

The Influence Of Educational Video Media On Adolescent Girls Knowledge In Anemia Prevention

Anggi Nurwidya¹, Riza Yuliawati², Agustin Widyowati³, M. Saheri⁴

^{1,2,3,4} Public Health Study Program, Universitas STRADA Indonesia, Indonesia

Corresponden Author: angginurwidya018@gmail.com

ABSTRACT

Anemia among adolescent girls remains a health issue that can impact future health and quality of life, necessitating effective prevention strategies—one of which is the use of educational videos. This study aimed to analyze the impact of educational videos on increasing the knowledge of adolescent girls regarding anemia prevention at SMP Negeri 1 Grogol. A pre-experimental design with a one-group pretest-posttest approach was employed. Forty-five respondents were selected using simple random sampling, and a questionnaire served as the research instrument. The intervention involved sending one video daily to the respondents over a seven-day period. Data were analyzed using the Shapiro-Wilk normality test and the paired-sample t-test. The results showed an increase in the mean score from 11.17 to 12.02. The paired-sample t-test indicated a significant increase in knowledge following the intervention ($p = 0.020$; <0.05). Video media proved effective in enhancing knowledge regarding the importance of early anemia prevention. The use of educational video media is recommended for other public health promotion initiatives.

Keywords : Anemia, Educational Video, Health Promotion, Knowledge

INTRODUCTION

Anemia is a condition in which the body's hemoglobin levels are below normal. Anemia in adolescents can lead to a decreased immune system, reduced fitness, impaired concentration, and decreased academic performance and work productivity. (Nordina, 2025)

According to the 2018 Basic Health Research (Riskesdas), the prevalence of anemia among adolescent girls in Indonesia reached 32%. In East Java Province, anemia among adolescent girls remains quite high and requires special attention. It was recorded that 42% of adolescent girls suffer from anemia. (Nurvita et al., 2024) Data from the Kediri Regency Health Office from 2023-2024 showed that approximately 20.13%, or 3,343, of the 16,611 adolescent girls who underwent screening suffered from anemia. (Pitoyo, 2024)

Anemia in adolescent girls is at higher risk because they menstruate every month. Furthermore, adolescent girls are undergoing puberty and growth, requiring adequate nutritional intake. (Setyaningrum et al., 2023) Preventing anemia is crucial, as it can negatively impact health. Anemic adolescent girls are at higher risk of health problems, such as stunting , which can impact future generations. (Rasyid et al., 2023)

Knowledge is a crucial factor in anemia prevention because it forms the basis for shaping a person's behavior toward health prevention and maintenance. (Salsabila & Hilman, 2023) Having good health knowledge helps individuals understand the importance of maintaining a healthy lifestyle and encourages them to take preventive measures against disease.

Health promotion efforts focused on anemia prevention are a crucial step in enhancing the understanding of adolescent girls. Beyond merely providing information, health promotion also aims to create an environment that supports healthy lifestyle behaviors. Video is one effective medium for conveying these messages. Educational videos are one medium used to convey health promotion messages. The visuals and audio in videos can create a fun learning experience, making the message more effective and well-received by viewers. (Edward et al., 2025)

Based on the high prevalence of anemia in adolescent girls, effective health promotion efforts are needed to improve knowledge regarding anemia prevention. Educational videos are a medium capable of conveying information in an engaging manner, thereby offering the potential to enhance the knowledge of adolescent girls. This study aims to examine the impact of educational videos on adolescent girls' knowledge regarding anemia prevention.

METHODS

The method used in this research is quantitative using a pre -experimental approach with a *one-group design. pretest-posttest* . The population in this study was 51 eighth-grade female students. The sample taken was 45 female students. The sampling technique used was simple random sampling. Random sampling. This study was conducted at SMP Negeri 1 Grogol, which is within the working area of the Grogol Community Health Center (UPT). The instrument used was a questionnaire consisting of 16 questions. This study was conducted for 7 days by providing one educational video every day through a WhatsApp group . The study period was April 14, 2026, to April 20, 2026. Data analysis in this study used a normality test. Shapiro-Wilk test and the results showed a normal distribution. Data were analyzed using the *Paired Sample t- test* .

RESULT

Table 1. Normality Test Results

Variables	Normality Test	Sig .	Information
<i>Pre-test</i>	Shapiro-Wilk	0.143	Normal
<i>Post-test</i>	Shapiro-Wilk	0.138	Normal

The *Shapiro-Wilk* test , the pre-test value was 0.143 and the post-test value was 0.138. These results indicate a significance value greater than 0.05 ($p > 0.05$), indicating that the knowledge variable is normally distributed.

Table 2. Results Before and After Intervention

Variables	<i>Mean</i> <i>Pre-test</i>	<i>Mean</i> <i>Post-test</i>	t count	Sig . (2-tailed)
Knowledge	11.17	12.02	-2,416	0.020

Paired test results *sample t- test* showed an average pre-test score of 11.17 and an average post-test score of 12.02. These results indicate an increase in knowledge after the intervention. The statistical test results showed a significance value (p-value) of 0.020. This value is smaller than the 0.05 significance level ($0.020 < 0.05$), so it can be concluded that there is a significant difference.

DISCUSSION

The advantage of video in conveying information is that it combines images, sound, and movement, stimulating the senses of sight and hearing, making health content more engaging and easier to understand than other media that use only text. (Mulansari et al., 2024)

The intervention in this study was implemented over seven days, with one educational video delivered daily. The gradual delivery of the material allowed respondents to receive repeated exposure to the information, thereby increasing their understanding of the causes, symptoms, impacts, and prevention efforts for anemia.

The results of this study align with Hermin Laia's (2022) on health promotion using video media for knowledge and attitudes, which showed that video is effective as a health education medium because it can convey information clearly, interestingly, and easily understood by respondents. Another study by Firda Ayu Nengsi (2025) comparing the effectiveness of brochures, animated videos, and lectures on students' choices of healthy snacks showed that all health promotion media were effective in improving students' knowledge and behavior. However, the level of effectiveness of the three media differed, with animated videos being the most effective. The results of this study support the belief that educational videos have advantages over other media because they combine visual and audio elements simultaneously, making information more engaging and easier for viewers to understand.

Although the increase in the average knowledge score in this study was relatively small, the results of the statistical analysis showed significant results so that educational video media can be used as an alternative health promotion media in the school environment to increase the knowledge of adolescent girls regarding anemia prevention.

CONCLUSION

Educational videos are an effective health promotion medium for conveying health messages. The advantage of video over other media is that it combines visual and audio elements, making information more engaging and easier for viewers to understand. This study showed that a seven-day anemia prevention intervention using educational videos to increase knowledge increased the average score from 11.17 to 12.02. The statistical test results showed a p-value of 0.020, indicating a significant difference.

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