



The Effectiveness of Audio-Visual Health Education in Improving Reproductive Health Awareness among Students at SMK Puspa Bangsa Banyuwangi

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Abstrak

Menjaga kesehatan reproduksi sangatlah penting, terutama bagi remaja, karena kurangnya pengetahuan di bidang ini dapat menimbulkan permasalahan yang signifikan. Studi pendahuluan di SMK Puspa Bangsa Banyuwangi mengungkapkan bahwa siswa sebelumnya belum pernah mendapatkan pendidikan kesehatan reproduksi melalui metode audio visual. Penelitian ini bertujuan untuk mengetahui pengaruh pendidikan kesehatan reproduksi yang disampaikan melalui media audio visual terhadap pengetahuan remaja tentang kesehatan reproduksi. Penelitian ini menggunakan desain pra-eksperimental dengan pendekatan one-group pretest-posttest. Populasinya adalah siswa SMK Puspa Bangsa Banyuwangi, dan besar sampel yang ditentukan dengan rumus Slovin adalah 87 peserta yang dipilih melalui proporsional random sampling. Analisis data dilakukan dengan menggunakan Wilcoxon Signed Rank Test. Mayoritas responden berusia 15 tahun (35,6%), dengan orang tua mayoritas berpendidikan SMA (48,3%) dan bekerja sebagai wiraswasta (49,4%). Rata-rata skor pengetahuan remaja sebelum diberikan pendidikan audio visual sebesar 20,97 meningkat menjadi 27,43 setelah diberikan intervensi. Terdapat pengaruh yang signifikan dari pendidikan kesehatan reproduksi audio visual terhadap pengetahuan remaja ($p\text{-value: } 0,024 < \alpha: 0,05$). Pendidikan kesehatan reproduksi melalui media audio visual secara signifikan meningkatkan pengetahuan remaja tentang kesehatan reproduksi. Saran yang dapat diberikan antara lain mengintegrasikan metode pendidikan audio visual ke dalam program pendidikan kesehatan reguler untuk meningkatkan pemahaman siswa tentang kesehatan reproduksi.

Kata Kunci: *Pendidikan Kesehatan Reproduksi, Media Audio Visual, Pengetahuan Remaja*

Abstract

Maintaining reproductive health is crucial, especially for adolescents, as a lack of knowledge in this area can lead to significant issues. Preliminary studies at SMK Puspa Bangsa Banyuwangi revealed that students had not previously received reproductive health education through audio-visual methods. This study aimed to determine the effect of reproductive health education delivered via audio-visual media on adolescents' knowledge of reproductive health. This research employed a pre-experimental design using a one-group pretest-posttest approach. The population consisted of students at SMK Puspa Bangsa Banyuwangi, and the sample size, determined using the Slovin formula, was 87 participants selected through proportional random sampling. Data analysis was performed using the Wilcoxon Signed Rank Test. Most respondents were 15 years old (35.6%), with parents predominantly having a high school education (48.3%) and working as entrepreneurs (49.4%). The average knowledge score of adolescents before the audio-visual education was 20.97, which increased to 27.43 after the intervention. A significant effect of audio-visual reproductive health education on adolescents' knowledge was observed ($p\text{-value: } 0.024 < \alpha: 0.05$). Reproductive health education through audio-visual media significantly improves adolescents' knowledge of reproductive health. Suggestions include integrating audio-visual educational methods into regular health education programs to enhance students' understanding of reproductive health.

Keywords: Reproductive Health Education, Audio-Visual Media, Adolescents' Knowledge

INTRODUCTION

Reproductive health is a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its functions (Khatarina, 2017). Adolescent reproductive health refers to the condition in which adolescents can experience healthy and safe sexual lives and carry out reproductive functions without harm. Maintaining reproductive health is critical, especially for adolescents, as a lack of knowledge about this topic can lead to significant issues, such as unintended pregnancies, sexually transmitted infections (STIs) like HIV/AIDS, and engagement in risky behaviours, including substance abuse (Cahyani, 2021).

Globally, reproductive health challenges among adolescents are substantial. For instance, the United States reports that 840,000 adolescents aged 15–19 experience pregnancies annually, 40% engage in sexual activity, and 20% of pregnancies are unintended (Mustari, 2018). Similarly, Indonesia faces considerable challenges in adolescent reproductive health. The World Health Organization (WHO) survey (2018) indicates that among Indonesian adolescents aged 15–19, there were 13,836 cases of unplanned pregnancies, 12,655 cases of abortion, 17,348 cases of reproductive tract infections, and 17,774 cases of sexually transmitted infections (Mustari, 2018).

In East Java, Indonesia, adolescent reproductive health issues mirror national trends. According to the East Java Health Office, the prevalence of early marriage among adolescents aged 15–19 in 2022 stood at 12.5%, leading to various health complications, including a higher risk of maternal mortality and childbirth complications. In Banyuwangi, East Java, the number of cases of adolescent pregnancies rose by 8% from 2020 to 2022, underscoring the urgent need for effective interventions in this area (East Java Health Office, 2023). Knowledge of reproductive health is vital for adolescents to foster healthy attitudes and behaviours. Adolescents experience crucial developmental stages, including cognitive, emotional, social, and sexual growth. These changes often occur between ages 12 and 20, and a lack of understanding of reproductive health can result in risky behaviours (Astuti, 2021). Contributing factors to this knowledge gap include sociocultural norms, religious constraints, and limited access to accurate information (Astuti, 2021).

Educational interventions can play a significant role in addressing this issue. Knowledge is primarily acquired through sensory experiences, mainly via sight and hearing (Notoatmodjo, 2017). Adolescents need comprehensive education to enhance their knowledge of reproductive health, which could lead to healthier and more responsible sexual behaviours (Khatarina, 2017). Providing health education is a preventive measure to reduce reproductive health issues and includes topics such as reproductive anatomy, relationships, sexually transmitted infections, and safe practices (Layyin et al., 2019). The use of audiovisual media has been proven effective in health education. Combining auditory and visual elements enables learners to retain and comprehend information better. Research by Agustina (2021) indicates that audiovisual media significantly improves understanding, making the learning process more engaging and effective. Similarly, studies by Wardhana (2022) demonstrate that using videos in reproductive health education significantly enhances adolescents' knowledge levels.

At SMK Puspa Bangsa Banyuwangi, initial observations highlight a pressing need for reproductive health education. Interviews with students revealed misconceptions, such as the belief that pregnancy cannot occur during the first menstrual cycle and a lack of understanding about personal hygiene and sexually transmitted infections. Many students also reported never receiving comprehensive reproductive health education, let alone through engaging methods like audio-visual media. This gap in knowledge underscores the importance of implementing tailored educational programs to address specific local challenges.

Given the significant adolescent reproductive health challenges in Banyuwangi, East Java, this study aims to explore the impact of reproductive health education using audio-

visual media on the knowledge levels of students at SMK Puspa Bangsa Banyuwangi. Through this research, we hope to identify an effective strategy to improve adolescents' knowledge and foster healthier reproductive behaviours, contributing to broader public health improvements in the region. By addressing these gaps and tailoring interventions to the specific needs of students at SMK Puspa Bangsa Banyuwangi, this research seeks to provide actionable insights that could be implemented in other educational institutions across East Java. The study highlights the critical role of innovative and interactive education in enhancing adolescents' reproductive health knowledge, ultimately promoting healthier lifestyles and reducing the prevalence of risky behaviours.

RESEARCH METHOD

The type of research used is a pre-experimental design with a one-group pretest and posttest design. This study was conducted to determine the effectiveness of reproductive health education through audio-visual media on the awareness level of students at SMK Puspa Bangsa Banyuwangi. The research design involved measurements before and after the intervention, using a pretest to measure the initial awareness level (O1), an intervention in the form of education using audio-visual media (X), and a posttest to measure awareness levels after the intervention (O2). This design allowed researchers to analyze the impact of education on changes in students' awareness regarding reproductive health.

The research population comprised all students of SMK Puspa Bangsa Banyuwangi, totalling 450 students across grades X, XI, and XII. The research sample was selected through proportional random sampling using Slovin's formula to determine the sample size. Based on the calculations, a sample of 82 students was randomly chosen from each grade, ensuring proportional representation. Inclusion criteria included students willing to participate as respondents and present during the study, while exclusion criteria involved students who were absent or unwell. Data were collected using a questionnaire on reproductive health knowledge, and the results were analyzed using univariate and bivariate analysis to examine the impact of the intervention.

RESULT AND DISCUSSION

Table 1 The level of adolescents' knowledge about reproductive health before being given education through audio-visual media at SMK Puspa Bangsa Banyuwangi.

Measurement	Mean	Median	SD	Min-Max	95%CI
Knowledge Variable (Pre-test)	20,97	23	6,333	12-20	19,68-22,37

Source: Primary Data

Based on Table 1, the pre-test results show that the mean knowledge score of adolescents about reproductive health before receiving education through audio-visual media at SMK Puspa Bangsa Banyuwangi is 20.97, with a median score of 23. The standard deviation is 6.333, indicating some variation in the knowledge levels among the students. The scores range from a minimum of 12 to a maximum of 20, with a 95% confidence interval (CI) between 19.68 and 22.37. This suggests that, on average, students had a moderate level of knowledge about reproductive health before the intervention, with some variability in individual scores.

Table 2 The level of adolescents' knowledge about reproductive health after being given education through audio-visual media at SMK Puspa Bangsa Banyuwangi.

Measurement	Mean	Median	SD	Min-Max	95%CI
Knowledge Variable (Post-test)	27,43	26	4,022	30-32	26,60-28,32

Source: Primary Data

Based on Table 2, the post-test results indicate that after receiving education through audio-visual media, the mean knowledge score of adolescents about reproductive health at SMK Puspa Bangsa Banyuwangi increased to 27.43, with a median score of 26. The standard deviation is 4.022, showing less variation compared to the pre-test scores. The scores range from a minimum of 30 to a maximum of 32, with a 95% confidence interval (CI) between 26.60 and 28.32. This suggests that, following the intervention, the students' knowledge significantly improved, with most students showing a higher and more consistent level of understanding about reproductive health.

Table 3. The effect of reproductive health education through audio-visual media on the level of adolescents' knowledge about reproductive health at SMK Puspa Bangsa Banyuwangi.

Variable	Measurable	Mean±SD	z	p
Knowledge	Pre-test	20,97±6,333	7,992	0,000
	Post-test	27,43±4,022		

Source: Wilcoxon Signed Rank Test.

The results presented in Table 3 show a significant increase in adolescents' knowledge about reproductive health after receiving education through audio-visual media at SMK Puspa Bangsa Banyuwangi. The mean knowledge score before the intervention (pre-test) was 20.97, with a standard deviation of 6.333. In contrast, the mean score after the intervention (post-test) increased to 27.43, with a standard deviation of 4.022. The Wilcoxon Signed Rank Test revealed a statistically significant change, with a z-value of 7.992 and a p-value of 0.000, indicating that reproductive health education effectively improved the students' knowledge.

Discussion

Adolescent Knowledge Level on Reproductive Health Before the Provision of Audio-Visual Counseling at SMK Puspa Bangsa Banyuwangi

Based on research on adolescent knowledge levels about reproductive health before the provision of audio-visual counselling at SMK Puspa Bangsa Banyuwangi, it was found that the average score of adolescent knowledge about reproductive health before counselling was 20.97. The results of this study indicate that the level of adolescent knowledge regarding reproductive health was still relatively low before the counselling was provided. This finding is consistent with research by Katharina (2017), which states that the majority of adolescents had limited knowledge before counselling (65.6%). A study by Wardhana (2022) also showed an average knowledge score of 7 before counselling through video media, which was classified as low (less than 50% of the total score). Similarly, research by Agustina (2021) showed similar results in several schools, with an average knowledge score still low before counselling.

Adolescent reproductive health involves various interconnected physical, mental, and social aspects. Maintaining adolescent reproductive health is important because a lack of knowledge can lead to risky behaviours such as unhealthy sexuality, the spread of HIV/AIDS, and drug addiction (Cahyani, 2021). A lack of understanding about sexual behaviour during adolescence can also harm the adolescents themselves and their families. Factors such as

customs, culture, and limited access to accurate information can contribute to the low level of adolescent knowledge (Astuti, 2021). Based on this study, the knowledge level of adolescents at SMK Puspa Bangsa Banyuwangi is low, indicating the need for further counselling on reproductive health.

Adolescent Knowledge Level on Reproductive Health After the Provision of Audio-Visual Counseling at SMK Puspa Bangsa Banyuwangi

The results of the study on adolescent knowledge levels about reproductive health after the provision of audio-visual counselling at SMK Puspa Bangsa Banyuwangi showed that the average knowledge score increased to 27.43. This improvement indicates that audio-visual counselling is effective in increasing adolescents' knowledge about reproductive health. Khatarina's (2017) study showed that after counselling, most adolescents experienced a significant increase in knowledge. Wardhana's (2022) study also showed an increase in the knowledge score of adolescents who received counselling through video media. Likewise, Agustina's (2021) study demonstrated a significant increase in adolescent knowledge in various schools after audio-visual counselling.

This increase in knowledge aligns with the basic concept of knowledge gained through the sensory perception of specific objects (Notoatmodjo, 2017). This process is essential, especially for adolescents, so that they can develop healthy and responsible sexual attitudes and behaviours (Khatarina, 2017). Effective reproductive health counselling can be carried out using various educational methods, one of which is counselling through audio-visual media. This medium makes it easier for adolescents to understand and accept information in a more enjoyable and accessible way (Wardhana, 2022).

The Effect of Reproductive Health Counseling Through Audio-Visual Media on Adolescent Knowledge Levels at SMK Puspa Bangsa Banyuwangi

Based on the study results, it was found that there was a significant difference in adolescent knowledge levels about reproductive health before and after the provision of audio-visual counselling. The mean knowledge score difference was 3.25 with a p-value of 0.000, indicating that H_0 is rejected and H_1 is accepted. This means that there is a significant effect of reproductive health counseling through audio-visual media on the improvement of adolescent knowledge levels at SMK Puspa Bangsa Banyuwangi. This study aligns with research by Katharina (2017), which indicates that reproductive health counselling through audio-visual media positively impacts adolescent knowledge. Likewise, Wardhana's (2022) and Agustina's (2021) studies also showed a positive effect of counselling through video media in increasing reproductive health knowledge.

According to Maulana (2019), the success of adolescent health counselling depends on various factors, including the media used. Audio-visual media has been proven effective in delivering information and messages to adolescents because it involves two senses at once, hearing and sight, which facilitates understanding (Machfoedz, 2019). Health counselling conducted using this media can enhance adolescents' understanding of the importance of maintaining reproductive health and encourage them to adopt healthier and more responsible attitudes. Counselling through audiovisual media has proven effective in increasing adolescents' knowledge about reproductive health. This shows that counselling using this media is crucial to providing accurate information and guiding adolescents to have a better attitude toward their reproductive health.

CONCLUSION

Adolescent knowledge about reproductive health was initially low, with an average score of 20.97 before audio-visual counselling. However, after the counselling, the knowledge level significantly improved, with the average score rising to 27.43, demonstrating the effectiveness of audio-visual media in enhancing adolescents' understanding of reproductive health. This study supports the findings of previous research, highlighting the importance of utilizing engaging educational methods, such as audio-visual counselling, to increase knowledge and promote healthier sexual behaviours among adolescents. The significant improvement in knowledge underscores the need for continued reproductive health education to ensure informed and responsible decision-making among youth.

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