

# The Influence of Reproduction Media and Animation Videos on Knowledge and Attitudes Regarding Reproduction and Sexuality in Elementary School Students

Frenta Helena Simaibang<sup>1</sup>, Putri Azzahroh<sup>1\*</sup>, Vivi Silawati<sup>1</sup>

<sup>1</sup>Applied Undergraduate Midwifery Study Program, Faculty of Health Sciences, Universitas Nasional, Indonesia

Submission date: 20-03-2023; Date of received: 24-03-2023; Publication date: 28-03-2023

### Abstract

**Background:** Sexual violence in children occupies the highest position, 50% -62%. The Indonesian Child Protection Commission (KPAI) released that in early 2018, there was 117 sexual violence against children, while in 2017, there were 393 cases in Schools plays an important role in increasing students' knowledge and sexual education. So far, sex education has been implemented only with the introduction of reproductive organs, forms of violation, danger and impact. Furthermore, the children try to find other knowledge to satisfy their curiosity.

**Purpose:** To determine the effect of media flipcharts and video animation on knowledge and attitudes about reproduction and sexuality in elementary school students. **Method:** Experimental research with one group pretest-posttest design in which the design consisted of one group then observed (pretest), after which intervention was given in the form of counselling using flipchart media and animated video and then observed again (posttest).

**Result:** difference test in two measurements paired-samples T-Test which showed the average of students' knowledge before giving information about reproduction and sexuality using flipchart media and animated videos on students, which was an average of 7.72 and the average after a given intervention to 10.64. While the attitude of students before being given information about reproduction and sexuality by using the media flipchart and animated video is an average of 32.96, and after being given an intervention, the average becomes 35.34.

**Conclusions:** It was concluded that the media of flipcharts and animated videos influence knowledge and attitudes about reproduction and sexuality in elementary school students. Thus, the school is advised to provide reproductive and sexual education by applicable norms and can use flipcharts and animated videos.

Keywords: Attitude; Knowledge; Reproduction; Sexuality.

# Introduction

Sexual violence against children occupies the highest position, namely 50% -62% of other forms of violence against children.<sup>1</sup> WHO defines child sexual abuse/abuse as the involvement of a child in sexual activity which is not fully understood. There is no explanation for it which violates the norms and rules of society.



Child sexual abuse is an activity between a child and an adult or another child that aims to satisfy another person's needs.<sup>2</sup>

Sexual violence against children is one of the many reproductive health problems that Indonesia is currently facing. The Indonesian Child Protection Commission (KPAI) released that at the beginning of 2018, there was 117 sexual violence against children, while throughout 2017, there were 393 cases (Akbar NA, 2018).

Sexual violence cannot be separated from the role of the family and school. Schools and families have a responsibility to help children understand their sexual health. However, with limited access to school, the family has an important role in providing early sex education to their children. But in reality, parents still need support and facilitation to have the ability to provide sex education to their children.<sup>4</sup>

Even though teachers think that sex education is important in this modern era, it turns out that they still consider sex education a taboo thing to talk about.<sup>5</sup> Early childhood sex education includes an introduction to reproductive organs and how to keep them clean. The impact of giving sex education will be intact if it is integrated with parents so that children have a good understanding and are not misinterpreted.<sup>6</sup> The impact of giving sex education will be intact if it is integrated with parents so that children have a good understanding and are not misinterpreted.

Given that parents have an important role in the growth and development of their children, building communication between parents and children needs to be done in introducing children's reproductive organs, their functions and how to care for them.<sup>1</sup> Several factors influence sexual behaviour and sexual education programs, including family values, parental relationships and the lack of information and knowledge about sex from both parents and teachers at school.

# Method

1. Research design

This was an experiment with a one-group pretest-posttest design.

2. Setting and samples

The research was conducted at SD Negeri 01 Dukuh with 50 students as respondents. *3. Intervention (applies to experimental studies)* 

A group was given a pretest, after which intervention was given in the form of flipchart media and infographic-based animated videos regarding reproductive health education and was observed. Then, a posttest was carried out.

4. Measurement and data collection

Sampling technique with purposive sampling. The instrument in this study was the observation sheet.

5. Data analysis;

Data analysis in this study was univariate and bivariate analysis with Paired T-Test. The software used is the SPSS application.



#### Results

#### **Univariate Analysis**

Table 1.

Distribution of Average Knowledge of Students Before and After Given Reproductive Health and Sexuality Education to Students

Knowledge	Mean	Median	Modus	n	Min	Max	Std. Deviation
Pretest	7.72	7	7	50	3	13	2.382
Posttest	10.64	11	11	50	5	15	2.164

Based on the table above, it can be explained that prior to conducting Reproductive Health and Sexuality education, the average knowledge of students was 7.72. Meanwhile, after conducting health education about reproductive health and sexuality, the average knowledge of students became 10.64. So it is said that there is a change before and after education is given. Based on the results of data processing and the specific objectives of this study, namely to find out the description of students' knowledge before and after being given information about reproduction and sexuality, the results obtained were the average value (mean) of knowledge before being given reproductive health and sexuality education (pretest) of 7. 72 with a Standard Deviation of 2.382 and after the intervention of reproductive health and sexuality (posttest), the average knowledge increased to 10.62 with a Standard Deviation of 2.164. It can be seen that the mean difference between before and after education is 2.92.

Table 2.

Distribution of Average Student Attitudes Before and After Provided Reproductive Health and Sexuality Education to Students

Attitude	Mean	Median	Modus	n	Min	Max	Std. Deviation
Pretest	32,96	32,50	31	50	26	40	3,410
Posttest	35,34	36,00	37	50	40	40	3,173

Based on the results of data processing and the specific objectives of this study, namely to find out the description of students' attitudes before and after being given information about reproduction and sexuality, the results of the average value (mean) of attitudes before being given reproductive health and sexuality education (pretest) were 32.96 with a Standard Deviation of 3.410, and after being given reproductive health and sexuality education (posttest) 35.34, with a Standard Deviation of 3.173. It can be seen that the mean difference between before and after education is 2.38.



#### **Bivariate Analysis**

Table 3.

The Influence of Turnsheet Media and Animated Videos on Knowledge of Reproduction and Sexuality in Students

Variable	Measurement	n	Mean	SD	SE	P Value	
Knowledge	Pretest	50	7.72	2.382	.337	0,000	
	Posttest		10.64	2.164	.306		

Table 3 shows the results of the two-measurement difference test (Paired T-Test), which shows that before the educational intervention on Reproductive health and Sexuality in Students, the average student knowledge was 7.72 (st. Deviation 2.382) and after being given an educational intervention on health Reproduction and Sexuality in Students The average knowledge of students is 10.64 (st. Deviation 2.164). The results of the Paired T-Test analysis show a P-Value of 0.000 <0.05, so it can be concluded that Flipchart Media is influenced before and after being given education on student knowledge.

#### Table 4.

The Influence of Leaflet Media and Animated Videos on Attitudes Regarding Reproduction and Sexuality in Students

Variable	Measurement	n	Mean	SD	SE	P Value
Attitude	Pretest	50	32.96	3.410	.482	0,000
	Posttest		35.34	3.173	.449	

Table 4 shows the results of the two-measurement difference test (Paired T-Test), which shows that before the educational intervention on Reproductive Health and Sexuality in Students, the average student attitude score was 32.96 (st. Deviation 3.410) and after the educational intervention was given about Reproductive Health and Sexuality in Students the average value of students' attitudes is 35.34 (st. Deviation 3.173). The results of the Paired T-Test analysis show a P-Value of 0.0001 < 0.05, so it can be concluded that Flipchart Media is influenced before and after being given education on student attitudes.

#### Discussion

In line with research in 2013 regarding education using flipchart media for workers on K3 knowledge, it found an increase in knowledge in the group that was given education with flipcharts. The average value before health education was 11, while after being given health education using flipchart media, the average value of



knowledge increased to 14. Therefore, it was concluded that flipchart media and animated videos could affect one's knowledge of certain things because the media flipcharts and animated videos are displayed according to the information and need to be addressed.<sup>8</sup>

Based on the results in 2019 analysis of questionnaires using educational media such as posters, videos, flipcharts, leaflets and modules obtained an average score of students' attitudes before being given health education was 10.23 and after being given health education was 11.86. The statistical test results obtained a mean difference of 1.62, so it can be concluded that there are differences before and after the provision of reproductive health and sexuality education to students.

Based on the results in 2016, the average change in knowledge of the respondents in the pretest group before counselling was -0.04, while in the posttest group, it was 3.20. The results of the statistical test obtained a probability value of 0.000, meaning that at alpha 5%, there is an average difference in changes in respondents' knowledge scores before and after counselling between the two groups, so it can be said that there is a significant effect of counselling using flipchart media on changes in K3 hazard knowledge and prevention in welding workshop workers in Ciputat, Pisangan Village in 2014.<sup>9</sup>

In line with Saban's research (2017) on the educational use of video compared to leaflet media for female students at SMAN 2 Ngaglik Sleman, audiovisual video media is more effective in increasing health knowledge than using flip chart media. Research subjects who are given health education using video will more easily understand information because it activates more senses than just using flipcharts. Information from this video will add to your understanding so that your knowledge can be better.

# Limitation

The limitation of this study is that it was only carried out in one group.

# Conclusion

It was concluded that the media of flipcharts and animated videos influence knowledge and attitudes about reproduction and sexuality in elementary school students. Thus, the school is advised to provide reproductive and sexual education by applicable norms and can use flipcharts and animated videos.

# **Ethical Considerations**

The ethical commission has reviewed this research.

#### Acknowledgement

Thanks to all parties involved.



# **Conflict of Interest**

There is no conflict of interest.

## Author contribution

The first, second, and third authors play a role in research and data processing. The correspondence author makes revisions to the formulation of discussions for articles.

# References

- 1. UNESCO. Monitoring and Coordinating Education Development. 2016.
- World Health Organization (WHO). Guidelines for medico-legal care for victims of sexual violence Guidelines for medico-legal care for victims of sexual violence. WHO Library Cataloguing-in-Publication Data; 2017.
- 3. Akbar NA. Sepanjang Tahun 2018, Ada 100 lebih Korban Kekerasan Seksual terhadap Anak di Indonesia. 2018.
- Wooden, C. L., & Anderson, FR. Engaging Parents in Reproductive Health Education: lesson learned implementing a parent-designed, peer-led educational model for parents of preteens. Am J Sex Educ. 2012; 7(4):461–73.
- Panjaitan RL, Djuanda D, Hanifah N. Persepsi Guru mengenai Sex Education di Sekolah Dasar kelas VI. Mimb Sekol Dasar. 2017; 2(2):224–33.
- Kursistin, P. Studi Deskriptif Mengenai Pendidikan Seks pada Anak Usia Dini dari Perspektif Pendidik PAUD. Insight. 2016.
- Ahmad DN. Membangun Komunikasi dan Pendidikan Berkarakter dalam Keluarga dalam Pengenalan Awal Organ Seksual pada Anak. Bioedukasi J Pendidik Biol. 2017; 8(2):125–33.
- 8. Fatmawati, H. Perubahan Pengetahuan tentang Potensi Bahaya Larutan Penggumpal dan Pencegahan Dermatitis dengan Intervensi Penyuluhan antara Media Lembar Balik dengan Media Leaflet pada Pekerja Pabrik Tahu di Kecamatan Ciputat dan Ciputat Timur Tahun 2013. Jakarta: Fakultas Kedokteran dan Ilmu Kesehatan, UIN Syarif Hidayatullah Jakarta, 2013.
- Bajuri, Z. Intervensi Penyuluhan Menggunakan Media Lembar Balik Terhadap Peningkatan Pengetahuan Bahaya K3 dan Pencegahannya Pada Pekerja Las di Ciputat. Skripsi. Jakarta: Universitas Islam Negri Syarif Hidayatullah. 2016.



 Saban S. Efektifitas media video dan leaflet terhadap pengetahuan tentang anemia siswi SMAN 2 Ngaglik Sleman. Skripsi. Yogyakarta: Universitas 'Aisyiyah Yogyakarta. 2017.