproductive health education to increase understanding and awareness of adolescents about reproductive health in a holistic manner. Educational efforts especially school-based are effective efforts to help adolescents understand the risk of HIV/AIDS transmission and improve adolescent responses to prevent risky behavior (Wilkins et al., 2022).

Komunitas Mahasiswa Peduli HIV / AIDS (KOMPLIDS) is a student organization in FKM UNEJ that has a role to contribute in promoting and preventing HIV/AIDS transmission. Through this study, aims to analyze the impact of school-based interactive reproductive health education in an effort to improve adolescents' understanding of HIV/AIDS.

## **METHODS**

This study is a pre-experimental study that aims to analyze the role of interactive health education with the understanding of adolescents aged 14-15 years in MTs 2 Jember about HIV/AIDS. Understanding analysis was conducted by comparing the results of pre and post test respondents' understanding of HIV/AIDS. The population in this study is all students VIII MTs 2 Jember, then conducted a sampling of 44 students as respondents in this study. The study was conducted in November 2022.



Stages of research conducted is to provide pre-test on respondents before interactive educational activities. Then the provision of interactive education by UKM Komunitas Mahasiswa Peduli HIV / AIDS (KOMPLIDS) FKM UNEJ interactively about HIV/AIDS. Post training activities, followed by the provision of post test on all respondents.

Data analysis was done descriptively to determine the picture of respondents understanding of HIV / AIDS in detail. Analysis was also conducted to determine the difference in understanding of respondents before and after getting interactive education by using Paired T-Test.

## RESULTS

The study was conducted on 44 student respondents with an age range of 14-15 years. The results of pre-test and post-test understanding of students after educational activities on HIV/AIDS were further analyzed descriptively to provide an overview of the respondents' understanding of HIV / AIDS.

The results showed that respondents' understanding of HIV / AIDS is still not optimal. Most are just barely understanding HIV / AIDS in general.

Based on the results of the pre-test, it was shown that the questions that were not optimal in getting correct answers (percentage of correct answers <50%) were in the aspects of definition, causes and early symptoms of HIV/AIDS. Whereas based on the post test scores, most of the respondents answered incorrectly about the initial symptoms of HIV/AIDS.

**Table 1.** Overview of Respondents understanding of HIV/AIDS

No.	Indicator understanding of HIV/AIDS	Number of Correct Answers			
		Pretest		Post test	
		N	%	N	%
1	Definition of HIV	20	45,4	27	61,3
2	Definition of AIDS	27	61,3	22	50
3	Causes of HIV/AIDS	20	45,4	24	54,5
4	Treatment of HIV/AIDS	26	59	35	59
5	Stages of Symptoms of HIV/AIDS	36	81,8	42	95,4
6	Stages of HIV/AIDS Infection	29	65,9	38	86,3
7	Early Symptoms of HIV/AIDS	20	45,4	9	20,4
8	Most Prevalence of People with HIV/AIDS	39	88,6	39	88,6
9	How to Prevent HIV/AIDS	31	70,4	39	88,6

Correct scores on understanding the early symptoms of HIV/AIDS decreased between before and after the interactive education. This showed that information about the early symptoms of HIV/AIDS, which from the beginning was still not good, could not be conveyed and understood properly by the respondents. With the result that the correct score has decreased significantly. As for the score that decreased the other correct score was about the definition of AIDS.

However, 7 out of 9 questions received an increase in the correct score between before and after the interactive education. This data indicates that the messages and information provided in interactive health education activities were well received by the respondents of the study.



This is supported by the results of comparative analysis using paired t-test which shows the value of significance = 0.000. This shows that there are significant differences in respondents' understanding before and after Interactive health education activities. This educational activity has a significant impact on increasing respondents' understanding of HIV / AIDS.

## DISCUSSION

Adolescence is also referred to as the genital phase in psychosexual development (Andarmoyo, 2012). Developments at this time place adolescents having a different sexual response compared to childhood. Reproductive hormones begin to increase at this time indicates the reproductive system has begun to actively work (Osaikhuwuomwan & Osemwenkha, 2013). Adolescents are at risk of reproductive vulnerability related to the genital phase or the pubertal phase. Adolescents have sexual attraction and desire that puts adolescents at sexual and reproductive risk. Most vulnerable adolescents access risky sexual behaviors that have an impact on increasing the risk of sexually transmitted diseases, especially HIV/AIDS (Pingitore et al., 2019).

Support from the surrounding environment, especially schools, is needed to prevent adolescents from accessing risky sexual behavior which will increase the vulnerability of HIV/AIDS transmission. (Bulc et al., 2019; Idele et al., 2014). One of the preventive efforts that is cost effective but has a sustainable impact is promotive and preventive efforts through reproductive health education for adolescents (Gullotta & Bloom, 2014).

Interactive reproductive health education that has been done in this study is one of the promotive and preventive efforts in adolescents to foster understanding and

awareness of adolescents about the importance of preventing risky sexual behavior as an effort to prevent transmission of HIV/AIDS .

Based on the results showed that most adolescents have had an initial understanding of HIV AIDS, especially the symptoms of HIV/AIDS, individuals and groups who are vulnerable to HIV/AIDS and prevention efforts. This is in line with similar studies that analyze adolescents' understanding of HIV/AIDS which is also still not optimal (Aryani et al., 2021) .

However, the understanding of the respondents in this study is still classified as a basic understanding. Reproductive health education efforts to increase the holistic understanding of research respondents have had a significant impact on efforts to increase adolescents' understanding of HIV/AIDS. Reproductive health education efforts, especially related to HIV/AIDS, need to be carried out on an ongoing basis. Holistic understanding needs to be supported by ongoing educational efforts. This educational process needs to become a school program in an effort to improve adolescent reproductive health.

## CONCLUSION

Adolescence is an early reproductive period called the genital phase or pubescent phase. At this time, adolescents are vulnerable to accessing risky sexual behaviors which increase the risk of adolescents contracting sexually transmitted diseases, particularly HIV/AIDS. Interactive reproductive health education is one of the promotional and preventive efforts undertaken in this study as a cost-effective effort to prevent adolescents from accessing risky sexual behavior and impact on the transmission of HIV/AIDS.

The results showed that interactive reproductive health education efforts were



shown to significantly improve adolescents' understanding of HIV / AIDS. Surely this educational effort needs to get school support to be able to take place on a sustainable basis to improve the consistency of adolescents' understanding of HIV/AIDS.

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