JURNAL KEPERAWATAN TERAPAN
OPEN ACCESS Kemenkes Poltekkes Malang
Jurnal Keperawatan Terapan (e-Journal),
Vol.12, No.02, September 2026. Hal. 148-161. ISSN:2442-6873
p-ISSN 2443-1125 e-ISSN 2442-6873

The Effect of Reproductive Health Education Using Animated Video Media on Pregnancy Prevention Attitudes Among Adolescents

Sinta Nurul Latifa*, Widiyono, Anik Suwarni
Universitas Sahid Surakarta, Surakarta, Jawa Tengah, Indonesia.
*Email: sintanurullatifa8@gmail.com

Abstract

Introduction: Adolescent reproductive health is an important issue in improving the quality of health among young people. Limited knowledge about reproductive health may contribute to risky sexual behaviour, unintended pregnancy, early marriage, and other reproductive health problems. Health education using appropriate media, such as animated videos, can be an effective strategy to improve adolescents' understanding and attitudes toward pregnancy prevention.

Objective: This study aimed to determine the effect of reproductive health education using animated video media on pregnancy prevention attitudes among adolescents.

Methods: This research employed a quantitative approach with a quasi-experimental design using a two-group pretest-posttest design. The study involved 78 adolescents who were divided into an experimental group and a control group, with 39 respondents in each group. The sampling technique used was proportional random sampling. Data were collected using a questionnaire based on the Guttman scale and analyzed using the Wilcoxon Signed Rank Test and Mann-Whitney U Test.

Results: The results showed that before the intervention, most respondents in the experimental group had fair attitudes (30 respondents; 77%), while 9 respondents (23%) had good attitudes. After receiving reproductive health education through animated videos, 34 respondents (87%) showed good attitudes and 5 respondents (13%) showed fair attitudes. The Mann-Whitney U Test showed a significant difference between groups with an Asymp. Sig. (2-tailed) value of 0.000 ($p<0.05$).

Conclusion: Reproductive health education using animated video media significantly improved adolescents' attitudes toward pregnancy prevention. This study highlights the importance of using engaging educational media to support adolescent reproductive health promotion.

Keywords: Adolescent Health, Reproductive Health Education, Health Education, Animated Video, Pregnancy Prevention

INTRODUCTION

Adolescent reproductive health is a crucial issue that demands attention. It indirectly influences the health and future development of the younger generation (Hazanah, 2022). Adolescence is a transitional period from childhood to adulthood, characterized by significant physical, psychological, emotional, and social changes, including reproductive organ development and increased curiosity about sexuality (Nopyanti *et al*., 2023). According to the World Health Organization (Organization, 2023), adolescents need adequate preparation and understanding of reproductive health to manage these changes and develop responsible behaviours. However, many adolescents still have limited knowledge and understanding of reproductive health, which may increase their vulnerability to risky sexual behaviours. Insufficient reproductive health information can contribute to unintended pregnancy, early marriage, and sexually transmitted infections (Nurmala et al., 2025; Choiriyah et al., 2024; and Aryanti et al., 2020) Therefore, providing accurate and comprehensive reproductive health education is essential to help adolescents develop positive attitudes and make responsible decisions regarding their reproductive health.

Adolescent reproductive health problems have become a global and national concern due to their significant impact on maternal and child health outcomes (Eka Mustika et al., 2025). Adolescent pregnancy remains one of the major reproductive health challenges because pregnant adolescents have a higher risk of complications during pregnancy and childbirth compared with women in the optimal reproductive age group (Aryanti et al., 2020; Yastirin et al., 2024) Babies born to adolescent mothers have a 50% higher risk of dying before reaching one year of age compared with babies born to mothers aged ≥20 years (Yosri et al., 2025). In Indonesia, adolescent pregnancy is still associated with risky sexual behavior, inadequate reproductive health knowledge, and limited access to reliable information. Previous studies have shown that unintended pregnancies among adolescents may contribute to early marriage, which remains a serious social and health issue in Indonesia (Choiriyah et al., 2024). In Boyolali Regency, 112 couples applied for marriage dispensation in 2025, and 61.61% of these cases were related to pregnancy before marriage (DP2KBP3A Boyolali, 2024). These conditions demonstrate the urgent need for effective preventive strategies to improve adolescents' attitudes toward pregnancy prevention. It supported by Sahari et al. (2025) that health issues among adolescents certainly require comprehensive and integrated handling.

The government has actually made efforts to address adolescent reproductive health issues through education and health promotion programs. According to (Kememkes RI, 2024), the government has established a legal framework via Law Number 17 of 2023 concerning

Health, which emphasizes the right of adolescents to access accurate reproductive health information and education. However, adolescent reproductive health education still needs to be strengthened to foster a more preventive mindset among young people. Previous studies have found that reproductive health education can improve adolescent knowledge and attitudes (Syarifah et al., 2025; and Yunita & Wangid, 2024) However, conventional methods such as lectures and classroom discussions are often considered less attractive because they do not fully meet the characteristics of the digital generation (Widiyastuti & Nurcahyani, 2022). Recent studies have suggested that audiovisual-based education, including animated videos, can improve adolescents' understanding and positive attitudes toward reproductive health issues (Lestiawati et al., 2024; Zayani & Susanto, 2024) Nevertheless, limited studies have specifically examined the effect of animated video-based reproductive health education on pregnancy prevention attitudes among adolescents, particularly at the junior high school level.

The use of animated video media may become an innovative approach to improve reproductive health education among adolescents. Animated videos combine visual, audio, and narrative components that can increase attention, simplify complex information, and deliver sensitive reproductive health messages in a more acceptable manner for adolescents. Previous research has demonstrated that video-based education is effective in improving reproductive health knowledge and attitudes among adolescents (Sukardi et al., 2025; Lestiawati et al., 2024). Based on a preliminary study conducted at MTsN 2 Boyolali on October 1, 2025, through interviews with counselling teachers and 10 ninth-grade students, it was found that most students had limited understanding of reproductive health, particularly regarding pregnancy prevention. Students mainly obtained information from social media and peers, while reproductive health education using animated video media had never been provided at the school. Therefore, this study aimed to determine the effect of reproductive health education using animated video media on pregnancy prevention attitudes among adolescents.

METHODS

Study Design

This study used a quantitative method with a quasi-experimental design using a two-group pretest-posttest design. This design was chosen to determine the effect of an intervention without random assignment of participants into groups. The participants were divided into two groups: the intervention group and the control group. Both groups completed a pretest before the intervention was given. The intervention group received reproductive health education

using an animated video, while the control group did not receive any intervention during the study period. After the intervention, both groups completed a posttest to measure changes in attitudes toward adolescent pregnancy prevention.

The research design consisted of four measurements. The intervention group received a pretest (O_1) before receiving the reproductive health education intervention, followed by a posttest (O_2) after the intervention. Meanwhile, the control group received a pretest (O_3) and posttest (O_4) without receiving the intervention during the research process. The intervention (X) was a reproductive health education program using a 6-minute animated video provided once during the study. The animated video contained educational materials about reproductive health, the risks of adolescent pregnancy, factors influencing adolescent pregnancy, the impact of adolescent pregnancy, and strategies for preventing adolescent pregnancy. This intervention was given to determine whether reproductive health education using animated video media could improve adolescents' attitudes toward pregnancy prevention.

Population, Sample, and Sampling Technique

The population of this study consisted of 96 female ninth-grade students at MTsN 2 Boyolali, Indonesia, in the academic year 2025/2026. Based on the Slovin formula with a 5% error level, 78 students were selected as samples and divided into an intervention group and a control group, with 39 students in each group. The study used proportional random sampling to select participants based on the proportion of students in each class. The inclusion criteria were female students aged 12–14 years who were willing to participate, while students who were absent, incomplete in filling out the questionnaire, or withdrew from the study were excluded. The independent variable was reproductive health education using animated video media, and the dependent variable was students' attitudes toward adolescent pregnancy prevention.

Instruments

The instruments used in this study included an animated video, a pregnancy prevention attitude questionnaire, SOP, and health education plan (SAP). The 6-minute animated video was used as the educational media and contained information about reproductive health, adolescent pregnancy risks, impacts, and prevention strategies. The attitude questionnaire consisted of 26 items based on cognitive, affective, and behavioural aspects. It used a Guttman scale with two responses: "Agree" (score 1) and "Disagree" (score 0), with total scores ranging from 0–26. The scores were categorized as good (21–26), moderate (14–20), and poor (≤13).

Jurnal Keperawatan Terapan (e-Journal),
Vol.12, No.02, September 2026. Hal. 148-161. ISSN:2442-6873
p-ISSN 2443-1125 e-ISSN 2442-6873

The questionnaire validity was tested using the Pearson Product Moment correlation test with SPSS version 25. All 26 items were valid with correlation values ranging from 0.380 to 0.773, and the reliability test showed a Cronbach's Alpha value of 0.874. The animated video was validated through expert judgment using the Content Validity Index (CVI), with a value of 1.00 for both media and content aspects, indicating that the video was valid for use as an educational medium.

Data Analysis

The collected data were processed through editing, coding, scoring, and tabulating. Data analysis was performed using IBM SPSS Statistics version 25. Univariate analysis was used to describe the characteristics of respondents and research variables. The results were presented using frequency distributions and percentages. The normality test was conducted using the Shapiro-Wilk test. Data were considered normally distributed if the p-value was greater than 0.05. Bivariate analysis was performed to determine the effect of reproductive health education using animated videos on attitudes toward adolescent pregnancy prevention.

If the data were normally distributed, the Paired Sample t-Test was used to compare pretest and posttest scores within the same group, and the Independent Sample t-Test was used to compare differences between the intervention and control groups. If the data were not normally distributed, the Wilcoxon Signed Rank Test was used for within-group analysis, and the Mann–Whitney U Test was used to compare differences between groups. The significance level was set at p-value < 0.05.

Ethical Considerations

This study was approved by the Health Research Ethics Committee of Universitas Muhammadiyah Purwokerto (KEPK-UMP) under registration number KEPK/UMP/258/IV/2026 on April 30, 2026. Ethical principles, including informed consent, privacy, confidentiality, and participant safety, were applied throughout the study. Before participation, the study objectives, procedures, risks, and benefits were explained to the participants and their parents or guardians. Written informed consent was obtained, and participants had the right to withdraw at any time without any consequences. Participants' identities were protected by using codes instead of real names, and all collected data were kept confidential. The animated video intervention was designed to provide safe and appropriate reproductive health education for adolescents without causing harm or discomfort.

RESULTS

Characteristics of Participants

This study was conducted at MTsN 2 Boyolali, Central Java, Indonesia. A total of 78 female students participated in this study and were divided into two groups: the intervention group (n=39) and the control group (n=39). The characteristics of participants are presented in Table 1.

Table 1. Characteristics of Participants in the Intervention and Control Groups (n=78)

Characteristics	Group				The Result of Homogenity Test
	Intervention		Control		
	f	%	f	%	*p-value*
Gender					
Female	39	100	39	100	
Male	0	0	0	0	
Age					
Early adolescents (12–14)	27	69,2	26	66,7	p = 0,811
Middle adolescents (15-17)	12	30,8	13	33,3	
Previously Received Information					
Yes	39	100	39	100	
No	0	0	0	0	
Sources of Information					
School	11	28,2	14	35,9	p = 0,120
Media	6	15,4	12	30,8	
Health workers	22	56,4	13	33,3	
Peers / Neighbours/ Family	0	0	0	0	

All participants were female students (100%) in both groups. Most participants were categorized as early adolescents (12–14 years old), with 27 students (69.2%) in the intervention group and 26 students (66.7%) in the control group. The remaining participants were categorized as middle adolescents (15–17 years old). All participants reported that they had received information about reproductive health before the study. In the intervention group, the main source of information was health workers (56.4%), followed by school (28.2%) and media (15.4%). Meanwhile, in the control group, the main sources of information were school (35.9%), health workers (33.3%), and media (30.8%).

Level of Adolescent Pregnancy Prevention Attitudes Before and After Intervention

The distribution of adolescent pregnancy prevention attitudes before and after reproductive health education using animated videos is shown in Table 2.

Table 2. Adolescent Pregnancy Prevention Attitudes Before and After Intervention (n=78)

	Category	Intervention Group		Control Group	
		f	%	F	%
Pre test	Poor	0	0	0	0
	Fair	30	77	29	74
	Good	9	23	10	26
Post test	Poor	0	0	0	0
	Fair	5	13	23	59
	Good	34	87	16	41
Total		39	100	39	100

Before the intervention, most participants in the intervention group had moderate attitudes toward pregnancy prevention (77%), while 23% had good attitudes. Similarly, in the control group, 74% of participants had moderate attitudes and 26% had good attitudes. No participants in either group were categorized as having poor attitudes. After receiving reproductive health education through animated videos, the intervention group showed an improvement in attitudes. The number of participants with good attitudes increased from 23% to 87%, while participants with moderate attitudes decreased from 77% to 13%. In the control group, there was also an increase in good attitudes, from 26% before the study to 41% after the study. However, the improvement was lower compared to the intervention group.

Normality Test

The normality test was performed using the Shapiro-Wilk test. The results are presented in Table 3.

Table 3. Normality Test Results of Pretest and Post-test Scores

Group	Variable	*Shapiro-Wilk* Sig.	Interpretation
Intervention	*Pretest*	0,148	Normal
	Post-test	0,019	Not Normally Distributed
Control	*Pretest*	0,087	Normal
	Post-test	0,012	Not Normally Distributed

The results showed that the pretest data in the intervention group were normally distributed (p=0.148), while the post-test data were not normally distributed (p=0.019). In the control group, the pretest data were normally distributed (p=0.087), but the post-test data were not normally distributed (p=0.012). Because the post-test data were not normally distributed, non-parametric tests were used for further analysis. The Wilcoxon Signed Rank Test was used

to compare changes within each group, while the Mann-Whitney U Test was used to compare differences between groups.

Effect of Animated Video-Based Reproductive Health Education on Pregnancy Prevention Attitudes

Comparison of Intervention Group Before and After Education

The changes in pregnancy prevention attitudes in the intervention group are presented in Table 4.

Table 4. Wilcoxon Signed Rank Test Results in the Intervention Group

Intervention Group	Median (Minimum-Maximum)	P *Value*
Pre test (n=39)	70 (57-80)	0,001
Post test (n=39)	79 (70-84)	

Before receiving reproductive health education using animated videos, the median attitude score was 70 (range: 57–80). After the intervention, the median score increased to 79 (range: 70–84). The Wilcoxon Signed Rank Test showed a significant difference between pretest and post-test scores in the intervention group (p=0.001). This result indicates that reproductive health education using animated videos significantly improved adolescent attitudes toward pregnancy prevention.

Comparison of Control Group Before and After the Study

Meanwhile, the attitude scores in the control group in this research are presented in Table 5.

Table 5. Wilcoxon Signed Rank Test Results in the Control Group

Control Group	Median (Minimum-Maximum)	P *Value*
Pre test (n=39)	73 (58-79)	0,058
Post test (n=39)	75 (61-84)	

The median pretest score in the control group was 73 (range: 58–79), while the median post-test score increased slightly to 75 (range: 61–84). The Wilcoxon Signed Rank Test showed that there was no significant difference between pretest and post-test scores in the control group (p=0.058). This indicates that the changes in the control group were not statistically significant.

Comparison of Post-test Scores Between Intervention and Control Groups

Jurnal Keperawatan Terapan (e-Journal),
Vol.12, No.02, September 2026. Hal. 148-161. ISSN:2442-6873
p-ISSN 2443-1125 e-ISSN 2442-6873

To determine the difference in attitudes toward pregnancy prevention among adolescents following the study, the researcher compared the post-test scores of the intervention group and the control group. The comparison of post-test scores between groups is presented in Table 6.

Table 6. Mann-Whitney U Test Results of Post-test Scores Between Groups

Group	Median (Minimum-Maximum)	P Value
Post- test intervention group (n = 39)	79 (70-84)	0,001
Post- test control group (n = 39)	75 (61-84)	

After the intervention, the median attitude score in the intervention group was 79 (range: 70–84), while the control group had a median score of 75 (range: 61–84). The Mann-Whitney U Test showed a significant difference between the intervention and control groups (p=0.001). The intervention group had better pregnancy prevention attitudes compared with the control group. These findings indicate that reproductive health education using animated video media had a significant effect on improving adolescent attitudes toward pregnancy prevention.

DISCUSSION

This This study aimed to examine the effect of reproductive health education using animated video on pregnancy prevention attitudes among female adolescents at MTsN 2 Boyolali. The results showed a clear improvement in the intervention group. Students with good attitudes increased from 9 (23%) before the intervention to 34 (87%) after the intervention, while those with moderate attitudes decreased from 30 (77%) to 5 (13%). The median score also increased from 70 (57–80) to 79 (70–84), with a significant difference between pretest and post test scores (p=0.001). This result is consistent with Safitri (2021), who found that reproductive health education can improve adolescents' positive attitudes toward preventing risky sexual behaviour. Yosri et al. (2025) also reported that educational videos can improve adolescents' understanding and attitudes toward reproductive health. These results indicate that animated video may be a useful medium for supporting adolescents' understanding of pregnancy prevention. The improvement may be related to the content of the education, which covered reproductive health, the risks of adolescent pregnancy, its physical, psychological, social, and educational consequences, and prevention efforts. Tanjaya et al. (2025) noted that knowledge is one factor that can influence adolescents' reproductive health decisions. Understanding the possible consequences of adolescent pregnancy may help

adolescents recognize the importance of prevention (Kedaton & Aniarti, 2024). For this reason, reproductive health education should address not only biological information but also issues that are meaningful to adolescents' lives.

Most respondents in the intervention group were early adolescents aged 12–14 years (69.2%). Nopyanti et al. (2023) explained that early adolescence is marked by strong curiosity about physical and reproductive changes. Zayani & Susanto (2024) also found that reproductive health education can improve adolescents' knowledge and attitudes about puberty. At this developmental stage, animated video may be appropriate because visual and audiovisual information can present complex topics in a concrete and engaging way. This may help adolescents receive and understand reproductive health messages more easily. All respondents had received reproductive health information before the study. Nevertheless, most had only moderate attitudes at pretest: 77% in the intervention group and 74% in the control group. Ni'matuzzakiyah & Wulandari (2025) reported that access to reproductive health information is related to adolescents' attitudes, but access alone does not guarantee that information will be fully understood or internalized. The present finding suggests that the quality and delivery of information are also important. Animated video may have strengthened existing information by presenting the material in a more structured and engaging form.

The sources of previous information varied between the groups. Health workers were the main source in the intervention group (56.4%), while school was the main source in the control group (35.9%). Adyana et al. (2023) emphasized the importance of appropriate health information sources in supporting adolescents' understanding and positive attitudes. These findings highlight there is a relationship between knowledge, attitudes, and the role of parents on pregnancy prevention behaviour in adolescents. Therefore, the different sources can complement one another, while educational media such as animation may provide an additional way to reinforce key messages. The control group also showed a small improvement, with good attitudes increasing from 26% to 41% and the median score from 73 (58–79) to 75 (61–84). However, the change was not statistically significant (p=0.058). Previous exposure to reproductive health information may have contributed to this change, as adolescents' attitudes can be influenced by information and experiences over time (Ni'matuzzakiyah & Wulandari, 2025; Eka Mustika et al., 2025). However, these factors were not specifically measured in this study, so the reason for the change cannot be determined with certainty.

A larger improvement was observed in the intervention group. The proportion of good attitudes increased by 64 percentage points, compared with 15 percentage points in the control group. The post-test median was also higher in the intervention group than in the control group (79 vs. 75; p=0.001). This result agrees with Yosri et al. (2025) and Ambali et al. (2025), who reported positive effects of video or audiovisual education on adolescents' reproductive health attitudes. The greater improvement in the intervention group suggests that the animated video may have contributed to the observed change. However, because participants had previous exposure to reproductive health information and other external factors were not fully assessed, the result should be interpreted with caution. One possible explanation is the multimedia nature of the intervention. The video combined moving images, sound, narration, and written information. Ambali et al. (2025) found positive changes following audiovisual reproductive health education. In this study, these features may have helped students maintain attention and understand the risks and consequences of adolescent pregnancy more clearly. The visual presentation may also have made the consequences more concrete than verbal information alone.

The educational content may have also supported the affective aspect of attitude formation (Suhita et al., 2025). Information about the physical, psychological, social, and educational consequences of adolescent pregnancy gave students an opportunity to consider how early pregnancy could affect their lives and future. Ambali et al. (2025) reported similar improvements in adolescents' reproductive health attitudes following health education. However, improved attitudes should not be equated with actual behavioural change, and further research is needed to examine this relationship. From a practical perspective, animated video can be used as a supporting medium for reproductive health education in schools. It may be combined with discussion, counselling, and question-and-answer activities so that students can clarify information and relate it to their own experiences. This approach may help schools and health workers provide reproductive health education that is clear, engaging, and appropriate for adolescents.

The novelty of this study is its focus on animated video for pregnancy prevention education among female adolescents in a madrasah in Boyolali, Central Java. Previous studies have reported the benefits of reproductive health education and audiovisual media for adolescent knowledge and attitudes (Yosri et al., 2025; Ambali et al., 2025; Ni'matuzzakiyah & Wulandari, 2025,). This highlights the potential use of simple audiovisual media in a school-

based reproductive health program. This study has several limitations. It was conducted in one school with 78 female students, which limits the generalizability of the findings. All participants had previously received reproductive health information, which may have influenced their initial attitudes. The study also measured attitudes rather than actual reproductive health behaviour, so the improvement cannot be directly interpreted as behavioural change.

CONCLUSION

Reproductive health education using animated video was associated with improved pregnancy prevention attitudes among female students at MTsN 2 Boyolali. In the intervention group, the proportion of students with good attitudes increased from 9 students (23%) at pretest to 34 students (87%) at posttest, with the median score increasing from 70 (57–80) to 79 (70–84) and a significant difference (p=0.001). In the control group, the proportion of students with good attitudes increased from 10 students (26%) to 16 students (41%), but the change was not statistically significant (p=0.058). The posttest attitude score was significantly higher in the intervention group than in the control group (median 79 vs. 75; p=0.001). These findings suggest that animated video may be a useful medium for supporting reproductive health education and pregnancy prevention attitudes among adolescents.

Future research is recommended to involve larger populations, include male and female adolescents, and explore other factors that may influence reproductive health attitudes, such as family support, peer influence, and social media exposure. Further studies can also develop and evaluate different educational media to improve adolescent reproductive health outcomes.

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to the principal, teachers, and female students of MTsN 2 Boyolali for their support and participation during the research process. And special appreciation is extended to all individuals who contributed to the completion of this study.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest related to the research, authorship, and publication of this article. The study was conducted independently, and there were no financial, personal, or institutional relationships that could influence the research process or the interpretation of the results.

RESEARCH FUNDING

This research did not receive any specific funding from public, commercial, or non-profit organizations. The study was independently funded by the authors.

REFERENCES

Adyana, C. V., Trisea Nindy Aprilea, & Muthmainnah. (2023). Hubungan Pengetahuan, Sikap, dan Peran Orang Tua Terhadap Perilaku Pencegahan Kehamilan Remaja di SMA PGRI 1 Sidoarjo. *Media Publikasi Promosi Kesehatan Indonesia (MPPKI)*, *6*(4), 693–697. https://doi.org/https://doi.org/10.56338/mppki.v6i4.3214

Ambali, D. D. W., Uly, N., & Alim, A. (2025). Pendidikan dan Komunikasi dalam Kesehatan Reproduksi Remaja. *Jurnal Promotif Preventif*, *8*(4), 819–831. https://doi.org/10.47650/jpp.v8i4.2047

Aryanti, M., Apriliani, P., & Anggita, I. (2020). *Upaya Preventif Kehamilan Remaja dengan Pendidikan Kesehatan Mengenai Kesehatan Reproduksi pada Remaja di Kecamatan Indramayu*. *6*(1), 19–22. https://doi.org/https://doi.org/10.33084/pengabdianmu.v6i1.1305

Choiriyah, A. L. F., Irianto, G., & Tarigan, G. T. S. (2024). Pernikahan Dini dan Risiko Kematian Ibu dan Anak: Evaluasi Implementasi PP Nomor 28 Tahun 2024 Dan Dampaknya Terhadap Kebebasan Sipil. *Lex Et Lustitia*, *1*(1), 18–25.

DP2KBP3A Boyolali. (2024). Profil Gender Kabupaten Boyolali Tahun 2024. In *Dinas Pengendalian Penduduk Keluarga Berencana Pemberdayaan Perempuan dan Perlindungan Anak Kabupaten Boyolali*. https://dinkes.boyolali.go.id/

Eka Mustika, A., Andriyanti, A., & Djuari, L. (2025). Faktor-Faktor yang Mempengaruhi Kehamilan Remaja Di Indonesia Tahun 2020-2025: Tinjauan Literatur. *JUKEJ : Jurnal Kesehatan Jompa*, *4*(4), 1236–1243. https://doi.org/10.57218/jkj.vol4.iss4.2085

Hazanah, S. (2022). Effective Use of Media About Sex Education on Adolescent Attitudes in Preventing Unwanted Pregnancy. *Indonesian Journal of Multidisciplinary Science*, *2*(3), 2078–2085. https://doi.org/10.55324/ijoms.v2i3.297

Kedaton, Y. K., & Aniarti, R. P. (2024). Pengaruh Edukasi Media Video Pembelajaran Terhadap Pengetahuan Dan Sikap Remaja Tentang Pencegahan Kehamilan Yang Tidak Diinginkan Di Smk N 1 Kutasari. *Prepotif : Jurnal Kesehatan Masyarakat*, *8*(3), 5983–5995. https://doi.org/10.31004/prepotif.v8i3.32978

Lestiawati, E., Barus, T. C. br, & Liliana, A. (2024). Pengaruh pendidikan kesehatan media video terhadap pengetahuan dampak negatif seks bebas pada remaja. *Journal of Health Research Science*, *4*(02), 395–401. https://doi.org/10.34305/jhrs.v4i02.1351

Ni'matuzzakiyah, E., & Wulandari, A. R. (2025). Educational Animation as a Preventive Media : The Effect of Sex Education Videos on Knowledge and Self-Awareness among Children. *DIAGNOSA: Jurnal Ilmu Kesehatan Dan Keperawatan*, *3*(3), 123–129. https://doi.org/10.59581/diagnosa-widyakarya.v3i3.5370

Nopyanti, E., Futriani, E. S., Suliati, S., Murtiani, F., & Widiantari, A. D. (2023). Influence of Educational Videos on Knowledge and Attitude on Reproduktive Health in Adolescent. *Jurnal Keperawatan Komprehensif (Comprehensive Nursing Journal)*, *9*(3). https://doi.org/10.33755/jkk.v9i3.524

Nurmala, I., Agus Salim, L., Muthmainnah, M., Nadia, A., Zainudin, S., & Perez, S. (2025). The Effectiveness of the HEY Website for Increasing Adolescents' Reproductive Health Knowledge. *Jurnal Promkes*, *13*(1), 114–121.

https://doi.org/10.20473/jpk.v13.i1.2025.114-121

Organization, W. H. (2023). *Adolescent sexual and reproductive health*. World Health Organization. https://www.who.int/teams/sexual-and-reproductive-health-and-research-%28srh%29/areas-of-work/adolescent-and-sexual-and-reproductive-health-and-rights?utm_source=chatgpt.com

RI., K. (2024). *Peraturan Pemerintah Nomor 61 Tahun 2014 tentang Kesehatan Reproduksi.* Kementerian Kesehatan Republik Indonesia.

Safitri, T. (2021). Pendidikan Kesehatan Reproduksi dan Seksual yang Komprehensif Membentuk Remaja Berkualitas. *Jurnal Ilmu Pengetahuan*, *1*(1), 60–68.

Sahari, D. A., Yulifah, R., & Yuliawati, D. (2025). Analisis Faktor-Faktor Yang Mempengaruhi Tingkat Keberdayaan Tentang Kesehatan Reproduksi Di Sma Negeri 1 Kepanjen. *Jurnal Pendidikan Kesehatan*, *14*(2), 153–167. https://doi.org/10.31290/jpk.v14i2.5518

Suhita, T. I., Yulianti, Y., Julianti, N., & Rohmah, H. N. F. (2025). Pengaruh Pendidikan Kesehatan Terhadap Pengetahuan Ibu Hamil Tentang Imunisasi Tetanus Toksoid. *Jurnal Kesehatan Tambusai*, *6*(4), 14337–14343. https://doi.org/10.31004/jkt.v6i4.50206

Sukardi, S. R., Navelia, Z. I., & Issabella, C. M. (2025). Pengaruh Video Edukasi tentang Pubertas terhadap Pengetahuan Remaja di SMP Negeri 06 Satu Atap Sintang Kalimantan Barat. *Jurnal Ilmu Keperawatan Dan Kebidanan*, *3*(April), 164–178. https://doi.org/https://doi.org/10.61132/protein.v3i2.1212

Syarifah, A. M., Ibtihal, N. D., Widarti, W. D., Lestari, F., & Hardianti, E. (2025). *Efektivitas Promosi Kesehatan Reproduksi Terhadap Pengetahuan Menstruasi Pada Siswa MA AL-Hananiyah Kelas X dan XI*. *4*(3), 750–761. https://doi.org/https://doi.org/10.31004/wt8e7z10

Tanjaya, N., Hakim, R. I., & Rusliani, D. M. (2025). Pengaruh Media Edukasi Berbasis Video terhadap Tingkat Pengetahuan Remaja Mengenai Kesehatan Reproduksi di SMA Muhammadiyah Pontianak. *Protein : Jurnal Ilmu Keperawatan Dan Kebidanan.*, *3*(2), 09–20. https://doi.org/10.61132/protein.v3i2.1097

Widiyastuti, D., & Nurcahyani, L. (2022). Pengembangan Video Pendidikan Kesehatan Reproduksi Remaja Bagi siswa Sekolah Dasar di Kota Cirebon. *Jurnal Kesehatan Reproduksi*, *8*(3). https://doi.org/https://doi.org/10.22146/jkr.65821

Yastirin, P. A., Sahara, R., & Sehmawati. (2024). Dampak Kesehatan Ibu pada Kehamilan Remaja. *Jurnal Profesi Bidan Indonesia (JPBI)*, *4*(2), 18–35. https://pbi.ejournal.unan.ac.id/index.php/1/article/view/42/42

Yosri, N. H., Dewi Hazanah, S., & Adib Chifdillah, N. (2025). Pengaruh Video Edukasi terhadap Pengetahuan dan Sikap Remaja Mengenai Risiko Pernikahan Dini. *Jurnal Kesehatan Jompa*, *4*(2). https://doi.org/10.57218/jkj.Vol4.Iss2.1922

Yunita, R. N., & Wangid, M. N. (2024). Development of Sexual Education Animation Videos to Improve Sexual Understanding and Understanding of Forms of Sexual Harassment Behavior of Yogyakarta Elementary School Students. *International Journal of Social Service and Research*, *4*(02), 637–656. https://doi.org/10.46799/ijssr.v4i02.736

Zayani, N., & Susanto, B. N. A. (2024). Pengaruh Edukasi Kesehatan Reproduksi Terhadap Pengetahuan Dan Sikap Remaja Terhadap Perilaku Seksual Pranikah Di Smkn 11 Kabupaten Tangerang. *As-Shiha : JOURNAL OF MEDICAL RESEARCH*, *5*(1), 66–76. https://doi.org/10.69922/asshiha.v5i1.103