



Virtual Effectiveness of Reproductive Health Education For Virtual Children In The AKB Era At Kota Bogor

Dedes Fitria¹, Titi Nurhayati²

Politeknik Kesehatan Kementerian Kesehatan Bandung, Indonesia

*Correspondence: E-mail: dedesfitria@yahoo.com

ABSTRACT

Knowledge of reproductive health is very important to limit sexual behavior that is increasingly free in adolescence, especially during early adolescence. A study in Cameroon showed that women with disabilities have limited understanding of reproductive health and have low reproductive health education. Health education delivered can use a variety of media including modules in the form of print, audio and video. Rosaria's research stated that there was a significant difference in the intervention group that received socialization on the HIV/AIDS prevention module and had better knowledge and attitudes than the control group. The preliminary study at SLB S found that most of the students at the special school did not know about the importance of knowing about adolescent reproductive health because they had never received education about reproductive health. So the authors were interested in conducting a study on the effectiveness of virtual reproductive health education for blind children in the AKB era in Bogor city. This study aims to determine the success of the Effectiveness of Reproductive Health Virtual Education for Blind Children in the AKB Era in Bogor City. The research design used in this study was a quantitative method using a quasi-experimental form of nonrandomized control group pretest-posttest design taking place in the city of Bogor. Quantitative data analysis included univariate and multivariate analysis using parametric test Unpaired T test with alternative nonparametric Mann-Whitney test. The results of the study show that the use of virtual modules is effective in increasing knowledge and attitudes for children with visual impairments with a p-value > 000.5. Suggestion. The use of virtual educational modules can be used as interesting and simple educational media in providing health education to adolescents, especially children with visual impairments.

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1. INTRODUCTION

Adolescence is a stage in which an individual is experiencing an important period in his life, namely the transition from childhood to adulthood and provides an opportunity to grow not only in the physical dimension but also in cognitive and social competence, economy, self-esteem and intimacy. (Soetjiningsih, 2010).

In general, adolescence is a behavior that always wants to try, including in terms of sexuality, especially early adolescence which is the initial stage or the beginning of physical maturation (Soetjiningsih, 2010).

Adolescence is a time when the functions of the reproductive organs and the hormonal system begin to work. Naturally, adolescents become very curious about sex. Adolescents' curiosity is usually channeled through conversations with peers, seeking information from pornographic sources, and then practicing with themselves, girlfriends, friends, or other people. It is rare for teenagers to involve their parents to discuss deeper issues of sexuality (Dewi, 2011).

The view that sex is taboo makes adolescents reluctant to discuss their reproductive health with other people, instead they feel uncomfortable when they have to discuss sexuality with their own family members. The lack of information about sex makes teenagers try to find their own access about sex (Evlyn & Suza, 2007). This creates an unhealthy sexual behavior among adolescents.

Sexual behavior is any behavior driven by sexual desire, either with the opposite sex or the same sex. The forms of this behavior can range from feelings of attraction to courting behavior, courtship and intercourse. Various sexual behaviors in adolescents that are not yet the time to have sexual intercourse normally are known as masturbation or masturbation, which is a bad habit in the form of manipulation of the genitals in order to channel sexual desire to fulfill pleasure which often causes personal and emotional shocks (Rihardini and Yolanda, 2012). Knowledge of reproductive health is very important to limit sexual behavior that is increasingly free in adolescence, especially during early adolescence. This is also corroborated by Riyanto's research (2007) that there is a very significant relationship between reproductive health knowledge and the intention of free sexual behavior. Endarto and Purnomo (2000) found that there was an effect of 7.6% on reproductive health knowledge on adolescent sexual behavior. The results of Dewi's research (2010) show that there is a relationship between the level of knowledge about reproductive health and adolescent sexual behavior. The level of knowledge about reproductive health is good, so the sexual behavior is also good.

One of the efforts that can be made to help adolescents solve the reproductive health problems they face is through reproductive health education which is usually called counseling. The more appropriate learning method is the discussion method to accept a conclusion and not be rigid in delivering the material. (Taukhit, 2014) This learning method aims to make educational messages acceptable and in accordance with their developmental tasks. According to Palupi's research results, cooperative and interactive learning methods are effective in increasing students' knowledge. (Palupi, Asmaningrum and Dewi, 2015)

An understanding of reproductive health needs to be given by parents to their children. Thus children do not enter into sexual relationships that lead to early marriage. Early marriage has an impact on the loss of children's rights to obtain a good life. Those who should enjoy school and get a good education, have to give up their studies because of marriage. Therefore it is necessary to emphasize parents to apply the right values in the family. If proper education

has been instilled from an early age, then the child's chances of welcoming a bright future are also greater. (Palupi, Asmaningrum and Dewi, 2015).

In 2010, research by the Deputy for Women's Protection from the Commission for Women's Empowerment and Child Protection (KPP-PA) showed that the number of people with disabilities in Indonesia was estimated at 2.13 million people or 0.92% of Indonesia's total population of 230.87 million. soul. When viewed by gender, there are more males with disabilities than females. The number of disabled men is 1.13 million people or 0.99% of the total population of Indonesia, while the number of disabled women is 0.99 million people or 0.85% of the total population of Indonesia. (BPS, 2010)

The 2007 Riskeddas data shows that approximately 21.3% of Indonesia's population aged 15 years and over are disabled from the total Indonesian population according to disability status, so it can be said that disability issues are a national problem. According to the disability status and characteristics of the respondents, the number of disabled men is 18.9% of the total population of Indonesia and the number of disabled women is 23.5% of the total population of Indonesia. (BPS, 2010)

A study in Cameroon showed that women with disabilities have limited understanding of reproductive health and have low reproductive health education. People with disabilities have barriers to accessing health services and information. These barriers arise from various aspects such as norms and culture and limiting attitudes, limited services, lack of assistive devices, weak communication skills of health workers, unavailability of buildings, marginalization in the community, illiteracy, limited education, and gender inequality. Families, caregivers, institutions,

The 2020 Rosaria study said that there were significant differences in the intervention group that received socialization on the HIV/AIDS prevention module, had better knowledge and attitudes than the knowledge in the control group (Rosaria, 2020)

Many adolescents with disabilities have low access to reproductive health information, even basic reproductive information about how their bodies develop and change. In addition, they are often taught to be quiet and obedient, so they are at high risk of violence and sexual harassment. Based on the results of Nyoman's research at SLB Part B regarding reproductive health education, it was found that the level of student knowledge about reproductive health was low (Nyoman 2019). Research conducted by Juliani regarding adolescent knowledge about reproductive health obtained a low level of knowledge about reproductive health due to a lack of information from educators at SLB Tuna Grahita (Juliani, 2019)

A preliminary study conducted by researchers at SLB S in Bogor in October 2020, showed that there were 182 adolescents with disabilities registered as students for the 2019/2020 academic year with different classifications of types of disabilities. Most of the students at the special school do not know about the importance of knowing about adolescent reproductive health because they have never received education about reproductive health. So the authors are interested in conducting a study on the Effectiveness of Reproductive Health Virtual Education for Blind Children in the AKB Era in Bogor City and is the aim of this research.

2. METHODS

The research design used in this study was a quantitative method using a quasi-experimental two-group design pre and post test. Respondents to this study were 60 blind children living in the city of Bogor who met the inclusion criteria. How to take samples with

quota sampling. Data analysis was used parametric test Unpaired T test with alternative nonparametric Mann-Whitney test so that the differences in each intervention group can be seen.

3. RESULTS AND DISCUSSION

1. Univariate Result

a. Characteristics of Respondents in The Control Group

After collecting the data, it is known that the distribution of the respondent's data is as shown in Table 4.1 below:

Table 1 Distribution of Respondent Characteristics

Variable	Category	Control Freq	Control %	Intervention Freq	Intervention %
Gender	Man	17	57	18	60
	Woman	13	43	12	40
	Amount	30	100	30	100
child age	Early Teens	10	33	13	43
	Late Teens	20	67	17	57
	Amount	30	100	30	100
Education	Base	12	40	10	33
	Intermediate	18	60	30	67
	Amount	30	100	30	100

From Table 1 it can be seen that in the sex characteristics of the control group respondents (57%) were male and female (43%), in the age characteristics of children, most of them were late adolescents (67%), in educational characteristics, most of the respondents with secondary education (60%). In the intervention group the sex characteristics of the male respondents (60%), in the age characteristics of the children, the majority were late adolescents (57%), in the educational characteristics, most of the respondents had secondary education (67%).

b. Respondents' knowledge of reproductive health

Table 2. Knowledge Distribution of Respondents

No	Knowledge category	Frequency	Percentage
Control			
1	Well	16	53
2	Not good	14	47
	Amount	30	100
Intervention			
1	Well	18	53
2	Not good	12	47
	Amount	30	100

From Table 2 it can be seen that in the control group 47% of respondents had poor knowledge and 53% had good knowledge. And in the intervention group 53% of respondents had good knowledge and 47% had poor knowledge.

c. Respondents' attitudes towards virtual reproductive health education

Table 3 Distribution of Respondents' Attitudes

No	Attitude Category	Frequency	Percentage
Control			
1	Support	18	60
2	Not very supportive	12	40
		Amount	30
Intervention			
1	Support	30	100
2	Not very supportive	0	0
		Amount	30

From Table 4.3 it can be seen that in the control group 60% of respondents supported virtual reproductive health education activities and 40% did not. And in the intervention group, 100% of respondents supported virtual reproductive health education activities.

d. Virtual reproductive health education

After collecting data with a questionnaire, it is known that the distribution of the respondent's data is as shown in Table 4.4 below:

Table 4.4 Virtual Reproductive Health Education

No	Virtual Education	Frequency	%
Control			
1	Benefit	21	70
2	No Benefits	9	30
		Amount	30
Intervention			
1	Benefit	29	97
2	No Benefits	1	3
		Amount	30

From Table 4.4 it can be seen that in the control group the majority of respondents (70%) thought virtual reproductive health education activities were felt to be beneficial. And in the intervention group, almost all (97%) of respondents thought that virtual reproductive health education activities were felt to be beneficial.

2. Comparison of change (Delta) in virtual education between the control group and the intervention group

After processing statistical data with SPSS, it is known as in Table 4.9 below:

Table 4.5 Comparison of changes (Delta) Virtual Education

Variable	Z	P ²
Intervention	-4,796	0.000
Control	-4,187	0.000

- The Mann Whitney test

From Table 4.5 it can be seen that there was a significant difference ($p < 0.05$) between the control group and the intervention group using the module (0.000) and the control group without the module (0.000), this situation indicates that the interventions carried out had a different effect on the two groups.

3.2. Discussion

Respondent Knowledge

From the results of data analysis, the mean knowledge results were obtained as follows: the value between the pre-test and post-test obtained in the control group obtained a value of 57.33 and in the control group and the intervention group obtained a value of 86.83. It can be concluded that there is a significant difference between the two groups. So that there is a positive effect of the independent variable on the dependent variable, that is, there is an influence from the use of reproductive health virtual education modules on knowledge about reproductive health for children with visual impairments.

At the beginning of the pre-test, the mean value before being given the virtual education module in the control group was 40.50, after being given education about reproductive health, the post-test results increased to 57.33. In the intervention group, before being given education and virtual reproductive health modules, a score of 41.83 was given, after being given education and virtual reproductive health modules, a score of 83.33 was obtained. Respondents' knowledge in the control group and the intervention group both had low scores.

This is in accordance with the results of Nyoman's research at SLB Part B regarding reproductive health education, it was found that the level of student knowledge about reproductive health was low (Nyoman 2019). Research conducted by Juliani regarding adolescent knowledge about reproductive health obtained a low level of knowledge about reproductive health due to a lack of information from educators at SLB Tuna Grahita (Juliani, 2019)

The increase in knowledge was very significant in the intervention group where initially the mean value was 41.83, and after the intervention was carried out it increased to 83.33. This is because the use of learning modules has a fairly strong information power, provides many opportunities for students to be used independently because the modules are arranged in a systematic, interesting, and clear manner and can be used whenever and wherever according to student needs.

This is in accordance with the results of the Rosaria 2020 study which stated that there was a significant difference in the intervention group who received the socialization of the HIV/AIDS prevention module and had better knowledge than the knowledge in the control group.

So the use of virtual reproductive health education modules can increase the knowledge of children with visual impairments about reproductive health so that they are exposed to reproductive health material that has never been done at the school.

Respondent's attitude

From the results of data analysis, it was obtained that the mean attitude results were as follows: the value between the pre-test and post-test was obtained in the control group, the value was 72.45, and in the control group and in the intervention group, the value was 83.33. It can be concluded that there is a significant difference between the two groups.

So that there is a positive effect of the independent variable on the dependent variable, that is, there is an effect of virtual education on reproductive health for children with visual impairments on the attitude of the respondents. From the results of the analysis above, it is in accordance with the frame of mind that the virtual module of reproductive health education for children with visual impairments has an effect on the attitude of respondents which is indicated by a significant difference.

At the beginning of the pre-test, the results of the analysis in the control group obtained a value of 40.50. After being given education about reproductive health, the post-test results increased to 57.33. In the intervention group, before being given education and virtual reproductive health modules, a score of 58.67 was given, after being given education and virtual reproductive health modules, a score of 83.33 was obtained. the attitudes of respondents in the control group and the intervention group both had low scores.

This is in accordance with the results of the Rosaria 2020 study which stated that there was a significant difference in the intervention group that received the socialization of the HIV/AIDS prevention module, which had a better attitude than the attitude of the control group.

The results of research in Cameroon show that women with disabilities have limited understanding of reproductive health and have low reproductive health education. People with disabilities have barriers to accessing health services and information. These barriers arise from various aspects such as norms and culture and limiting attitudes, limited services, lack of assistive devices, weak communication skills of health workers, unavailability of buildings, marginalization in the community, illiteracy, limited education, and gender inequality. Families, caregivers, institutions, or even professional health services often ignore the needs of women with disabilities because of the perception that they are disabled not sexually active and do not require reproductive health information (Rihardini and Yolanda, 2012).

Albert Bandura argues that an individual learns a lot about behavior through imitation/modeling, even without the reinforcement he receives.

So the use of virtual reproductive health education modules for children with visual impairments influences attitudes. The ability to hear and remember very well in children with visual impairments is an advantage they have compared to normal children in general. Strong memory and the use of virtual modules produce a positive reaction or response to objects which then raises individual behavior to respond to learning that has been done virtually.

Effectiveness

The results of the discussion from the Mann Whitney test show a value of 0.000. This shows that the provision of virtual reproductive health education for children with visual impairments has an effect on the knowledge and attitudes of children with visual impairments with a value of 0.000.

From the results of the data analysis above, it is in accordance with the frame of mind that the virtual module of reproductive health education for children with visual impairments has an effect on knowledge and attitudes which are indicated by significant differences.

According to Bandura, people learn through direct experience or observation (imitating models). People learn from what they read, hear, and see in the media, and also from other people and their environment. Likewise children with visual impairments, they learn by hearing and remembering. Good memory skills make it easier to convey material so that in the post test there is a significant increase in scores in both groups. Albert Bandura suggested that social learning theory discusses (1) how our behavior is influenced by the environment through reinforcement and observational learning, (2) the perspectives and ways of thinking we have about information, (3) and vice versa, how our behavior we influence our environment and create reinforcement and observational opportunities.

The social learning that is carried out can change the attitude of a person who is initially less interested in discussing reproductive health issues, but after being given education and virtual modules it can increase the attitude change so that they pay more attention to their reproductive health. This can be seen from the increase in attitude scores in the post test where the results of the post test scores all increase.

The use of virtual reproductive education modules has been shown to significantly increase attitude scores in the intervention group.

Adolescents who have correct knowledge about reproductive health can be careful in their steps. Teenagers will be able to provide an assessment of whether it is appropriate to have sexual relations with their partners before marriage. The assessment made by the teenager was made consciously and not compulsorily. (Ali, 2012)

Supporting factors

Supporting factors in this research include the availability and willingness of institutions that are still consistent in holding special schools for children with visual impairments and providing free dormitories during the current pandemic as well as locations that are easily accessible to make it easier for researchers to conduct research.

Obstacle factor

The inhibiting factors in this study were the pandemic situation and the existence of PPKM (Imposition of

4. CONCLUSION

Virtual Education Reproductive Health for Blind Children in the AKB Era in Bogor City effectively carried out to increase the knowledge and attitudes of children with visual impairments. The level of knowledge and attitudes of children with visual impairments increased after receiving virtual education on reproductive health. The supporting factors are an affordable location and the willingness of institutions that are still consistent in holding special schools for children with visual impairments and providing free dormitories during the current pandemic. The inhibiting factors in this study were the pandemic situation and the PPKM (Imposition of restrictions on community activities).

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