



The Effect of Snake and Ladder Education Games on Knowledge of Sexual Violence Prevention in Children at Sdn 12 Meulaboh

Fitri Apriani¹, Yulfa Aulia², Orita Satria³, Nurromsyah Nasution⁴

^{1,2,3,4}Nursing Department, STIKes Medika Seramoe Barat, Industri Road, Aceh Barat, Aceh, Indonesia

ARTICLE INFO

Article history:

Received Dec 4, 2024

Revised Dec 12, 2024

Accepted Dec 21, 2024

Keywords:

Education;
Snake and Ladder Games;
Sexual Violence.

ABSTRACT

Background: Sex education aimed at preventing sexual violence in early childhood is often considered taboo within society, contributing to vulnerability of children to sexual violence. Thus, introducing and teaching sexuality, protect themselves, and respond appropriately if they encounter sexual crimes. One method of delivering sex education is through educational games, such as snakes and ladders. Objective: To examine the impact of snake and ladder educational game on children's knowledge of sexual violence prevention at SDN 12 Meulaboh. Method: this quasi experimental study employed a one group pretest and post test design, involving 58 participants selected through proportional stratified random sampling. The study was conducted from July 30 to August 14, 2024. Results: The wilcoxon test results indicated a significant improvement in children's knowledge of sexual violence prevention following the snake and ladder educational intervention with p-value of 0.00 (p-value < 0.05), indicating the rejection of the null hypothesis (H₀) and acceptance of the alternative hypothesis (H_a), with a z-score of -5.615. Conclusion: education through the snakes and ladders game is effective in increasing children's knowledge of sexual violence prevention. Suggestion: it is necessary to carry out preventive efforts that are comprehensive, intensive and sustainable by parents, teachers, educational institutions and health workers to solve the problem and reduce the risk of sexual violence as well as guarantee the freedom for children to develop their abilities as the future generation.

This is an open access article under the [CC BY-NC](https://creativecommons.org/licenses/by-nc/4.0/) license.



Corresponding Author:

Fitri Apriani,
Nursing Department,
STIKes Medika Seramoe Barat,
Industri Road, Aceh Barat, Aceh, 23611, Indonesia
Email: Fitriapriani177@gmail.com

1. Introduction

According to Indonesian Law No.12 of 2022, sexual violence is a non-physical or physical sexual act directed against the body or reproductive organs with the intention of degrading a person's dignity and sexuality or morality both inside and outside of marriage by abusing power relations or conditions of inequality between the victim and the perpetrator (UU No.12 Tahun 2022). Sexual violence is sexual behavior that is not reasonably desired or considered to cause offense or humiliation. Sexual violence is also physical intrusion of a sexual nature by force or under conditions of inequality or coercion of the victim. Any sexual activity with a child under the age of 18 is considered sexual violence against children (UHNCR, 2022). Child sexual abuse also refers to a child's relationship with an adult where the child is used as an object of sexual gratification by coercion, threat, bribery, deception or intimidation and does not necessarily involve physical contact (exhibitionism or voyeurism) (ECPAT et al., 2022).

Sexual violence cases have recently become a trend that is widely discussed in the mass media. The iceberg phenomenon in this case is starting to show its true form. The more information technology develops, the more cases of sexual violence begin to emerge. Ironically, it is not only adults, but also minors who are victims of sexual violence. For example, a 13-year-old girl was traumatized by being raped and recorded by 3 teenagers in Tarakan, there was another incident of a teacher who sexually assaulted his students in Pariaman, West Sumatra (Afrianto, 2024). Then as many as 15 elementary school students in Yogyakarta were also victims of sexual violence committed by one of the honorary teachers (Daeng, 2024). Then there was news of a father in Kukar who raped his own 10-year-old biological daughter repeatedly for five years (Mooslem, 2024). The above is proof that anyone can be a perpetrator of sexual violence, including biological family. This is similar to that experienced by a child in North Tapanuli who was raped by her father since grade 3 (CNN, 2024), then there was also a 12-year-old child in Aceh Abdya who was raped by her stepfather repeatedly (Zass, 2024).

It is difficult to know and obtain exact figures on the prevalence of sexual violence, as most incidents are silenced and not reported to the authorities. Studies estimate the prevalence rate of sexual violence during childhood worldwide to be 127 per 1000 children (76 per 1000 in boys and 180 per 1000 in girls) (Stoltenborgh et al., 2015). WHO (World Health organization) in 2023 estimates that about 1 in 5 girls (18%) and 1 in 13 boys (8%) from all over the world have experienced sexual violence before reaching adulthood (0-17 years) (WHO, 2023).

Based on data from the online system Simfoni PPA (Protection of Women and Children), in 2023 there were 18,175 cases of violence against children with 14,449 female victims and 5,772 male victims where sexual violence cases became the first case with the highest number of victims from 2019 to 2023, namely 10,932 cases. Meanwhile, in 2024 from January to April, 2,889 cases of sexual violence against children have been recorded with East Java holding the title of the first rank of the most cases of sexual violence against children in 2024. Based on age, most victims of sexual violence are aged 13-17 years followed by children aged 6-12 years. And most cases occurred in children in junior high and elementary schools compared to others (KPPPA, 2024).

Several factors influence the occurrence of sexual violence cases, including, when viewed from the perspective of the perpetrator, sexual violence generally occurs because of the inequality of power and status between the perpetrator and the victim so that the perpetrator is free to threaten, intimidate and force the victim directly. This makes most victims afraid to refuse and choose to remain silent about the incident (BKKBN, 2013). Another cause that causes sexual violence is the desire of the perpetrator and the opportunity to do so, supported by the public's perception that sexual violence is a personal problem of the victim and tends to blame the victim and the lack of information to the general public about sexual violence (Murniati, 2023).

The impact of sexual violence on children will greatly affect the physical, psychological and developmental development of children as the future of the nation. Usually the symptoms and signs of a child experiencing sexual violence are not always clear. There are some children who like to keep secrets by being obedient and trying not to be the center of attention. Even so, there are several signs that can be suspected, including drastic and sudden changes in attitude, children often complain of pain in the body, especially in their genitals, children wet the bed when previously they did not, children's learning ability decreases, appetite decreases, do not want to be left alone and often demand excessive attention. If there are several signs above, it is better if parents immediately bring their children to medical services for physical and psychological examinations (Korona, 2017).

The assumption that sex education as an effort to prevent sexual violence in early childhood is taboo in society is one of the triggers why children easily become victims of sexual violence. So it is necessary to know that sexual education is an important thing that must be taught and introduced to children from an early age to prevent children's curiosity about sex and so that children have knowledge about sex before children hear from others. In early childhood, sex education in question is to provide an overview of body parts, especially reproductive parts so that children's knowledge to recognize and understand body members, functions, differences and how to protect them can increase. Thus, children

can protect themselves and can take action when they encounter sexual crimes from their surroundings (Siregar & Dalimunthe, 2023).

Sex education as an effort to prevent sexual violence against children can be done through various methods and media. One of them uses the snakes and ladders game media, through this game children can learn while playing, the impact is that children absorb the information conveyed more easily and reduce the level of boredom when learning is carried out (Sari dkk, 2022). Education through snakes and ladders media makes children's mood happy when receiving learning. Children can be more motivated to discuss and answer the questions asked, importantly, children do not feel embarrassed to convey their answers and experiences (Susilowati & Dwi, 2022).

The results of the study after being given a snakes and ladders game, children's understanding of sexual education increased, seen from the mean score of previous knowledge which was 80.7 increased to 88.64. Through education with snakes and ladders media, children can find out what activities are included in sexual violence and its impact and how to prevent sexual violence. This knowledge greatly helps reduce the risk of children becoming victims of sexual violence (Sumiyarini et al., 2022). This is also supported by research conducted by Fadhillah et al. in 2022 with the results of group guidance education scores with snakes and ladders games can prevent sexual harassment posttest > pretest (86.7 > 65.7) so it is said to be effective in increasing student knowledge about sexual harassment (Fadhillah, 2022). Not only limited to normal children, sex education through snakes and ladders games is also effective in increasing the knowledge of students with intellectual disabilities (Handayani et al., 2020).

2. Methods

This research was conducted from July 30 to August 14, 2024 at SDN 12 Meulaboh. The type of research used is quasi experiment with one group pretest-posttest design. This study reveals the effect of snakes and ladders game education by involving one group of subjects. The group will be given a pretest to measure knowledge before treatment followed by treatment and given a posttest to measure knowledge after treatment (Ismail, 2018). The questionnaire used in this study was adopted from Jatmikowati's research (2015) and has been tested for validity by Syadzwin in 2018 which consists of 15 question items about reproductive organs, sexual violence and its prevention. The sample in this study were students in grades 4-6 at SDN 12 Meulaboh totaling 58 people with 4 classes using 10 students and 2 classes using 9 students with sampling techniques using probability sampling techniques, namely proportionate stratified random sampling (Sulung & Yasril, 2023).

3. Results and Discussion

Univariate analysis

a. Age of respondent

Table 1
Frequency Distribution of Age of Respondents in Grades 4-6 at SDN 12 Meulaboh in 2024 (n = 58)

No	age	Frequency	%
1	10 y.o	34	58.6
2	11 y.o	18	31.0
3	12 y.o	6	10.3
Total		58	100

Source: Primary Data (Processed, 2024)

Table 4.1 above shows that the majority of respondents who took part in this study were 10 years old with a percentage of 58% (34 people), and the least came from respondents aged 12 years, namely 10.3% (6 people).

b. Gender

Table 2
Frequency Distribution of Gender of Respondents in Grades 4-6 at SDN 12 Meulaboh in 2024 (n = 58)

No	Gender	Frequency	%
1	Boys	27	46.6
2	Girls	31	53.4
Total		58	100

Source: Primary Data (Processed, 2024)

Table 4.2 above shows that the majority of respondents who took part in this study were female with a percentage of 53.4% (31 people).

c. Respondents' knowledge on prevention of sexual violence before intervention

Table 3
Frequency Distribution of Respondents' Knowledge Level on Prevention of Sexual Violence Before Intervention (n = 58)

No	Category	Frequency	%	Mean	SD	Min	Max
1	Good	38	65.5				
2	Moderate	19	32.8	72.71	11.56	40	99
3	Less	1	1.7				
Total		58	100				

Source: Primary Data (Processed, 2024)

The table 4.3 above shows that the majority of respondents who participated in this study previously had good knowledge about preventing sexual violence with a percentage of 65.5% (38 people), but on the other hand there were still quite a lot of respondents who had knowledge about preventing sexual violence in the sufficient category with a percentage of 32.8% (19 people). The results of the pretest showed that the average knowledge was rated 72.71 with the lowest value being 40 and the highest value being 99.

d. Respondents' knowledge on prevention of sexual violence after intervention

Table 4
Frequency Distribution of Respondents' Knowledge Level on Prevention of Sexual Violence after Intervention (n = 58)

No	Category	Frequency	%	Mean	SD	Min	Max
1	Good	52	89.7				
2	Moderate	6	10.3	85.45	11.15	54.4	99
3	Less	0	0				
Total		58	100				

Source: Primary Data (Processed, 2024)

Table 4.4 above shows that there was an increase in knowledge after the intervention was given to respondents in the good category to 89.7% (52 people). The results of the post test showed that the average knowledge increased to 85.45 from before with the lowest value being 54.4 and the highest value being 99.

Bivariate analysis

Table 5
The Effect of Sexual Violence Prevention Education Through Snakes and Ladders Game on the Knowledge of Children in Grades 4-6 at SDN 12 Meulaboh (n=58)

Knowledge	Mean	SD	Min	Max	Z	Asymp. Sig (2-Tailed)
Pre Test	72.71	89.7	40	59.4	-5.615 ^b	0.000
Post Test	85.45	10.3	99	99		

Source: Primary Data (Processed, 2024)

The results of the study using the Wilcoxon test showed a significant effect between before and after being given an educational intervention through a snakes and ladders game to prevent sexual violence with a P-Value of 0.000, where the P-Value <0.05 so, it can be concluded that H_a is accepted and H_0 is rejected.

Analysis

Based on the pretest results, it is known that 65.5% of respondents previously had good category knowledge regarding the prevention of sexual violence, but some respondents were still quite a lot in the moderate category with an average value of 72.71 which is the limit between the good and moderate categories. After the intervention with the snakes and ladders game, there was a significant increase in knowledge, respondents in the good category increased from 65.5% to 89.7% supported by an average score of 85.45.

The pretest results also showed that more than half of the respondents had low knowledge about the parts of their body that are private and should only be seen and touched by them, their parents and those who have permission from their parents. In addition, some respondents also had quite low knowledge about the limits of socializing with friends, both of the same sex and opposite sex, and things that should not be done other than to parents. This is evidenced by the number of respondents who answered incorrectly on the items containing these matters.

Providing education on the prevention of sexual violence is one of the efforts that can be made to prevent and help reduce the incidence of sexual violence which has continued to increase recently. Unfortunately, many people today still consider it taboo to provide sex education in early childhood so that due to the lack of information that children get related to sex education and sexual violence, it makes it difficult for children to react and protect themselves when they are in conditions that should not be. Therefore, sex education is an important thing that must be taught and introduced to children from an early age so that they know and understand about their body members, especially the reproductive parts and how to protect them from sexual crimes (Siregar & Dalimunthe, 2023).

Sex education as an effort to prevent sexual violence to children can be provided through various methods and media, one of which uses the snakes and ladders game media. The snakes and ladders game will allow children to learn while playing, so that children will casually absorb information because they feel that what they are doing is playing without the need to be tense and anxious when education is given. A relaxed and relaxed state will make children easier to discuss and answer questions and children are also not ashamed to convey their answers and experiences (Wulan Sari et al., 2022)(Susilowati & Dwi, 2022).

Evidence that sexual violence prevention education through snakes and ladders games has a positive impact can be seen from the post test results which experienced a significant increase, good category respondents in the pretest increased to 85.7% in the post test. Also during the provision of snakes and ladders game education on sexual violence prevention, respondents were actively involved in the process of answering questions, discussions, and enjoying the game. The snakes and ladders game media can increase interest and learning atmosphere for respondents because education is packaged in the form of a game that makes respondents not feel like they are learning but playing, coupled with the appearance of a snakes and ladders board filled with animated images related to sexual violence that can attract respondents' attention and curiosity about the meaning of the

animation listed so that researchers can explain a lot according to respondents' curiosity. This helped to increase the respondents' knowledge and understanding of sexual violence and showed that education through snakes and ladders games was effective in increasing children's knowledge about sexual violence prevention.

In line with the research of Sumiyarini et al in 2022 also proved that after being given a snakes and ladders game, children's understanding of sexual education increased with a score of 80.7 to 88.64 (Sumiyarini et al., 2022). This was also supported by research by Fadhillah et al in 2024 with the results of the education score after the snakes and ladders game to prevent sexual harassment increased from 65.7 to 86.7 (Fadhillah, 2022). In addition, it is interesting that sexual violence prevention education through snakes and ladders games can not only be carried out by normal children but also effectively carried out in children with intellectual disabilities as in the research of Handayani et al in 2020 (Handayani et al., 2020).

4. Conclusion

There is a significant effect before and after being given snakes and ladders game education on knowledge of preventing sexual violence in children at SDN 12 Meulaboh which is supported by the results of the Wilcoxon test with a P-value of $0.000 < 0.05$ (H_a is accepted and H_0 is rejected) and a z-score of -5.615. This snakes and ladders game can certainly be applied in a sustainable manner to shape attitudes towards preventing sexual violence in children, especially in the curriculum of PJOK (Physical Education, Sports and Health) lessons. Because practically, the snakes and ladders game as an educational media for sexual violence prevention is easier to understand in a simple way and is liked by elementary school children.

References

- Afrianto, M. A. (2024). *Guru ASN di Pariaman Tega Cabuli hingga Setubuhi 2 Siswinya Berulang Kali*. Detik.Com. <https://news.detik.com/berita/d-7366487/guru-asn-di-pariaman-tega-cabuli-hingga-setubuhi-2-siswinya-berulang-kali>
- BKKBN. (2013). *Pegangan Fasilitator untuk Populasi Remaja dengan Perilaku Risiko Tinggi PELECEHAN SEKSUAL*. 1–22. www.unesco.org/jakarta
- CNN. (2024). *Pria di Taput Ditangkap Usai Perkosa Anak Kandung Sejak Kelas 3 SD*. CNN Indonesia. <https://www.cnnindonesia.com/nasional/20240528004448-12-1102621/pria-di-taput-ditangkap-usai-perkosa-anak-kandung-sejak-kelas-3-sd>
- Daeng, M. F. (2024). *Sebanyak 15 Murid SD di Yogyakarta Diduga Jadi Korban Kekerasan Seksual*. Kompas.Id. <https://www.kompas.id/baca/nusantara/2024/01/08/15-murid-sd-di-yogyakarta-diduga-jadi-korban-kekerasan-seksual>
- ECPAT, INTERPOL, & UNICEF. (2022). *Disrupting Harm di Indonesia: Bukti eksploitasi dan pelecehan seksual anak secara daring*. 106. https://www.end-violence.org/sites/default/files/2022-11/DH_Indonesia_ONLINE_ID_Nov22.PDF
- Fadhillah, H. N. (2022). *Sejarah Permainan Ular Tangga, Jadi Alat Pengajaran Agama Hindu*. National Geographic. <https://nationalgeographic.grid.id/read/133102627/sejarah-permainan-ular-tangga-jadi-alat-pengajaran-agama-hindu?page=all>
- Handayani, T., Supena, A., & Rasmita, R. (2020). The Effectiveness of Snakes and Ladders Media on Sex Education for Children With Intellectual Disabilities. *Jurnal Inovasi Pendidikan Dasar*, 5(2), 71–80. <https://doi.org/10.22236/jipd.v5i2.122>
- Ismail, F. (2018). *Statistika Untuk Penelitian Dan Ilmu Ilmu Sosial*. Prenadamedia Group.
- Korona, M. (2017). *Pencegahan Dan Penanganan Korban Kekerasan Seksual Pada Perempuan dan Anak*. DPPPA Sulawesi Tengah.
- KPPPA. (2024). *Data Kekerasan Seksual Indonesia*. <https://kekerasan.kemennppa.go.id/register/login>
- Mooslem, D. (2024). *Ayah di Kukar Perkosa Anak Kandung Berkali-kali, Terbongkar Setelah Lima Tahun*. IniBalikPapan.Com. <https://www.inibalikpapan.com/ayah-di-kukar-perkosa-anak-kandung-berkali-kali-terbongkar-setelah-lima-tahun/>
- Murniati, D. (2023). Dampak Yang Didapatkan oleh Anak Perempuan Korban Kekerasan Seksual dalam Kehidupan Bermasyarakat. *Jurnal Ilmiah Mahasiswa Pendidikan Sejarah*, 8(4), 4118–4128.
- Siregar, S., & Dalimunthe, D. S. (2023). Pentingnya Pendidikan Pada Anak Usia Dini. *Marpokat: Jurnal Pengabdian Kepada Masyarakat*, 1(1), 25–44. <https://doi.org/10.62086/mjpkm.v1i1.400>

- Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R. A., & IJzendoorn, M. H. van. (2015). The prevalence of child maltreatment across the globe: Review of a series of meta-analyses. *Child Abuse Review. Child Abuse Review*, 24, 37–50. <https://doi.org/10.1002/car.2353>
- Sulung, N., & Yasril, A. I. (2023). *Metode Besar Sampel dan Teknik Pengambilan Sampling Untuk Penelitian Kesehatan*. Deepublish.
- Sumiyarini, R., Riyadi, S., Dwiyati, & Susilowati, L. (2022). Edukasi Kesehatan Seksual Dengan Media Video dan Permainan Ular Tangga Sebagai Upaya Pencegahan Kekerasan Seksual Pada Anak Yang Bersekolah Dengan Basis Asrama. *Journal of Innovation in Community Empowerment*, 4(1), 32–36. <https://doi.org/10.30989/jjice.v4i1.691>
- Susilowati, L., & Dwi, Y. (2022). Sexual Health Education Metode GAVIS Mencegah Kekerasan Seksual Pada Anak Usia Sekolah. *Jurnal Penelitian Kesehatan Suara Forikes*, 13(April), 507–510.
- UHNCR. (2022). *Defining Sexual Exploitation and Abuse and Sexual Harassment*. <https://www.unhcr.org/what-we-do/how-we-work/tackling-sexual-exploitation-abuse-and-harassment/what-sexual-exploitation>
- WHO. (2023). *Lifetime Prevalence Of Child Sexual Abuse*. [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/lifetime-prevalence-of-child-sexual-abuse\(-\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/lifetime-prevalence-of-child-sexual-abuse(-))
- Wulan Sari, N., Yuniliza, Y., & Rovendra, E. (2022). Pengaruh Edukasi Dengan Media Ular Tangga Terhadap Pengetahuan Dan Sikap Remaja Tentang Kesehatan Reproduksi. *Journal of Health Educational Science And Technology*, 5(2), 115–126. <https://doi.org/10.25139/htc.v5i2.4559>
- Zass, T. (2024). *Ayah di Abdya Tega Cabuli Anak Tiri, Ibu Lapor Ke Polisi, Pelaku Ditangkap di Kebun Sawit di Nagan*. SerambiNews. <https://aceh.tribunnews.com/2024/05/29/ayah-di-abdya-tega-cabuli-anak-tiri-ibu-lapor-ke-polisi-pelaku-ditangkap-di-kebun-sawit-di-nagan>