

## **The Effect Of Animated Media on Anxiety in Facing Menarche Among Students at SD Negeri 2 Ciamis**

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### **ABSTRACT**

**Purpose:** This study aims to identify the effect of animated media in reducing menarche-related anxiety among female students in grades 4, 5, and 6. Menarche, as the first experience of menstruation, often causes anxiety in young girls due to a lack of understanding and preparedness. Therefore, providing appropriate and engaging educational media is essential to help reduce anxiety levels. **Methods:** This study employed a pre-experimental design using a one-group pretest-posttest approach. The sample consisted of 19 female students from grades 4 to 6, selected through purposive sampling. The instrument used for data collection was an anxiety questionnaire designed to assess students' emotional responses related to menarche. Data were analyzed using the Wilcoxon signed-rank test to determine differences in anxiety levels before and after the intervention. **Results:** The results showed a significant difference in the average anxiety scores between the pretest and posttest. The p-value obtained was 0.001, which is less than the significance level of 0.05, indicating that animated media had a significant effect in reducing students' anxiety about menarche. **Conclusion:** Animated media is effective in increasing students' engagement and understanding of menarche, making educational messages more accessible and reducing emotional distress related to the experience.

**Keywords :** Animated media, anxiety, menarche

## Introduction

Adolescence is a crucial transition period in which an individual moves from childhood to adulthood. During this stage, individuals begin to exhibit secondary sexual characteristics, which persist until their physical growth ceases. Generally, adolescence occurs between the ages of 11 and 19 years (Novita & Purwaningsih, 2020). According to the World Health Organization (2012), the age range for menarche among adolescents is between 10 and 19 years. The 2010 Indonesian Basic Health Research (RISKESDAS) data indicate that the average age of menarche in Indonesia is 13 years, with earlier onset occurring before the age of 9 years and delayed onset extending up to 20 years. Most females experience menarche between the ages of 10 and 15 years. In West Java Province, the average age of menarche is 38.1% at 13–14 years and 23% below the age of 13 years (Fuadah, 2019).

Menarche is a significant milestone for females, marking the attainment of normal hormonal levels. These hormones are produced in the hypothalamus and directed to the ovaries and uterus. This process stimulates the development of secondary sexual characteristics, including breast growth, changes in the menstrual cycle, alterations in the skin, and the growth of hair in the armpit and pubic areas. These changes contribute to shaping an ideal body proportion (Rummy Islami Zalni, 2023). This is consistent with a passage from Surah Al-Baqarah, verse 222, which provides essential guidance on awareness of cleanliness and purity, particularly for adolescent girls experiencing menstruation. Although this verse does not explicitly discuss menstruation, it emphasizes the importance of understanding biological processes and maintaining personal hygiene. The verse also highlights that menstruation is considered an impure state requiring temporary abstinence from worship and intimate relations. Furthermore, it underscores the importance of providing accurate and timely sexual education (Sunarko, 2018).

Anxiety is a feeling of fear regarding the possibility of an event occurring, arising from an anticipatory process. This feeling functions as a crucial signal, prompting individuals to take action in response to perceived threats. The impact of stress, anxiety, and depression on physical and mental health can be highly significant. Among various psychological issues, anxiety is the most commonly encountered (Ah. Yusuf, 2019). A previous study titled *"Menarche and First Emotional Reaction of Turkish Adolescent"* conducted by Karakoc (2019) in Turkey reported that emotional responses to menarche included fear (35.2%), surprise (35.8%), embarrassment (6.8%), sadness (4.5%), and happiness (10.1%). Similarly, a study by Wati et al. (2019) titled *"Descriptive Analysis of Adolescent Girls' Anxiety in Facing Menarche at SMP Muhammadiyah Pekanbaru"* also revealed the levels of anxiety experienced by adolescent girls during menarche. The results indicated that 15 participants (34.88%) experienced severe anxiety, 11 participants (25.58%) experienced moderate anxiety, and 9 participants (20.93%) experienced mild anxiety.

A study by Ponza et al. (2019) on *"The Development of Animated Media in Learning for Fourth-Grade Elementary School Students"* demonstrated that the use of animated media was highly effective for elementary school students, with an average score of 90.5%. Animated media can present engaging stories and visuals, making it suitable for the interests of elementary school students.

The researcher is interested in conducting a study on anxiety related to menarche by utilizing animated media. Animated media serves as an instructional aid that supports the learning process by providing dynamic visual representations resembling real-life experiences. With its ability to present moving objects that change in shape, size, and color, this medium is designed to captivate students' interest. Interest is a feeling that arises in response to understanding and exploring the displayed objects. When curiosity emerges, children are more likely to watch and comprehend animated videos enthusiastically. This approach is expected to help reduce their anxiety about menarche (Sunami & Aslam, 2021).

## Methods

This study employed a pre-experimental research design with a one-group pre-post test approach. The population in this study consisted of 25 female students. The sampling technique used was purposive sampling, resulting in a total sample of 19 female students. The study was conducted on December 19–20, 2024, at SD Negeri 2 Ciamis. The assessment of anxiety levels was categorized based on the total score as follows: a score of 14–20 indicated no anxiety, 21–27 indicated mild anxiety, 28–41 indicated moderate anxiety, and 42–56 indicated severe anxiety. The distribution of statements regarding the level of fear before the use of animation media (pre-test) was conducted using 14 statements, each with four answer choices: never (score 1), sometimes (score 2), often (score 3), and always (score 4). The results of this study were then organized into tables to facilitate understanding.

## Results

**Table 1. Research Findings Based on Categories of Anxiety Levels in Facing Menarche Among 4th, 5th, and 6th Grade Students Before Receiving Animation Media Related to First Menstruation.**

Anxiety Category	Frequency	Percentage (%)
No Anxiety	3	15.8
Mild Anxiety	7	36.8
Moderate Anxiety	6	31.6
Severe Anxiety	3	15.8
<b>Total</b>	<b>19</b>	<b>100.0</b>

Table 1 above illustrates the anxiety levels of adolescents before menarche who were exposed to animation media (pre-test) at SD Negeri 2 Ciamis. The results indicate that the majority of adolescents, totaling 7 individuals (36.8%), fell into the category of mild anxiety.

The findings of this study reveal that many respondents experienced fear or anxiety related to menarche. A study conducted by Efita (2023) in Padang described the psychological reactions of middle school students during menarche, showing that they experienced negative responses such as anxiety, fear, and embarrassment. This is consistent with the findings of Retnaningsih et al. (2019) in Semarang, which reported that 80% of pre-menarche students felt anxious and confused when facing their first menstruation. The fear experienced by children before menarche arises from uneasiness and anxiety about the upcoming first menstruation. This condition serves as an alert signal, reminding individuals of the changes that are about to occur (Meinarisa et al., 2021).

The results of this study align with research by Wahyuni et al. (2019) in Palembang, which employed a pre-experimental method with a one-group pre-post test without a control design. The study examined the effect of animation media on pre-menarche anxiety among fifth-grade students at SDN 88 Palembang and found that the students' anxiety levels were categorized as mild. Furthermore, these findings are consistent with research by Yuniza (2020) in Palembang, which also applied a pre-experimental method with a one-group pre-post test design. Her study, involving 36

respondents, found that most experienced mild anxiety before menarche, aligning with previous findings.

**Table 2. Research Findings Based on Categories of Anxiety Levels in Facing Menarche Among 4th, 5th, and 6th Grade Students Before Receiving Animation Media Related to First Menstruation.**

Anxiety Category	Frequency	Percentage (%)
No Anxiety	19	100.0
Mild Anxiety	0	0.0
Moderate Anxiety	0	0.0
Severe Anxiety	0	0.0
<b>Total</b>	<b>19</b>	<b>100.0</b>

Table 2 presents the anxiety levels experienced by adolescents before menarche after receiving an animation media intervention at SD Negeri 2 Ciamis (post-test). All respondents exhibited anxiety levels classified as "no anxiety" (100%) and experienced a reduction in anxiety after being exposed to animation media.

This finding aligns with the theory stating that animation media serves as a tool for delivering health information to improve health quality (Aisah, 2021). The use of animation media can help reduce anxiety levels as it incorporates both visual and auditory elements. This is consistent with the theory that animation media influences cognitive, affective, and motor aspects of individuals (Dewi, 2023).

The results of this study are consistent with research by Wahyuni et al. (2019) conducted in Palembang, which explored the impact of animation media on menarche-related anxiety among female students. That study found that most students experienced a reduction in anxiety levels and no longer felt anxious. Similarly, this study aligns with research by Yuniza (2020) in Palembang, which also examined the effect of animation media on students' anxiety about menarche. The study indicated a decline in menarche-related anxiety, with students categorized as experiencing "no anxiety."

The Wilcoxon test on the anxiety variable was conducted to identify differences between pre-test and post-test data. The following presents the Wilcoxon test results for the "self-esteem" variable in the experimental group:

**Tabel 3. Uji Wilcoxon Test**

Test Statistics <sup>a</sup>	
Group	Result
Z	-5,392 <sup>b</sup>
Asymp. Sig. (2-tailed)	<,000
a. Wilcoxon Signed Ranks Test	
b. Based on positive ranks	

## Discussion

Based on Table 3, the results of the Wilcoxon test on self-esteem in the experimental group showed a Z value of -5.392 with a significance (sig) value of 0.000. This indicates that anxiety has an effect on menarche among female students in grades 4, 5, and 6. According to Munadi (2020), animation media is an information delivery tool that combines auditory and

visual elements. With these characteristics, animation media offers advantages in conveying messages. Additionally, it can enhance individuals' cognitive, emotional, and motor skills. The messages delivered through animation media may include both verbal and non-verbal communication. A study conducted by Hendriani et al. (2019) revealed that the use of animation media can effectively reduce anxiety among female students experiencing menarche.

The findings of this study align with research conducted by Wahyuni et al. (2019) in Palembang, which reported a p-value of 0.000 ( $P < 0.05$ ) using a pre-experimental method. This suggests that the use of animation media has a significant effect on reducing anxiety related to menarche. Similarly, research by Yuniza (2019) in Palembang, which involved 36 respondents, found a decrease in anxiety levels with a p-value of 0.021. This indicates a significant influence on the anxiety experienced by female students before and after the use of animation media. Furthermore, the study highlighted that delivering information through animation media increases students' interest in the material, making the learning process more effective.

A study conducted by Pratiwi et al. (2020) titled *"Differences in Anxiety Reduction Between Lecture Methods and Animation Media in Students of SDN 12 Metro Pusat"* produced interesting results. This quasi-experimental study found that the use of animation media in learning was more effective for elementary school students compared to lecture methods. This effectiveness is attributed to animation media combining auditory and visual elements simultaneously, which facilitates students' understanding of the material. In contrast, the lecture method relies solely on auditory elements, which tend to make students more passive. This presents a challenge for students with a visual learning style, who may struggle to absorb lessons or information effectively.

Based on the above explanation, the researchers suggest that the use of animation media has a significant impact on reducing children's anxiety about menarche in elementary schools. This is evident from the comparison of pre-test and post-test results, which showed a significant reduction in anxiety levels after the students watched the animation video. For most children who watched the video, their anxiety levels decreased significantly, with some even reaching the "no anxiety" category. Additionally, the study results indicate a p-value of 0.000, which is considerably lower than the established significance threshold.

The researchers believe that animation media can be an effective method to enhance children's understanding and interest in information about their first menstruation. Animation media presents information in a more engaging and interactive way, making it easier for children to comprehend and retain information. Moreover, this medium can also help children develop social and emotional skills, such as managing anxiety and improving communication abilities. Therefore, the researchers recommend the use of animation media as an educational tool for reproductive health in elementary school settings.

## **Conclusion**

It can be concluded that most children experienced mild anxiety before watching the animation video, with 7 participants (36.8%) having anxiety scores between 21 and 27. However, after watching the animation video, all participants no longer experienced fear related to menarche. The results of this study also indicate that the animation video played a significant role in reducing anxiety about menarche among children, with a p-value of 0.000, demonstrating strong statistical significance.

## **Recommendations**

Based on the study findings, it is recommended that educational institutions integrate reproductive health into the elementary curriculum and train teachers accordingly. Students should actively seek accurate information and support one another. Parents are encouraged to

educate their children about menstruation and guide them in accessing reliable online sources. Schools should develop reproductive health programs and provide adequate facilities. Future research should explore the impact of animated media on menarche-related fear, considering psychological and social factors.

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