



THE EFFECT OF QUALITY SEXUALITY HEALTH EDUCATION USING THE STRATEGY METHOD ON KNOWLEDGE OF THE DANGERS OF PRE-MARITAL SEX IN ADOLESCENT STUDENTS

Fani Fionita^{1*}, Rahmawati¹, Rismanudin²

¹School of public health, Universitas Tamalatea Makassar, Jl. Perintis Kemerdekaan KM No.12, Tamalanrea, Makassar, Kota Makassar, Sulawesi Selatan 90242, Indonesia

²School of Nursing, Universitas Famika, Grand Central BTP. 12, Tamalanrea, Tamalanrea, Makassar, Sulawesi Selatan 90222, Indonesia

*ffionita4@gmail.com

ABSTRACT

Adolescent sexual behavior in Indonesia shows an increasingly worrying trend, as evidenced by the rise in premarital sex, unwanted pregnancies, abortions, and early marriages. This phenomenon reflects the vulnerability of adolescents in facing biological, psychological, and social changes that are not balanced with adequate knowledge and attitudes. The influence of social environments, media exposure, and weak internalization of moral values also increase the risk of unhealthy sexual behavior. These conditions indicate that existing prevention efforts have not been able to comprehensively address the needs of adolescents. Therefore, this research is important to gain a deeper understanding of the factors that influence adolescent sexual behavior and to serve as a basis for formulating more effective, sustainable, and culturally appropriate educational and intervention strategies. This study aimed to determine the effect of health education using the stratagem method on students' knowledge of the dangers of premarital sex at SMPN 3 Bontomarannu. This was done by assessing their knowledge levels before and after the intervention. The results showed an increase in adolescents' understanding after the intervention, indicating that the stratagem method was effective in increasing their knowledge. This study applied a quantitative approach with an experimental design aimed at determining the causal relationship between variables through manipulation of independent variables. The study population included individuals who met the predetermined inclusion criteria and were relevant to the study objectives. There were 44 respondents in this study, divided into 22 respondents in the intervention group and 22 respondents in the control group. This study demonstrates that sexuality education using the staging method effectively improves students' understanding of the risks of premarital sex. Involving 44 respondents through simple random sampling, pre- and post-test results showed a significant increase in the intervention group compared to the control group. The results of the study showed that before the intervention there was no difference in knowledge between the two groups, but after being given counseling on the stratagem method, the intervention group experienced a significant increase, while the control group did not show any significant changes.

Keywords: knowledge; sexuality education; teenagers; the dangers of premarital sex

How to cite (in APA style)

Fionita, F., Rahmawati, R., & Rismanudin, R. (2026). The Effect of Quality Sexuality Health Education Using the Strategy Method on Knowledge of the Dangers of Pre-Marital Sex in Adolescent Students. *Indonesian Journal of Global Health Research*, 8(3), 221–228. <https://doi.org/10.37287/ijghr.v8i3.1014>.

INTRODUCTION

The WHO reports that since early 2010, Indonesia has seen 20–60% of abortions being induced. Research in 10 major cities and 6 districts recorded approximately 2 million abortions, half of which occurred in urban areas.(WHO, 2017) Furthermore, approximately 93.7% of adolescents reported having had sexual intercourse. Data from the East Java Health Office indicates 36,000 cases of illegal abortion.(Suhaid & Yetty Leoni Irawan, 2022) In major cities such as Jakarta, Surabaya, and Bandung, 32% of adolescents aged 14–18 have had premarital sex, with 62.7% losing their virginity by age 12–13, and 21.2% having had an abortion.(Suryana et al., 2024).

The 2017 Indonesian Demographic and Health Report shows that adolescent boys engage in more sexual activity than adolescent girls.(Umaroh et al., 2023) This behavioral pattern is influenced by several factors, such as age, residential environment whether rural or urban and adolescents'

education level. Furthermore, age has been shown to have a strong relationship with sexual behavior, with data from the 2017 Indonesian Demographic and Health Survey (IDHS) noting that adolescents aged 15–19 are increasingly engaging in extramarital sex.(Umaroh et al., 2023)

Child protection data in South Sulawesi, based on media reports and monitoring from 2011–2016, shows various cases related to adolescent reproductive health. There were 42 recorded cases of health and drug abuse, 6 cases of adolescents affected by free sex broadcasts or exposure, 2 cases of early marriage, 4 children using drugs, 15 cases of pornography on social media, and 4 cases of adolescent abortion. These findings indicate that adolescents in the region face serious reproductive health challenges.(Metasari & Sianipar, 2021; Sari et al., 2025; Taqiyyah et al., 2025)

Today, adolescents are in a highly dynamic developmental phase that can shift in both positive and negative directions.(Ronald & Nicholas, 2018) Therefore, appropriate attention through education, guidance, and mentoring is essential to ensure their potential develops productively. This phenomenon is evident in the increasing number of adolescents exhibiting promiscuous behavior without considering moral values, making them vulnerable to engaging in harmful behavior, including various forms of juvenile delinquency.(Sodik, 2022; Waruwu et al., 2025)

Unplanned pregnancies, teenage marriage, and high abortion rates have serious consequences for adolescent reproductive health, largely due to a lack of knowledge. These conditions encourage many adolescents to engage in premarital sex, early pregnancy, and early parenthood.(Seks et al., 2024) This situation ultimately prompted the government to enact Law No. 52 of 2009, which outlines policies for family development, strengthening adolescent character, and providing information, education, and support related to family life. Therefore, efforts to prevent risky sexual behavior among junior high and high school students need to be strengthened by providing education on factors influencing premarital sex, including reproductive knowledge, religious teachings, and legal regulations regarding early marriage.(Ningrum et al., 2023; Rismanudin et al., 2025; Tarihoran et al., 2025)

Nurses are not only responsible for providing services but also play a crucial role as educators in nursing practice. Furthermore, nurses are required to provide comprehensive health support, including to adolescents in the school environment. The Health Promotion Model, a health education approach that describes the process of developing healthy lifestyles, was developed by Pender in 1987. Thorough preparation is essential throughout the educational process to enhance the focus and effectiveness of the learning process for adolescent students.(Jiménez et al., 2025; Medknow, 2023)

Previous research on Health Education using the stratagem method was conducted by Abdul Haris Haery (2017) and Nurul Istiqamah (2018). Both studies aimed to assess the effect of the stratagem method in increasing adolescent knowledge regarding the dangers of premarital sex and understanding of vulva hygiene in adolescent girls.(Rohman et al., 2025) Their findings indicated that this method effectively strengthened the outreach process and was able to increase students' understanding of reproductive health issues. Based on these findings, the researchers were motivated to conduct a follow-up study entitled *The Effect of Health Education Using the Stratagem Method on Knowledge of the Dangers of Premarital Sex in Adolescent Students at SMPN 3 Bontomarannu*.

Through the implementation of the stratagem method, the learning process allows students to collaborate on solving various problems through group discussions. Students with better understanding help explain the discussion results to group members who are still unclear, resulting in a process of knowledge sharing.(Anwar, 2024) This activity also encourages students to become accustomed to expressing their ideas and opinions in a structured manner in discussion forums.

Furthermore, students learn to comprehend, process, and summarize the ideas expressed by their peers. Thus, this method not only improves academic abilities but also fosters communication skills, collaboration, and a deeper understanding of concepts.(Djirlyay & Murdiono, 2024; Hazballoh, 2024)

The results of a study by Purnasari et al. (2022) showed an effect of sexual health education on knowledge of the dangers of sex among adolescent girls aged 15-16 at An-Nashriyah Islamic Boarding School in Jombang. The study examined the effect of knowledge on the dangers of sexuality before and after receiving sexual health education using the stratagem method. A significant value ($p=0.000$) was obtained, thus H1 was accepted. Of the 28 respondents, 15 (53.6%) had sufficient knowledge before receiving health education, and after receiving sexual health education, almost all 27 (96.4%) had good knowledge. This study aimed to determine the effect of health education using the stratagem method on students' knowledge of the dangers of premarital sex at SMPN 3 Bontomarannu. This was done by assessing their knowledge levels before and after the intervention. The results showed an increase in adolescents' understanding after the intervention, indicating that the stratagem method was effective in increasing their knowledge.

METHOD

This study applied a quantitative approach with an experimental design aimed at determining the causal relationship between variables through manipulation of independent variables. The study population included individuals who met the predetermined inclusion criteria and were relevant to the study objectives. There were 44 respondents in this study, divided into 22 respondents in the intervention group and 22 respondents in the control group.

RESULT

This study aimed to assess the effect of sexuality counseling methods on students' understanding of the risks of premarital sex at SMPN 3 Bontomarrannu. Simple random sampling was used to determine the sample, where participants were selected randomly without considering strata division. A total of 44 respondents were recruited, consisting of 22 ninth-grade students assigned to the intervention group and 22 students assigned to the control group. The following are the results of the study:

Tabel 1.

Frequency Distribution of Age Characteristics in the Intervention and Control Groups

Age Characteristics	Intervention Group		Control Group	
	f	%	f	%
13	5	22,7	4	18,2
14	12	54,5	16	72,7
15	5	22,7	2	9,1

Tabel 2.

Frequency Distribution of Gender Characteristics in the Intervention and Control Groups

Gender Characteristics	Intervention Group		Control Group	
	f	%	f	%
Female	18	81,8	16	72,2
Male	14	18,2	6	27,3

Tabel 3.

Frequency Distribution of Pre-Test Knowledge Levels in the Intervention Group and Control Group

Level of Knowledge	Pre test Intervention		Pre test Control		Result (p)
	f	%	f	%	
Good	0	0	0	0	0,569
Enough	4	18,2	2	9,1	

Tabel 4.
Frequency Distribution of Post-Test Knowledge Levels in the Intervention Group and Control Group

Level of Knowledge	Post test Intervention		Post test Control		Result (p)
	f	%	f	%	
Good	5	22,7	0	0	0,000
Enough	16	72,7	6	27,3	
Not Enough	1	4,5	16	72,2	

Tabel 5.
Average Level of Knowledge of the Dangers of Premarital Sex

Variables		Rerata	Standard Deviation	Min-Max
Level of Knowledge	Group Pre test	3	1.63	1-6
	Intervention Pre test	7	1.15	4-10
	Group Pre test	3	1.37	1-6
	Control Post test	3	1.86	1-6

Tabel 6.
Results of the Normality Test for Knowledge Levels of the Dangers of Premarital Sex

Group	Shaapiro Wilk
age of intervention group	0.001
Pre-test intervention knowledge level	0.000
Post test intervention knowledge level	0.000
Age of control group	0.000
Pre-test intervention knowledge level	0.000
Post test intervention knowledge level	0.000

Tabel 7
Results of Comparative Test of Knowledge Levels of the Dangers of Premarital Sex
Pre-test and Post-test in the Intervention and Control Groups (Wilcoxon Test)

Level of Knowledge		Median	Min	Max	Nilai (p)
Intervention	Pre Test	3,00	1,00	6,00	0,000
	Post Test	7,00	4,00	10,00	
Control	Pre Test	2,50	1,00	6,00	0,059
	Post Test	3,00	1,00	6,00	

The results showed that the majority of respondents in both groups were 14 years old, in both the intervention and control groups. Most of the study participants were also female. Initial findings regarding knowledge levels showed that both the intervention and control groups were dominated by adolescents with low knowledge regarding the dangers of premarital sex. A small proportion had adequate knowledge, and none reached the good knowledge category. A p-value of 0.569 confirmed that before treatment, there was no significant difference between the two groups in terms of initial knowledge regarding the risks of premarital sex.

Based on the research results, there was a significant difference between the knowledge levels of the intervention group and the control group after the implementation of counseling using the stratagem method. In the intervention group, the majority of students showed an increase in understanding, as evidenced by the dominance of the sufficient and good knowledge categories, while the control group remained in the low to moderate categories. Comparison of average scores also supported this finding, where the intervention group experienced an increase in scores from pre-test to post-test, while the control group experienced no change. Bivariate analysis yielded a p-value <0.05, indicating a significant effect of the counseling provided. The Shapiro–Wilk normality test indicated that the data were not normally distributed, so the analysis was continued using non-parametric statistical tests to assess differences in knowledge before and after the intervention. Thus, counseling based on the stratagem method was proven effective in increasing students' understanding of the dangers of premarital sex.

The results of the study in Table 4.7 show that the level of knowledge in the intervention group increased from 3.00 in the pre-test to 7.00 in the post-test. The level of knowledge in the control group before the pre-test was 2.50, while after the post-test it increased to 3.00, indicating an increase in knowledge in the control group from before to after the trial. Furthermore, when statistical tests were conducted using the Wilcoxon T-test on the intervention group before and after the pre-test, a p-value of 0.000 ($p < 0.05$) was found, indicating a significant difference in knowledge about the dangers of premarital sex after receiving sexuality education using the stratagem method. In the control group, the result was $p = 0.059$ ($p > 0.05$), indicating no significant difference between the pre-test and post-test because they did not receive sexuality education using the stratagem method.

DISCUSSION

The study findings showed that the knowledge score in the intervention group increased from a baseline of 3.00 in the pre-test to 7.00 after the post-test. Meanwhile, the control group showed a smaller change, with a pre-test score of 2.50 increasing to 3.00 in the post-test. This indicates a minimal increase in knowledge in the control group compared to the intervention group.(Amna Safder Malik, Hajra Sarwar, Dure Adan, Noor Saya, 2025; Shaban et al., 2024). The Wilcoxon T-Test statistical test yielded a p-value of 0.000 or $p < 0.05$ in the intervention group, indicating a significant change in knowledge about the dangers of premarital sex after the stratagem counseling was provided.(Seks et al., 2024) Meanwhile, the control group obtained a p-value of 0.059 or $p > 0.05$, so there was no significant difference between the pre-test and post-test scores. This occurred because the control group did not receive stratagem counseling during the study.(Susanti et al., 2024)

Thus, the results of the study showed that in the initial stage (pre-test) there was no difference in knowledge about the dangers of premarital sex between the intervention group and the control group, indicated by a p value = 0.059 or $p > 0.05$.(Nanlohy & Daramatasia, 2025) However, in the final measurement (post-test), a p value = 0.000 or $p < 0.05$ was obtained, which indicates a significant difference in the level of knowledge of the two groups after the intervention process was carried out.(Tyagita Widya Sari, 2021). To assess the effect of sexuality education using the stratagem method on knowledge about the dangers of premarital sex, analysis was conducted using the Wilcoxon statistical test. The results in the intervention group showed a p value = 0.000 or $p < 0.05$, so H_a was accepted. This means that counseling using the stratagem method provided a significant increase in knowledge in adolescent students. In contrast, the control group obtained a p value = 0.059 or $p > 0.05$, so H_a was rejected, indicating no significant change in knowledge.(Anam et al., 2022) Thus, a clear difference was seen between the group that received counseling using the stratagem method and the group that did not receive the treatment, where the intervention group experienced a more pronounced increase in knowledge.(Noriyati et al., 2025)

Stratagem is a form of educational game introduced by Bell Gredler in 1994. This method is considered appropriate for the cognitive abilities of adolescents who are at the formal operational stage, the highest phase of thinking development. Implementing this strategy can help improve student understanding. One supporting medium that can be utilized is a combination of audio and visuals. The use of these media helps create two-way interaction between educators and students during the learning process, allowing for more effective delivery of material.(Pragita et al., 2018). This research aligns with the results of a study by Abdul Haris Haery (2017), which showed that providing sexuality education significantly increased adolescents' understanding of the risks of premarital sex at Guppi Islamic Boarding School Junior High School through the use of the stratagem method. These findings demonstrate that the stratagem approach can strengthen the effectiveness of outreach activities, as students feel more comfortable, understand the material more easily, and demonstrate increased interest, focus, and attention during the learning process. This method also helps improve adolescents' knowledge more optimally than conventional

approaches.(Rahmat Kurniawan, T. IskandarFaisal, Nurmiaty, Nuswatul Khaira4, Adheyatul Fitry, 2025)

According to researchers, adolescents need education that can help shape positive behaviors. However, the counseling approach in schools cannot be equated with conventional learning methods. Adolescents require appropriate stimulation to optimize their knowledge development.(Mills, n.d.) Providing stimulation can improve brain function by strengthening synapses and intercellular connections, allowing information to be processed more quickly and effectively. One way to support this process is by using audio-visual methods, such as educational games, to make learning more enjoyable and maintain a conducive classroom atmosphere.(Abdullah et al., 2018).

The results of this study align with the findings of Nurul Istiqamah (2018), who demonstrated that health education plays a crucial role in improving adolescent girls' knowledge of vulvar hygiene at SMPN 33 Makassar and SMAN 9 Makassar. The strategic approach used has been shown to improve students' behavior regarding vulvar hygiene. A good understanding of how to maintain vulvar hygiene helps adolescents maintain their health and reduce the potential for future reproductive problems. By receiving education early, adolescents are better prepared to prevent various disorders or diseases that can affect the health of their genital organs.

According to educational experts, health aspects are closely related to the learning process. In teaching and learning activities, specific strategies are needed to help students stay focused and achieve learning goals. The use of continuously evolving learning strategies can increase motivation, knowledge, and encourage attitude change in students. Cooperative learning models involve small groups working together to complete academic tasks while supporting each other. Through this collaboration, positive interdependence develops among students, motivating them to strive optimally until they achieve their targeted competencies. One interesting approach to cooperative learning is group cooperative games, and one form frequently used in this category is the stratagem method.

The results of this study align with the findings of Reza Riyady Pragita (2017), who stated that the application of the Stratagem method can improve students' social skills and strengthen their social values. Through this approach, material can be delivered in a more structured manner, providing new insights for adolescents. Furthermore, this method encourages students to actively participate in discussions, work collaboratively in groups, and practice building solidarity. Thus, this strategy not only increases knowledge but also helps shape positive social attitudes and enhances students' ability to work collaboratively. Researchers believe that the use of the stratagem method can increase the effectiveness of sexuality education at SMPN 3 Bontomarannu. This approach provides opportunities for students to discuss in peer groups while playing without pressure, making the learning process more relaxed, enjoyable, and fostering positive competition. Through collaboration and group discussions, students more easily understand the material and solve the assigned problems. Furthermore, nurses play a crucial role in providing health education to the community, including adolescents, particularly through their role as educators. By implementing education on the dangers of premarital sex, it is hoped that students will improve their understanding of the potential risks and be able to avoid various triggers for such behavior.

CONCLUSION

The research findings indicate that in the initial stage, before the intervention was administered, the knowledge levels between the intervention and control groups were relatively similar and showed no significant differences. However, after the intervention group received counseling using the stratagem method, there was a significant increase in understanding in that group. This increase was evident through the difference in knowledge scores before and after the intervention, indicating that

the stratagem method had a positive impact on students' understanding of the material presented. Meanwhile, the control group, which did not receive similar treatment, did not show any significant changes in knowledge, remaining at their initial level of understanding. Comparing the results of these two groups confirms that counseling using the stratagem approach is effective in increasing student knowledge, while also proving the success of the intervention implemented in the learning process.

REFERENCES

- Abdullah, Al-Kahtani, F., Al-Regaiey, K., Iqbal, M., & Bashir, S. (2018). Brain Training Games Enhance Cognitive Function in Healthy Subjects. 63 69. <https://doi.org/10.12659/MSMBR.909022>
- Amna Safder Malik, Hajra Sarwar, Dure Adan, Noor Saya, S. I. (2025). Effects of International Standardized Protocols on Knowledge and Practice of Nurses Regarding Bed Sore Ulcer at Private Hospital. III(Vii), 0–4.
- Anam, K., Rakhmawati, D., & Jember, U. I. (2022). The Effect Of Adolescent Reproductive Health Counseling On Knowledge Level Pengaruh Penyuluhan terhadap Pengetahuan Kesehatan Reproduksi Remaja. 5(May), 99–107. <https://doi.org/10.56013/JURNALMIDZ.V5I1.1594>
- Anwar, F. (2024). Strategi Pembelajaran Collaborative Learning dalam Meningkatkan Kemampuan Kerjasama dan Komunikasi dalam Pembelajaran PAI. 1(2).
- Djirlyay, M. S., & Murdiono, M. (2024). Application of Debate Learning Method as An Effort To Improve Communication Skills In Civic Education Courses. 5(9), 1148–1154.
- Hazballoh, M. (2024). Discussion Group Dan Implikasinya Di Madrasah Aliyah Al-Hikmah Kediri. 03, 29–40.
- Jiménez, B., Tatiana, I., Jiménez, B., Karina, J., Navarro, C., & Elena, C. (2025). Enfermería escolar en la salud infantil desde una perspectiva integral.
- Medknow, W. K. -. (2023). Adolescent health issues : The role of public health nurses. 59–65. <https://doi.org/10.4103/jin.jin>
- Metasari, D., & Sianipar, B. K. (2021). Pemberdayaan Remaja Melalui Pengembangan Kesehatan Reproduksi Remaja Youth Empowerment through the Development of Adolescent Reproductive Health. January, 11–18.
- Mills, K. L. (n.d.). The adolescent brain is literally awesome.
- Nanlohy, S., & Daramatasia, W. (2025). Pengaruh pendidikan kesehatan melalui media video animasi. 6(2), 110–118. <https://doi.org/10.33475/mhjns.v6i2.767>
- Ningrum, H., Wahyuni, S., & Pranikah, S. (2023). Pro Health Jurnal Ilmiah Kesehatan. 5(2), 380–383.
- Noriyati, N., Sohibun, S., Damayanti, R., & Nisa, N. K. (2025). Pengaruh Penyuluhan Tentang Perilaku Seks Pranikah Terhadap Pengetahuan dan Sikap Siswa di SMA Negeri 1 Kayan Hulu Tahun 2023. 25.
- Pragita, R. R., * R. P., & Sulistyorini3, L. (2018). (The effect of health education through audiovisual media. 016(September).
- Rahmat Kurniawan, T. IskandarFaisal, Nurmiaty, Nuswatul Khaira4, Adheyatul Fitry, S. B. (2025). Edukasi Hiv/Aids Pada Remaja Sma Tolitoli Melalui Media Permainan Tradisional Engklek Edukatif. 4539–4549.
- Rismanudin, Alam, M. S., Jaya, W. H., & Hafid, W. (2025). Fathering Patterns Of Teenagers Towards Children With. 7(June 2024), 1–10.
- Rohman, A. A., Aniroh, U., Waluyo, U. N., Diinginkan, K. T., & Reproduksi, K. (2025). Strategi Peningkatan Pengetahuan Kesehatan Reproduksi Remaja Melalui Edukasi Menggunakan Media Video Animasi. 7(1), 215–223.
- Ronald, E., & Nicholas, B. (2018). UC Berkeley. <https://doi.org/10.1038/nature25770>
- Sari, R. K., Anggara, A. D., Soraya, Y., Intan, N., Primavita, C., Yusuf, I., Trisnadi, S., & Sari, R. K. (2025). How Female Adolescents Exposed to Pornography ? 11(3), 124–132.

- Seks, M., Dan, P., Usia, K., Ihul, R. K., & Rosari, O. (2024). Peningkatan Pengetahuan Dan Sikap Remaja Dalam Mencegah Seks Pranikah Dan Kehamilan Usia Dini. 7, 1166–1175.
- Shaban, M. M., Sharaa, H. M., Gomaa, F., Amer, M., & Shaban, M. (2024). Effect of digital based nursing intervention on knowledge of self-care behaviors and self- efficacy of adult clients with diabetes. 1–12.
- Sodik, H. (2022). Kenakalan Remaja , Perkembangan dan Upaya Penanggulangannya. 14(1), 125–140.
- Suhaid, D. N., & Yetty Leoni Irawan. (2022). Etika Pergaulan Remaja masa kini dan kehamilan yang tidak di inginkan. 5, 2123–2137.
- Suryana, I. M., Ayu, P., & Utami, S. (2024). Contradictions In Indonesia ' s Legal Approach To Abortion : A Study Of Reproductive Health Law And The Criminal Code. 4(06), 4079–4090.
- Susanti, A. H., Azzahroh, P., & Silawati, V. (2024). Effect of Reproductive Health Education on Teenagers Through Video Media on Knowledge and Attitudes Regarding Sexual Pre - Marriage in SMPN 1 Dente Teladas. 2(1), 54–68.
- Taqiyyah, A., Kinanti, B. S., Farhan, M., Rafa, M. N., & Putra, S. A. (2025). Edukasi Moral Seksual dan Kesehatan Reproduksi Anak Remaja di Desa Belung Poncokusumo. 1(1), 1–8.
- Tarihoran, M. R., Nugrahaeni, D. K., Mauliku, N. E., & Endah, S. N. (2025). Analisis Faktor-Faktor yang Berhubungan dengan Perilaku Seksual Berisiko pada Remaja. 4(3), 462–475. <https://doi.org/10.55123/insologi.v4i3.5135>
- Tyagita Widya Sari, P. O. H. (2021). Jurnal Indah Sains dan Klinis Perbedaan Pengetahuan Sebelum dan Sesudah Penyuluhan Sex Education. 2(2), 18–21.
- Umaroh, A. K., Karjoso, T. K., & Anshari, D. (2023). Original Article The Exposure Of Reproductive Health Information And Sexual Intercourse Among Adolescents In Indonesia (2017 Idhs Analysis). 23(1), 161–174.
- Waruwu, A. M., Gulo, O., Otniel, H., & Harefa, N. (2025). Peran Pendidikan dalam Menanggulangi Kenakalan Remaja. September.
- WHO. (2017). ABORTION Indonesia. 2017–2018.