



The Effect of Health Education through HIV/AIDS Booklet Media on Adolescent Behavior for HIV/AIDS Prevention in Darussalam Health Prevention Lhokseumawe City

Wulandari¹, Samsidar Sitorus¹, Aida Fitria¹

¹Helvetia Health Institute Medan, Indonesia

Corresponding Author: Wulandari



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Abstract

According to Republic of Indonesia Minister of Health Regulation Number 52 of 2017, health development is aimed at increasing awareness, willingness and ability to live healthy for everyone so that the highest degree of public health can be realized as an investment for the development of productive human resources. This research is Quasy experiment with one-group-pretest and posttest without a control group which describes the effect of health education through the HIV/AIDS booklet media on adolescent behaviour. The population were 71 people, and all were as the sample. Based on the Wilcoxon Signed Rank test, the significance value is $0.000 < .05$. Based on the multivariate analysis with the MANOVA test, it was found that the attitude variable (R -Square = .773) was the variable that had the strongest correlation with the experiment giving the HIV/AIDS booklet media. The results showed the effect of health education through the HIV/AIDS Booklet Media on changes in adolescent behaviour for HIV/AIDS prevention, indicated by an increase in knowledge, attitudes and actions before and after the distribution of HIV/AIDS booklets. Increasing the implementation of HIV/AIDS socialization activities for vocational high school youth by providing education using media tailored to educational targets, one of which is the HIV/AIDS booklet media for vocational high school students and students as a preventive effort in reducing HIV/AIDS cases among vocational high school adolescents so that teenagers in this school become liaison information related to HIV/AIDS to adolescents in other schools.

Introduction

Today, along with the development of the era of globalization and the sophistication of Science and Technology (IPTEK), it is necessary to have a role for quality Human Resources (HR) in order to be able to prosper and advance a country. One very important factor cannot even be separated from a country as a mover, thinker and planner to achieve development goals. Human resources aimed at development, namely the smart and healthy young generation of the nation. The young generation in question is the entire population of productive and quality adolescents in terms of education, human character itself, and health which will later become the foundation for the strength of a country (Budiati et al., 2018)

This is in accordance with the Regulation of the Minister of Health of the Republic of Indonesia (Permenkes RI) Number 52 of 2017, namely health development aimed at increasing awareness, willingness and ability to live a healthy life for everyone so that the highest degree of public health can be realized as an investment for human resource development. productive.

To ensure these productive human resources, the state is obliged to carry out comprehensive health efforts for children so that every child as the nation's next generation will obtain the highest health status since the womb (Ministry of Health, 2017).

In line with the Sustainable Development Goals (SDGs), promotion of healthy living and welfare for all people of all ages must be carried out by paying attention to health priorities as an insight into development, including reproductive health, maternal and child health, and prevention of infectious diseases. Some infectious diseases such as HIV / AIDS infection are diseases that can be transmitted from an infected mother to her child during pregnancy, childbirth and breastfeeding, and cause illness, disability and death, which adversely affect the survival and quality of life of the child. One of the educational media is one of the main roles that teenagers must have in protecting themselves from various polemics of both social and reproductive health irregularities today (Ministry of Health, 2015).

The paradigm of reproductive health for adolescents is very crucial which requires a life cycle approach (Life Style Approach) that takes into account reproductive rights and gender equality. The international community has consistently affirmed the rights of adolescents to correct information on Adolescent Reproductive Health (KRR) and RH services including counseling during the 1994 International Conference on Population and Development (ICPD). The international community has also reminded us that The rights and responsibilities of parents are guiding, including not preventing adolescents from gaining access to services and information they need about good reproductive health (Wu 2010; Kumalasari, 2012).

Adolescent's understanding of reproduction is a provision for adolescents to behave healthily and responsibly, but not all adolescents get sufficient and correct information about reproductive health. This limited knowledge and understanding can lead adolescents to risky behavior. In this case, experts consider the need for understanding, guidance, and support from the surrounding environment so that in this system of change, healthy growth and development occurs (Ots & Horak, 1996).

Improving the quality of adolescent reproductive health can be done by paying attention to health communication problems. Cases around adolescent reproduction are now increasing, due to adolescents' lack of understanding of various aspects of reproduction related to themselves. The problem of adolescents regarding sexuality and reproductive health is increasingly being felt more complex and concerning. Problems that occur in adolescent reproductive health can include sex before marriage, dropping out of school due to pregnancy, irresponsible partners, use of contraceptives, abortion, HIV / AIDS infection, sexually transmitted diseases and the use of illegal drugs (Pernawati, 2018).

Sexually transmitted diseases today are closely related to adolescents, because adolescents are a group that is vulnerable to exposure that occurs around them. Adolescent groups are the age group most at high risk of contracting and transmitting HIV and AIDS, therefore the spread and starting to reduce the number of new HIV and AIDS cases, requires special efforts focused on youth groups. Efforts were made to increase adolescent knowledge regarding HIV and AIDS through health education (Prawirohardjo, 2010).

HIV / AIDS is a disease that continues to develop and has become a global problem that is sweeping the world. In the world, there are 34.5 million people who are infected with HIV with 17.8 million female sufferers, while 2.1 million sufferers of children younger than 15 years old (UNAIDS, 2013). In 2015, Indonesia was ranked second which is estimated to be the largest contributor to people with HIV / AIDS in Southeast Asia after India (60%), which was 20% or 690,000 PLWHA (UNAIDS, 2016). In 2016, Indonesia experienced an increase in the incidence of HIV incidence to 41,250 people from 30,935 people in 2015 (Aryani et al 2009).

The number of HIV positive cases reported from year to year tends to increase. In 2017, 53 HIV cases in Aceh were reported and 80 AIDS cases were reported. According to gender, the percentage of new HIV positive cases and AIDS in 2017 in men was greater than women. 62% of HIV sufferers in men and 38% in women. Meanwhile, 75% of people with AIDS were found in men and 25% for women. (Noviana, 2013).

Based on the data the researchers got by researchers through interviews with 10 students at Darussalam Lhokseumawe Health School in July 2019, it was found that 4 students did not understand about HIV / AIDS and 1 person had heard and only knew the dangers, while 3 students did not understand about HIV / AIDS and 2 other students had heard and knew only about transmission. When researchers asked where the information was obtained from, students and students answered from parents, friends and electronic media.

Lack of understanding of HIV / AIDS encourages researchers to provide health education through printed media in the form of booklets as information that is more interesting and easy to understand which can later be read by students at Darussalam Lhokseumawe Health Senior High School, because students and students in this school can become role models. for other youth in bridging and conveying health information. Based on the explanation above, the researchers are interested in examining the Effect of Health Education through the Media of HIV / AIDS Booklets on Adolescent Behavior at the Darussalam Health Center in Lhokseumawe City in 2019. The research objective was to analyze the Effect of Changes in Adolescent Behavior by Providing Health Education through the Media of HIV / AIDS Booklets for Prevention. HIV / AIDS at Darussalam Health SMKS Lhokseumawe City in 2019.

Methods

Type of research The design of this study used a Quasy experimental design with one group pretest and posttest without a control group which described the effect of health education through the HIV / AIDS booklet media on adolescent behavior at Darussalam Health SMKS Lhokseumawe City in 2019.

The population of this study was all 71 students of Darussalam Health SMKS Lhokseumawe City for the academic year 2019/2020. The sampling technique in this study was total sampling, which is a sampling technique where the number of samples is the same as the population. All samples taken from this statement are 71 people. Types of data used Primary data Data taken directly from the source, namely data comes from respondents by distributing questionnaires, questions in the questionnaire.

The sample inclusion criteria are as follows: willingness to be a respondent and consistent to read the booklet for 3 days of research time and so on to add information for students at Darussalam Health SMKS Lhokseumawe City.

Results and Discussion

Table 1 shows that from 71 respondents, the majority of adolescents' knowledge before being given health education with the HIV / AIDS booklet media, the majority were in the low category, namely 63 people (88.7%).

Table 1. Distribution of Knowledge and Attitudes

Variable	N	Percentage
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Knowledge (Pretest)		
Enough	8	11,3
Less	63	88,7
Pengetahuan (posttest)	71	100
Good	20	28,2
Enough	41	57,7
Less	10	14,1
Attitude (Pretest)		
Positive	32	45,1
Negative	39	54,0
Attitude (Posttest)		
Positive	43	60,6
Negative	28	39,4
Action (Pretest)		
Good	32	45,1
Bad	39	54,9
Action (Posttest)		
Good	40	56,3
Bad	31	43,7

In the table it can be seen that from 71 respondents, the majority of adolescent knowledge after being given health education with HIV / AIDS booklet media, the majority were in the sufficient category, namely 41 people (57.7%).

In the table, the frequency distribution of respondents' answers about the attitudes of adolescents after being given health education with the HIV / AIDS booklet media shows that the answers to "yes" are mostly found in statements No.1, 8, and 10, namely 68 respondents (69%). Meanwhile, the most "no" answers were No.2, namely 33 respondents (46%).

The table shows that out of 71 respondents, the majority of adolescents' attitudes after being given health education with the HIV / AIDS booklet media were mostly in the positive category, namely 43 people (60.6%).

In the table, it is found that the frequency distribution of respondents' answers about the actions of adolescents after being given health education with the HIV / AIDS booklet media shows that the answers to "Yes" are mostly found in question No.1, namely 67 respondents (94%). Meanwhile, the most number of "No" answers was No.4, namely 38 respondents (54%).

In the table of the results of the posttest that out of 71 respondents, the majority of adolescents' actions after being given health education with HIV / AIDS booklet media were in the good category, namely 40 people (56.3%).

Table 2. Kolmogorov-Smirnov Test Results

Variable	Pretest (Mean±SD)	Posttest (Mean±SD)	Mean Different	Value
Knowledge	8,9±1,6	14,0±2,0	5,1	<i>p</i> *= 0,001
Attitude	6,3±0,9	10,7±1,4	4,4	<i>p</i> *= 0,001
Action	6,3±1,1	10,6±1,4	4,3	<i>p</i> *= 0,001

Table 2 above can be seen that there is an increase in the knowledge, attitudes, and actions of adolescents after being given the HIV / AIDS booklet media, this is indicated by the average

value of knowledge at pretest 8.9 to 14.0 at posttest, the mean value of current attitudes. pretest 6.3 to 10.7 at posttest, and the mean score of action at pretest 6.3 to 10.6 at posttest. Furthermore, using the Wilcoxon Signed Rank test, the significance value was obtained $0.001 < 0.05$, so that H_0 was rejected and H_a was accepted, which means that there was an effect of health education through the HIV / AIDS Booklet Media on adolescent behavior in Darussalam Health SMKS Lhokseumawe City in 2019.

Table 3. MANOVA test

Variable	R Square	Error model	P value
Knowledge	0,656	3.502	0,001
Attitude	0,773	1.459	0,001
Action	0,739	1.606	0,001

Table 3 shows that for each dependent variable has a p value < 0.05 , which means that there is a significant effect of the independent variable on all dependent variables. Based on the error value of the model, it was found that the smallest value was the attitude variable, which means that the model for the attitude variable was the best model in this experiment. Furthermore, based on the value of R Squared, it is found that the closest value to 1 is the attitude variable, meaning that the attitude variable is the variable that has the strongest correlation with the experiment of giving HIV / AIDS booklet media to adolescents at Darussalam Health Center, Lhokseumawe City, 2019.

Knowledge about HIV / AIDS was obtained through scoring the results of a questionnaire, which the respondents had filled in through the pre-test and post-test. Furthermore, it was found that the level of knowledge of respondents at the time of the pre-test (before getting health education using the HIV / AIDS booklet media) was mostly low, namely 63 respondents (88.7%), while only a small proportion of respondents who had sufficient knowledge, namely 8, 3%). The results of the post-test score of respondents' knowledge, there were 20 respondents (28.2%) who had good knowledge, 41 respondents (57.7%) had sufficient knowledge, and 10 respondents had less knowledge.

This figure shows a change in the knowledge of adolescents before and after being given health education using the HIV / AIDS booklet. This figure shows an increase in the percentage of respondents' knowledge level before being given health education and after being given health education, the HIV / AIDS booklet media.

The results of this study indicate that there has been a change in knowledge as expected from health education using booklet media. It is hoped that this knowledge can change the attitudes of high school adolescents towards HIV / AIDS prevention. This increase in knowledge is due to the provision of information, in which there is a learning process.

The frequency of respondents' answers regarding the knowledge of adolescents before being given health education with booklet media showed that the most "correct" answers were in question No.20, namely 49 respondents (69%) with the question "Shaking hands with HIV / AIDS sufferers will not cause HIV infection. ". Meanwhile, the most "wrong" answers were No.7, namely 69 respondents (71%) with the question "HIV can be transmitted by mothers to the children they are carrying".

Meanwhile, the frequency of respondents' answers about knowledge after being given health education using the HIV / AIDS booklet showed that the "correct" answers were mostly found in question No. 4, namely 69 respondents (97%) with the question "People who are newly infected with HIV do not show symptoms ". While the most "wrong" answers were No.19,

namely 33 respondents (46%) with the question "HIV / AIDS transmission from mother to child can be prevented by Caesarean section procedure".

According to the assumptions of the researchers, age greatly influences the mindset of a teenager because with increasing age there will be more ways of thinking and teenagers will know how to deal with HIV / AIDS. Knowledge is the result of "knowing" and this happens after people sense a certain object. Sensing occurs through the human senses, namely: sight, hearing, smell, taste, and touch. Most of human knowledge is obtained through the eyes and ears. Knowledge or cognitive is a very important domain for the formation of one's actions (National Epidemiology Network and Ford Foundation, 2015)

In another sense, knowledge is a variety of symptoms that humans encounter and acquire through the observation of reason. Knowledge arises when a person uses their intellect to recognize certain objects or events that have never been seen or felt before. Behavior which is based on knowledge will be more lasting than behavior which is not based on knowledge. In theory, knowledge will determine a person's behavior. Rationally, a mother who has high knowledge will certainly think more deeply about acting, she will pay attention to the consequences that will be received if she acts carelessly. Knowledge is influenced by intrinsic and extrinsic factors. The extrinsic factors include education, work, the state of the material to be studied. Meanwhile, the intrinsic factors include age, ability and will or will. By increasing and optimizing the intrinsic factors that exist within themselves and extrinsic factors, the knowledge of adolescents will increase (Ayuningsih et al., 2014).

According to Bloom (1956), knowledge (cognitive) is a very important domain for the formation of one's actions (overt behavior). A person's knowledge can change and develop according to their abilities, needs, experiences and high and low mobility of information about their environment. Access to information also has an equally important role to increase knowledge (Aini, 2010).

Youth attitudes about HIV / AIDS

The results of the research on adolescent attitudes before health education with HIV / AIDS booklet media found that 32 respondents (45.1%) showed a positive attitude, and after health education was carried out using the HIV / AIDS booklet media there was an increase to 43 respondents (60.6 %) who are positive. Whereas for adolescents who had negative attitudes towards HIV / AIDS, there was a decrease before being given the HIV / AIDS booklet media as many as 39 respondents (54.9%), to 28 respondents (39.4%) there was a significant decrease after education to 4 (7 , 4%).

This figure shows a change in the attitude of adolescents before and after being given health education using the HIV / AIDS booklet. This figure shows an increase in the percentage of positive attitudes of respondents before and after being given health education using the HIV / AIDS booklet media. There were differences in attitudes between the groups that were given health education and the groups that were not given health education. The bad attitude may be due to the age factor, because most students are young adolescents. so there may not be much knowledge about HIV / AIDS (Ali & Asrori, 2006).

The respondents of this research are teenagers, so they have little personal experience. The effect of health education with HIV / AIDS booklet media on adolescent attitudes, it can be seen from the results of the frequency of respondents' answers about adolescent attitudes before being given health education using HIV / AIDS booklet media. respondents (69%) with the statement "In your opinion, changing partners can increase the risk of HIV transmission?". Meanwhile, the most number of "No" answers was No. 14, namely 59 respondents (83%) with the statement "In your opinion, everyone should be willing to do an HIV test?".

Transmission by sexual intercourse can occur from male to female or vice versa, as well as to the same sex through risky sexual intercourse. HIV transmission can occur during vaginal, anal, or oral sex with an HIV-infected partner. One of the best ways to prevent HIV transmission is to use condoms during sex and not change sexual partners (Sarwono, 2012).

Meanwhile, the frequency distribution of respondents' answers regarding the attitudes of adolescents after being given health education with the HIV / AIDS booklet media showed that the answers to "yes" were mostly found in statements No.1, 8, and 10, namely 68 respondents (69%) with the statement "A student SMA doesn't have to have a boyfriend ", " I won't stay away if there is a family member who has HIV / AIDS ", and " I don't mind shaking hands with people with HIV / AIDS ". Meanwhile, the most number of "no" answers was No.2, namely 33 respondents (46%) with the statement "A person with HIV must be diligent in checking himself and taking antiretroviral drugs (ARV)".

Attitude describes someone likes or dislikes an object. Attitude is often derived from the experience of one's own or closest others. Attitude makes a person approach or away from other people or other objects. Positive attitudes towards health actions do not always manifest in an action depending on the current situation, attitudes will be followed by actions referring to other people's experiences, attitudes followed or not followed by an action based on many.

Adolescent actions related to HIV / AIDS

Most of the adolescents' actions during the pre-test were bad, namely 39 respondents (54.9%), while only a small proportion of respondents who took good actions were 32 respondents (45.1%). The results of the post-test score for the respondent's actions, there were 40 respondents (56.3%) who had good actions, while as many as 31 respondents (43.7%) had bad actions.

This figure shows a change in the actions of adolescents before and after being given health education using the HIV / AIDS booklet. This figure shows an increase in the percentage of respondents' actions before being given health education and after being given health education, the HIV / AIDS booklet media.

The frequency of respondents' answers regarding the actions of adolescents before being given health education using booklet media shows that the answer "yes" is mostly found in question No.20, namely 49 respondents (69%) with the question "Shaking hands with HIV / AIDS sufferers will not cause HIV infection. . Meanwhile, the most "wrong" answers were No.7, namely 69 respondents (71%) with the question that HIV can be transmitted by mothers to the children they are carrying. Meanwhile, the frequency distribution of respondents' answers about the actions of adolescents after being given health education with HIV / AIDS booklet media showed that the answers to "Yes" were mostly found in question No.1, namely 67 respondents (94%) with the question "Have you ever sought information about HIV prevention / AIDS? "Meanwhile, the most number of answers" No "was No.4, which was 38 respondents (54%) with the question" Do you stay away from your friends / family who suffer from HIV / AIDS? ".

The Effect of Health Education through HIV / AIDS Booklet Media on Adolescent Knowledge

With this health education, vocational students can gain better health insights and knowledge about HIV / AIDS, so that students can take precautions as early as possible related to HIV / AIDS. After being given health education, the students' knowledge regarding HIV / AIDS has increased. This can be seen from the post-test results, that students have answered many

questions correctly on the question items that previously answered many wrong, seen from the distribution results of the question items reaching > 50% of students have answered correctly.

According to the researchers' assumptions, booklet media greatly influences a teenager's insight, by reading and listening a lot, they will get information. The media booklet greatly influences a person's mindset because by reading and listening a lot the insight and knowledge will increase.

The Effect of Health Education through HIV / AIDS Booklet Media on Youth Attitudes

This is in line with Bloom's theory which states that knowledge plays an important role in providing insight into one's attitudes and actions. A person's attitude is more influenced by the learning process than by the process of development or maturity. Basically, someone who has sufficient knowledge should also give a positive response or attitude to a problem. Based on sufficient knowledge, a person can understand well the subject matter at hand, so that he can think about the good and bad attitudes taken (Marlinda & Azinar, 2017).

It can be concluded that respondents who have sufficient knowledge tend to be positive and vice versa respondents with less knowledge tend to be negative. Respondents who have sufficient knowledge tend to have a positive attitude towards HIV and AIDS prevention, because with a good understanding they can predict that the attitude they take will not have a negative effect on themselves and their surroundings.

The Effect of Health Education through HIV / AIDS Booklet Media on Adolescent Actions

One of the factors that cause HIV / AIDS cases in adolescent and productive age groups is that adolescence is identical to a passionate spirit, an increase in libido. In addition, this risk is caused by environmental factors of adolescents. Many adolescents do not have information about health, prevention of pregnancy, infections caused by sex and HIV / AIDS. Customs that exist in the community also influence adolescent behavior, such as differences in treatment between boys and girls. Boys seem to be given more freedom in their lives than women, although they are monitored, they are not as strict as women. This makes adolescents, especially men, more likely to do things that are at risk of HIV / AIDS (Takaingin et al., 2016).

It is hoped that the delivery of information with correct and clear health education will help adolescents understand how important the problem of preventing HIV / AIDS is. With the increase in information as knowledge for adolescents is expected to form a new attitude. New knowledge on the subject can lead to an inner response in the form of the subject's attitude towards the object he knows about (Marlinda & Azinar, 2017).

According to Mönks et al (2002) adolescents aged 15-18 years are included in middle adolescents. Adolescence is a time when someone is in a period of curiosity and always wants to try everything. Most of them felt they could do things as adults do. This will be a problem if they do not have knowledge about reproductive health which in turn will increase the number of HIV / AIDS cases.

Conclusion

There is an effect of health education through HIV / AIDS Booklet Media on Adolescent Behavior for HIV / AIDS Prevention at the Darussalam Healthcare Center of Lhokseumawe City in 2019. Attitude variable is the variable that has the strongest correlation with the experiment giving HIV / AIDS booklet media to increase behavior change in adolescents at Darussalam Health SMKS Lhokseumawe City in 2019, therefore providing health education using HIV / AIDS booklets can quickly and well influence adolescent attitudes to take care of themselves.

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