The Influence of Audiovisual Media on Improving Adolescents' Knowledge of Reproductive Health

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ABSTRACT

Various adolescent health problems in Indonesia are so complex, not only related to physical but also related to psychosocial aspects. When teenagers have to struggle to recognize the sides of themselves that are experiencing physical-psychic and social changes due to puberty, society instead tries to hide everything about sex and leave teenagers with question marks in their minds. The view that sex is taboo, makes teenagers reluctant to discuss reproductive health with others. The lack of accurate and correct information about reproductive health makes teenagers seek access and explore themselves. Health education for adolescents needs to be provided with the right methods and media. Audiovisual media is a learning tool or media that uses video or mobile display, this media is a modern learning among the community and effective for teenagers so that they can absorb the material provided to the maximum.

This study aims to determine the influence of audiovisual media on increasing adolescent knowledge about reproductive health. This research is a quantitative study with quasi-experimental design one group without control, with a sample of 50 respondents. Respondents measured the rate of years before and after intervention, namely health education using audiovisual media.

The results of the study: dependent t-test dependent statistical test on post-test knowledge about reproductive health increased by 6.46 to 8.06 with p value of 0.000 indicating the influence of audiovisual media provision on improving adolescent reproductive health knowledge.
I. INTRODUCTION

The number of Indonesian teenagers in the Indonesian Health Profile in 2017 was 66.6 million, which means that 1 in 4 people in Indonesia is a teenager. (Ministry of Health, 2018) The large number of teenagers can be a tremendous asset for the Indonesian nation if managed properly, because teenagers are the future of the nation so that the younger generation should get serious attention because all actions taken by teenagers today are very influential for the future of the nation. (National Population and Family Planning Agency, 2008)

Various health problems of adolescents in Indonesia is so complex, not only concerning the physical but also related to the psychosocial aspect. Pressures as a result of physiological development in adolescence, coupled with pressures due to changes in socio-cultural conditions as well as the rapid development of science and technology often lead to problems including problems about reproductive health in adolescents. The knowledge gained from the youth learning place has an important role in shaping the attitude of a youth.

One way to provide reproductive health information for adolescents is to provide health education. In providing health education for adolescents, appropriate methods and media are required. This is intended so that teenagers can absorb the maximum material provided in health education. A wide range of health education is provided by face-to-face methods combined with certain media. Some media that can be used include print media, exhibition/display media, audio media, audio visual media, and multimedia. (Sadiman R, 2005)

From some research that has been done, so far health education is conducted more often by using conventional methods such as lectures or media leaflets. With the lecture method, the impact will be felt quickly but not for long. Then it will be better in addition to lectures, delivery is also done by methods and other media such as using video media so that changed attitudes and behaviors can last longer and found more effective media (Edyati, 2014). Audiovisual media is a learning tool or media that uses video or mobile display, it is a modern learning tool among the community and effective for teenagers. Delivery of information using a combination of text, graphics, sound, video, animation. Audiovisual technology is very efficient in terms of time for educators because without having to ask, learners take notes on the material, simply by copying the files that have been submitted. Learning using audiovisual technology will increase learning skills by 50%, rather than without using media. Therefore, in this study, researchers prefer audiovisual media because it is considered more efficient and more suitable for teenagers because it can be opened using their own gadgets, thus it is expected that the information provided can be quickly absorbed and understood by teenagers (Munir, 2013).

II. METHODS

This research is quantitative research, using quasi-experimental method in one group without control group (one group pre test post test without control). This study was conducted at SMPN 35 Bekasi with a sample number of 50 respondents. Sampling is done by a simple random sampling method on all students in the school. Measurement of knowledge about reproductive health is carried out 2 times, before and after intervention. The intervention provided is health education on reproductive health using audiovisual media. The test used in this study was paired t-test.
III. RESULT

Univariate Analysis

Table 1. Characteristics of Respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentage Sum (%)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Man</td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td>- Women</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>Mother’s Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Low</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>- High</td>
<td>34</td>
<td>68</td>
</tr>
<tr>
<td>Exposure to Reproductive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Never</td>
<td>36</td>
<td>72</td>
</tr>
<tr>
<td>- Ever</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>Sum</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on table 1, there are 50 teenagers consisting of 28 people (56%) male and 22 (44%) female gender. Most of the respondents had a higher education of 34 people (68%) while the low education is 32%. Based on the exposure of information about reproductive health most say never get information that is as many as 36 people (72%) and who have been informed about reproductive health 14 people (28%).

Table 2. Average Distribution of Respondents' Knowledge on Adolescent Reproductive Health at SMPN 35 Bekasi in 2019

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Mean</th>
<th>SD</th>
<th>Min – Max</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre test</td>
<td>6.46</td>
<td>2.233</td>
<td>2 – 12</td>
<td>5.83 – 7.09</td>
</tr>
<tr>
<td>Post test</td>
<td>8.06</td>
<td>2.736</td>
<td>3 – 14</td>
<td>7.28 – 8.84</td>
</tr>
</tbody>
</table>

Based on the data contained in table 2, it can be known that the average pre test value is 6.46; SD 2.23, while in post test obtained an average score of 8.06; SD 2.73. The lowest knowledge score during pre test is 2 and the highest score is 12. The lowest post test score is 3 and the highest is 14.

Bivariate Analysis.

Table 3. Youth Level of Knowledge about Adolescent Reproductive Health Before and After Intervention at SMPN 35 Bekasi in 2019.

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>P – value</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre test-</td>
<td>50</td>
<td>1,6</td>
<td>1,979</td>
<td>0,280</td>
<td>0,000</td>
<td>1,037-2,163</td>
</tr>
<tr>
<td>Post test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 3 it can be known that the average knowledge of adolescent reproductive health after being given audiovisual media is 1,600 with a standard deviation of 1,979 and p-value of 0.000. Thus it can be concluded that there is an influence on increased knowledge about adolescent reproductive health before and after being given audiovisual media.
IV. DISCUSSION

In this study, there are 2 factors that affect the knowledge of adolescent reproductive health, namely gender and exposure to information. When viewed from the average gender, knowledge of adolescent reproductive health in young women is higher compared to adolescent boys. The results of the statistical test with an independent T-test found that there was a significant difference between the level of knowledge of reproductive health and gender with a p-value of 0.004. This is in line with research conducted by Ernawati (2018) which states that there are significant differences in the average value of knowledge of male and female reproductive health, this can be due to the large number of sources of information used. (Ernawati, 2018)

According to the World Health Organization (WHO) cited by Notoatmodjo, 2012, it is mentioned that knowledge can be obtained from education. The level of formal education is the basis of intellectual knowledge that a person has. Aside from the level of formal education, information outside of formal education obtained individually such as social media, electronic media, and information from the internet can also affect a person's level of knowledge. (Soekidjo, 2012) Exposure to sources of information can affect a person's level of knowledge.

Adolescents' Level of Knowledge about Reproductive Health

Knowledge is the result of human sensing or the result of knowing a person's knowledge of objects through sensory devices (eyes, nose, ears, and so on). (Notoatmodjo in Nurul A, 2018) The results of this study showed the average value of respondents' knowledge in the pre-test was 6.46; SD 2.23, while in the post test obtained an average value of knowledge of respondents of 8.06; SD 2.73. This indicates an increase in the average value of knowledge in respondents.

Budiman and Riyanto's theory (2013) said that knowledge is influenced by education, information/mass media, socioeconomic culture, environment, experience and age (Budiman, 2013). This is in accordance with Ekayana's research that mass media such as the internet is used as one of the sources of information that is widely accessed and used by teenagers. In the current development of technology and information allows all people to access the internet, including students or in this case teenagers. But often the internet has a harmful impact on teenagers who accidentally get information from websites or get email posts containing pornographic content, without knowing the adverse effects of such deviant behavior. The results showed that there was a significant influence between watching porn movies/videos on the internet and deviant behavior (Dusra, 2017).

In addition, knowledge about reproductive health gained from friends is usually a story or personal experience. While reproductive health knowledge obtained from the school in the form of natural sciences (IPA) (Kemendikbud, 2013). Reproductive health materials in science lessons are only basic knowledge, the portion of discussion is not in detail, and less applicable to the issue that occurs.

Some respondents also knew about reproductive health education from parents, school teachers and health workers. Parents are part of the family that provides first and foremost education for their children. The education provided by parents at home can determine the quality of healthy thinking towards children, especially when they are in their teens. As teenagers, the role of parents is very important in providing reproductive health education in adolescents.

Knowledge of reproductive health is also obtained from parents, but generally not comprehensively such as how to care for reproductive organs, as well as the risks of free sex
Effectiveness of Audiovisual Media Administration to Increase Adolescents' Knowledge of Reproductive Health.

In the process of teaching and learning the presence of the media has a fairly important meaning. Because in these activities the vagueness of the material to be delivered can be helped by presenting the media as an intermediary. One of the technologies in the teaching process is choosing learning media. Learning media according to Rossi and Breidle are all tools and materials that can be used for educational purposes, such as radio, television, books, newspapers, magazines, and so on. This learning medium will help facilitate students in digesting knowledge information submitted. Learning media according to the characteristics of sensory stimuli generation can take the form of Audio (sound), Visual (image), or Audio Visual.

According to Rudi Bertz, as cited by Asnawir and M. Basyirudin Usman, classifying the main characteristics of the media on three main elements, namely sound, visual, and motion. The visual form itself is distinguished again on three forms, namely visual images, lines (linear graphic) and symbols. As with most media such as audiovisual media has a high level of effectiveness, according to research, the average is above 60% to 80%. The advantages of audio visual media in conducting health education include clearer material, allowing students to understand what is being conveyed, more varied so that it is not easily bored.

The results of the study conducted by researchers there was an increase in the average score of adolescent reproductive health knowledge after being given health education using audiovisual media that is 1.6 with a standard deviation of 1.979 and p-value of 0.000. From these results it is proven that health education using audiovisual media can increase knowledge about reproductive health in adolescents.

This is in line with research conducted by Risma Meidiana, et al (2018) the results showed that respondents' knowledge increased after being given audio visual media, judging by the average value after being given higher audiovisual media compared to the average value before being given video (Risma M et al., 2018). This research is also in line with research conducted by Saputra et al (2016), which stated that there is a difference in students' knowledge about fruit and vegetables before and after being given education through video media at Smp Al Chasanah, with an average score before education of 7.72 and an average value after education of 11.31, with a p value of 0.000 (Saputra DM; et al., 2016).

Audio-visual media can improve learning outcomes because it involves imagination and increases students' learning motivation. The use of media in learning is highly recommended to improve the quality of learning. Audio-visual media encourages the desire to know more (Firdaus, 2016). Audio-visual media not only produces an effective way of learning in a shorter time, but what is received through audio-visual media is longer and better to stay in
memory. Audio-visual media makes it easier for people to convey and receive lessons or information and can avoid misunderstandings. The growing attention in the use of audio-visual media has prompted a lot of scientific research on the place and value of such audio-visual media in education. The research has proven that audio-visual media clearly has valuable value in the field of education (Firdaus, 2016).

V. CONCLUSION
Based on the results of the research and discussion that has been described in the previous chapter, then in this study can be concluded as follows:
1. Characteristics of the most respondents in the male gender, the last education of the mother is low and the respondent has never been exposed to information about reproductive health.
2. After being treated by providing audiovisual media in the form of adolescent reproductive health videos, the average results of post-test knowledge about reproductive health increased from 6.46 to 8.06.
3. There is a difference in knowledge about adolescent reproductive health between before and after being given audiovisual media with p-value of 0.000 which indicates the influence of audiovisual media administration on improving adolescent reproductive health knowledge.

Recommendations
Based on the results that have been achieved, it can be suggested are:
1. For health workers can conduct reproductive health education in adolescents, using various alternative methods that can stimulate many senses such as audiovisual media
2. For parents, to be able to get closer so that it becomes the dominant source of information and able to provide information about reproductive health in adolescents
3. For the school, there is a container in the school for students to get information about reproductive health in addition to the science lessons in the curriculum.
4. For further research can be developed further research using methods, samples and various other health promotional media related to adolescent reproductive health.
REFERENCES


