

Original article:

The Effectiveness of Education with Picture Media to Increase Students' Knowledge and Attitudes about Maintaining the Cleanliness of the External Genitalia at Al-Azhar 26 Junior High School Yogyakarta

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ABSTRACT

Background: Cleanliness of women's genitals is related to the menstrual cycle. The education of menstruation with picture media increases women's awareness to maintain the cleanliness of the external genital because picture media shows effects of risk behavior if do not maintain the cleanliness. Women with a better understanding of menstruation often have a safe and clean way to manage their menstrual bleeding. Poor knowledge, attitudes and actions towards external genitalia hygiene in adolescent girls have clinical implications, namely the occurrence of infections in the reproductive system and urinary tract infections. In developing countries, this problem needs more serious attention. **Objective:** This study aims to analyze the effectiveness of education with picture media to increase students' knowledge and attitudes about maintaining the cleanliness of the external genitalia at Al-Azhar 26 Junior High School Yogyakarta. **Methods:** This research is a quantitative study with a quasi-experimental design and uses analytic research with a One Group Pretest-Posttest Design. In this study there was no control group, data collection using a questionnaire. The population was made up of Grade VIII students of junior high schools who were actively studying at MTs Al- Azhar 26 Yogyakarta. Respondents came from junior high school students because junior high school students represented teenagers and their intellectual abilities were not much different. The research sample was taken by using a total sampling technique of 60 samples. The treatment procedure was after completing the pre-test, students were given education about external genital hygiene with picture media. After receiving education, students were asked to fill out a post test, after the data was collected, data analysis was carried out using the Wilcoxon test. Ethical permission for this research from FKIK UMY with number 106/EC-KEPK FKIK UMY/IV/2021. **Results:** Respondents are 60, aged 12 and 13 years. The mean value of knowledge before intervention is 7,02, the mean value of knowledge after intervention is 13,68. The mean value of the attitude before the intervention was 15.35, the mean value of the attitude after the intervention was 33.23. The results of the test on the level of knowledge of the respondents using the Wilcoxon test obtained a value of $p = 0.001$ ($p < 0.05$), this is a significant result in increasing the level of knowledge of respondents about external genitalia hygiene. The results of the test on respondents' attitudes using the Wilcoxon test obtained p value = 0.001 ($p < 0.05$), this is a significant result in increasing respondents' attitudes about the external genitalia. **Conclusion:** counseling about genital hygiene is effective in increasing knowledge and attitudes about female genitalia in Yogyakarta. Efforts to improve external genital hygiene in adolescents need to be continuously improved with education that is carried out continuously and carried out using various methods.

Keywords: Education, hygiene of the external genitalia organ, knowledge, attitude

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Introduction

Adolescence, as defined by the WHO as being between the ages of ten and nineteen, is a pivotal time marked by the development of one's identity and the transition from childhood to maturity. Physical, psychological, emotional, and social changes that are significant for teenagers'

wellbeing typically characterize this shift. For parents and developing teens, these changes provide significant challenges. The onset of menstruation typically marks the beginning of adolescence in women, and this period is considered a critical one that calls for special consideration. Menstrual difficulties and proper hygiene practices are frequently defined by

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taboos and other sociocultural norms, which have a considerable impact on how menstruation and proper cleanliness are understood scientifically. Young women, particularly those in rural areas, struggle with maintaining good menstrual hygiene. Young women, especially those living in rural areas of sub-Saharan Africa, struggle greatly with good menstrual hygiene habits. . Studies from the African and Asian continents have shown that girls in school handle their menstrual hygiene in an unsatisfactory way. The availability of clean water for washing and a convenient location to replace sanitary napkins is thought to be a daily problem for some 200 million women and girls in underdeveloped countries. Since the majority of women and girls who menstruate use unsanitary absorbents during their periods, access to sanitary products has become a significant concern for them. Due to a lack of sanitary napkins and other basic sanitation facilities, adolescent females do not attend school during menstruation [1].

Teenagers are defined by the World Health Organization as those between the ages of 10 and 19. Adolescence, which is defined as the age between childhood and maturity, is characterized by children's growth and development. A child is physically, psychologically, and biologically developing at this time. It is understood that this is a unique time in a girl's life cycle that needs special consideration. Because it signals the beginning of a woman's reproductive phase, menarche is a significant biological turning point in her life. The average age for menarche, which was between the ages of 12 and 13, remained generally consistent throughout the population. Unfortunately, the situation is made worse for girls because they lack knowledge about menstrual preparation and management or because they are shy. Despite being a natural occurrence, menstruation is nevertheless taboo in Indian culture because it is viewed as filthy and unclean [2].

The women's menstrual cycle and the hygiene of the external genitalia are closely associated. Women's attitudes toward menstruation have an impact on how they maintain their personal cleanliness while bleeding. Menstruating women frequently have a clean and safe approach to control their menstrual bleeding, and vice versa. Poor menstrual hygiene practices have been linked to reproductive and urinary tract infections, cervical cancer, school absence or dropout rates, subpar academic achievement, low self-esteem,

and a poor quality of life. Additionally, because to smells, leaks, and stains on clothing, females may feel dread, uncertainty, and embarrassment during menstruation. For the girls themselves and their future, inadequate understanding and poor menstrual hygiene practices have significant clinical ramifications. Young women, especially those from low socioeconomic backgrounds, have inadequate awareness about menstruation and poor hygienic practices. According to reports, 40–45% of schoolgirls have inadequate understanding of their menstrual bleeding and use risky hygiene practices [3].

In this study, students at Al-Azhar 26 Junior High School in Yogyakarta will understand how preserving the hygiene of their external genitalia through picture media through the picture media, the students to be able to provide effective knowledge to reduce the number of cases of venereal disease and reproductive organs.

Literatur Review

Many girls are ill-prepared, according to studies from several developing nations, and a large number of girls begin menstruation without understanding what is happening to them. Girls in impoverished nations are reportedly subjected to stress, confusion, embarrassment, and fear as a result of a lack of information about proper hygiene practices in relation to menstrual difficulties. Young ladies have reported embarrassing menstruation leakage and offensive scents in classes. Menstrual taboos are frequently to blame for this issue's improper resolution. Due to these causes, teenage females are more susceptible to engaging in unsanitary behaviors during their periods, which can result in a number of diseases, including urinary and reproductive tract infections. Due to these causes, teenage females are more susceptible to engaging in unsanitary behaviors during their periods, which can result in a number of diseases, including urinary and reproductive tract infections. It is also the primary element that most significantly influences students' attendance at instructional activities in schools. Teenage females cited menstrual discomfort and a lack of supplies for maintaining their external genitalia cleanliness as the main causes of their absences from school. According to reports, young women frequently use shredded or folded toilet paper, old clothing, or torn blankets, which makes it difficult for them to attend school and frequently leaks and causes blisters [4].

It has long been known that the vaginal microbiota is crucial for maintaining health. The absence of a healthy vaginal ecosystem can result in a number of illnesses, such as bacterial vaginosis, pelvic inflammatory disease, and sexually transmitted diseases. Insufficient good bacteria have also been linked to cervical cancer, ectopic pregnancy, early birth, and miscarriage, according to research. Studies show that women continue to use vaginal washes for a variety of reasons, despite the abundance of information emphasizing the significance of the vaginal microbiota. There are many publications that promote the advantages of vaginal washing, despite the fact that the negative consequences of vaginal washing have been abundantly documented in the literature. Many educational initiatives are reportedly being made to decrease this habit [5].

Menstrual cleaning supplies that are clean and absorbent, can retain privacy, are provided with soap and water, and have disposal facilities for old menstrual supplies must be accessible and available. The majority of schools in poor nations, particularly those in rural regions, are under-equipped, including a lack of water for females to wash their hands, external genitalia, and soiled clothing. Additionally, they don't have any provisions for sanitary napkins, soap, or the disposal of used sanitary napkins. Lack of access to sanitary napkins or appropriate substitutes has an impact on girls' involvement and psychological health in class because they are concerned about staining their clothes and then being teased and humiliated by their peers [6].

For girls' and women's overall wellbeing and dignity, understanding menstruation and menstrual hygiene is crucial. Adolescents need fundamental, precise, and comprehensive information on the design and operation of their bodies, as well as other issues related to sexual and reproductive health, regardless of their culture, age, or marital status. Poorly informed decisions and behaviors could have serious, long-lasting detrimental repercussions on the health of their reproductive system. Contrarily, accurate information and hygienic behaviors related to menstruation have an impact on a variety of sectors across sustainable development goals, such as health, education, gender equality, and water and sanitation. Evidence points to unsafe sanitary conditions and inadequate personal cleanliness as the primary causes of gynecological issues in adolescent girls.

Most infections that result from poor hygiene during menstruation have been documented. The regular usage of dirty napkins or linen napkins that weren't adequately dried before reuse has been linked to hidden microbes and vaginal infections [7].

Menstrual hygiene management refers to maintaining personal hygiene while having a period, which involves washing, frequently using sanitary napkins, and correctly discarding used products. Adolescent girls benefit from safe and effective menstrual hygiene management because it gives them the knowledge and skills they need to take care of their periods in a healthy way, boosts their self-esteem, and improves their academic performance. The achievement of sustainable development goals, such as good health and well-being, inclusive and impartial quality education, gender equality and women's empowerment, clean water and sanitation, will depend in part on safe menstrual hygiene management. However, many teenagers struggle to control their periods while attending school, especially in low- and middle-income nations [8].

From the various journals above, it can be seen that the level of good knowledge and attitudes about external genitalia health or menstrual health is positively correlated with a reduced risk of infection. Education about external genital hygiene will increase knowledge, attitudes and actions related to external genital hygiene and prevent infections in the reproductive organs.

Methods

This research is a quantitative study with a quasi-experimental design and uses analytic research with a One Group Pretest-Posttest Design. In this study there was no control group, data collection using a questionnaire. The population was made up of Grade VIII students of junior high schools who were actively studying at MTs Al-Azhar 26 Yogyakarta. Respondents came from junior high school students because junior high school students represented teenagers and their intellectual abilities were not much different. The research sample was taken by using a total sampling technique of 60 samples. The treatment procedure was after completing the pre-test, students were given education about external genital hygiene with picture media. After receiving education, students were asked to fill out a post test, after the data was collected, data analysis was carried out

using the Wilcoxon test. Ethical permission for this research from FKIK UMY with number 106/EC-KEPK FKIK UMY/IV/2021.

Result

The Table below will be displayed the results of research which include and the results of the statistical test of Respondents' Knowledge and Attitudes.

1. Age of responden

Tabel 1. Age of Respondent

Age	Total	%
12 year	16	26,7%
13 year	44	73,3%
Total	60	100%

Based on Table 1, the respondent's age from 60 female students was found to be 16 respondents (26.7%), while those aged 13 years were 44 respondents (73.3%). Thus, it can be concluded that most of the respondents are 13 years old. Where the age of the respondents in this study included in the early teens and middle teens with an age range of 11- 14 years.

2. The results of the statistical test of Respondents' Knowledge and Attitudes

The results of the statistical test of knowledge and attitudes of students before and after being given education on cleanliness of the external genitalia can be seen in the following table.

Table 2. Results of statistical tests of Knowledge and Attitudes about external genitalia hygiene Variable

Variable	Knowledge			Attitude		
	N	Mean	SD	N	Mean	SD
Before education (pretest)	60	7,02	1,76	60	15,35	2,60
After education (posttest)	60	13,68	0,68	60	33,23	2,72
P	0,001*			0,001		

*Significant ($p < 0,05$) ** Not significant ($p > 0,05$)

Based on Table 2, it can be seen that the comparative analysis of two pairs of groups obtained the average knowledge pretest value of 7.02 then increased after being given education at the posttest of 13.68. The mean pretest value of

attitude was 15.35 then increased to 33.23 at the posttest. Thus, it can be concluded that there is an increase in students' knowledge and attitudes after being given education about the cleanliness of the external genitalia.

Discuss

The results of statistical tests showed that the knowledge value of external genitalia was 0.001, below 0.005. Thus, it can be concluded that there is a significant difference between knowledge before and after being given education about the cleanliness of the external genitalia.

The results of statistical tests showed that the value of attitudes towards external genitalia was 0.001, below 0.005. Thus, it can be concluded that there is a significant difference between attitudes before and after being given education about the cleanliness of the external genitalia.

Many teenage girls menstruate while in school due to early menarche and a greater emphasis on education. Postmenarchal females will suffer menstrual bleeding on at least a few school days each month because the average menstrual cycle lasts 25 to 30 days and bleeding lasts for 4 to 6 days. As a result, managing menstrual hygiene is becoming more and more vital, but it is frequently overlooked how closely it is linked to the success of girls' education, empowerment, and social development [9].

The vaginal microbiome, or microbial community, has an impact on fertility and reproductive success as well as life quality and can protect against harmful microorganisms. The health effects of microbial ecosystem balance disruption can be severe. In order to establish a link between particular microbial profiles and unfavorable gynecological and obstetric outcomes, microbiome research is currently attempting to identify the bacteria that distinguish a healthy microbiome. Numerous health practices, including the use of antibiotics, sexual activity, and behavioral treatments like vaginal cleansing and birth control measures, might affect the makeup of the vaginal microbiota. Vaginal douching has been the main topic of previous study on vaginal health practices. The prevalence of douching has been reported to vary, but according to the Centers for Disease Control and Prevention in the United States, 20% of women between the ages of 15 and 44 have experienced it in the previous year. Negative obstetric and gynecological examination

outcomes have been linked to this technique, including pelvic inflammatory disease, decreased fertility, ectopic pregnancy, low birth rate, early pregnancy, cervical cancer, and bacterial vaginosis. Medical therapies must be used in the context of understanding the social and cultural practices that influence the relevant health behaviors in order for their effectiveness to be maximized [10].

The use of vaginal douches or soaps to clean the vagina because they can disrupt the normal flora and create infection are some common causes of vulvovaginal disease. Other causes include immune deficiencies, hormonal changes, stress, and hormonal fluctuations. The vulva is prone to dermatitis and other dermatological diseases, particularly when the usual vulvar environment's components—humidity, vaginal or urinary discharge, fecal residue, friction, and heat—disturb the skin's barrier function. Pruritus, pain and discomfort, changes in skin color and texture, and other frequent signs and symptoms of vulvovaginal illnesses can significantly lower quality of life. Numerous bacteria, including both aerobic and anaerobic types, are frequently present in infections. Women's hygiene habits are influenced by a variety of factors, such as personal preferences as well as cultural and social norms. In order to avoid unpleasant body odor, washing the vulva on a regular basis is required to prevent the buildup of vaginal discharge, sweat, urine, and fecal contamination. Vulvar washing treatments are not intended to treat infections, despite the fact that they may be a helpful addition to medical care [11].

According to the study, the majority of the 242 (49.18%) respondents knew that the main components of managing menstruation hygiene were commercial sanitary napkins, 186 (37.8%) underwear, and 88 (17.88%)

homemade sanitary napkins. Participants indicated that there was a bad smell during menstruation in 350 cases (71.5%) and that menstrual blood was unsanitary in 337 cases (68.5%). Four hundred and nineteen (85.2%) of the participants claimed that infections were more likely to occur when menstrual hygiene was poor. A total of 436 respondents (90.7%) and 431 respondents (87.6%) indicated that bath soap and sanitary napkins should be used regularly, respectively. In general, 436 respondents (90.7%) have a high level of knowledge, while 46 respondents (9.3%)

assessed their knowledge of menstrual hygiene management as low [12].

Depending on blood flow, menstrual blood absorbers should be changed every 2 to 6 hours. There is enough proof to conclude that repeated use carries a risk of irritability and infection. There are no specific recommendations for how often to wash your body or how to use soap and water on your genitalia [13].

One-fifth of all females in the globe are in their teen years. Even though it is a natural and physiological procedure for women, menstruation is still taboo among young women. Young women frequently struggle with menstruation hygiene, particularly in poor nations. Poor menstrual hygiene habits significantly affect puberty's health, education, and other elements. Infections of the reproductive tract are one of the detrimental outcomes. Other negative effects include a 40% rate of school absences, stillbirths, miscarriages, infertility, and cervical cancer. Poor menstrual hygiene was prevalent in 27.5 to 40% of women in the Nepal study, 68.5% in Bangladesh, 44.8 to 81.7% in India, 45.45% in Uganda, 74.7% in Nigeria, and 28.5% in Bhutan. Numerous studies have revealed that a large percentage of girls begin menstruation without understanding what is occurring to them or why [14].

In spite of the fact that the majority of students (92%) were aware of menstruation before menarche, only 37.6% of Ethiopian students reported using sanitary napkins, while 62.4% reported using washcloths instead. Due to availability and economical issues, there is a limited use of sanitary napkins. In the range of one day to four days, 43% – 50.7% of students miss school because to menstrual-related issues. 90% of pupils said that there were no separate restrooms for girls at their school. In Ethiopia's Oromia (65%) and Amhara (33%) states, high dropout rates for girls are likewise correlated with a lack of distinct facilities [15].

Teenage girls are a vulnerable population when it comes to both their health and their social position. In this situation, menstruation is regarded as filthy or disgusting in society. Menstrual hygiene is a problem that is not given the recognition or attention it needs. During the menstrual cycle, good hygiene practices are crucial, including the use of sanitary napkins and thorough genital cleaning. In order to safeguard their health in the long run

from numerous illnesses, women of childbearing age require access to hygienic items that are both mild and clean. Thus, preventing reproductive tract infections with proper menstrual hygiene techniques. Women's health can suffer significantly from reproductive system infections, including chronic pelvic discomfort, dysmenorrhea, and in extreme situations infertility. Poor menstrual hygiene is intimately tied to the silent epidemic of reproductive tract infections that has claimed the lives of many women. Around 10% of women globally experience genital infections annually, including bacterial vaginosis and urinary tract infections, and 75% of women have a history of genital infections [16].

Young girls typically experience anxiety, worry, terror, and shame during menstruation and are less equipped to deal with issues related to menstrual hygiene. Additionally, regulating menstruation is made more difficult by pre-existing social taboos and cultural hurdles. There are still many people who lack access to safe menstrual hygiene products and reproductive health care. In addition to being unique and urgent for women and girls of reproductive age, menstrual hygiene needs necessitate equal access to menstrual period management, a fundamental reproductive health right. In an emergency, the affected person's regular routine is altered, and they are subjected to increased stress that could harm their bodily and mental health. Basic human needs like shelter, food, clean water, and medicine are emphasized, but other needs like managing menstruation safely, which can have serious psychosocial repercussions if unmet, are frequently disregarded [17].

In India, girls' awareness and understanding of menstruation before to menarche are rather restricted. In Rajasthan, India, interviews with rural females found that 2.8% of them were aware. The Village Council for Girls in Maharashtra, India, which was used as a forum to disseminate health messages, dramatically increased the number of girls who knew they were having periods before they started from 35.1% in 2003 to 55.4% in 2007 (p -value 0.05). 1,573 Chinese females were polled, and 75% of them said they knew little or nothing about their periods. Even still, females who have even a little knowledge frequently have misconceptions regarding menstruation. For instance, a research conducted in rural Nepal revealed that 82.0% of the 150 girls polled believed that menstruation was a curse, whereas

6.0% thought it was a normal procedure [18].

There is very little information about menstruation taught in schools in many low- and middle-income countries. Due to the taboos surrounding menstruation in this setting, some teachers, particularly male ones, may be reluctant to bring up menstrual hygiene management in class. Sometimes the teachers themselves lack knowledge. Young women are forced to seek information outside of a formal educational setting as a result. Although 56.5% of the adolescents in this survey were aware that a woman could become pregnant after engaging in unprotected sex during a specific menstrual cycle phase, none of them were aware of that particular phase. More than 75% of females in India who were polled did not know where menstrual blood comes from [19].

A necessary condition for healthy menstruation behaviors is access to accurate and useful information. Studies from various regions of the nation have shown that very little of society is aware of or understands that menstruation is a typical biological occurrence. It is challenging for women and girls to talk openly about menstruation without feeling ashamed or constrained by the prevalent sociocultural norms, beliefs, and practices. Because menstruation is considered taboo in society, not only girls and women but also teachers and health professionals find it awkward to talk about menstrual hygiene management difficulties. To modify the outdated social attitudes around menstruation, significant efforts are required. For the improvement of adolescent health, menstrual hygiene management needs to be covered in puberty education at the curricular level [20].

Limitations and Further Research

This research is limited to measuring respondents' knowledge and attitudes about external genital hygiene, not measuring actions for external genital hygiene, because a questionnaire alone is not sufficient to measure actions regarding external genital hygiene, but other methodologies such as observation are needed. For further research, it is necessary to measure measures of cleanliness of the external genitalia, because these actions will have direct implications for preventing infection of the reproductive organs.

Conclusion

Counseling about genital hygiene with picture

media is effective in increasing knowledge and attitudes about female genitalia in Yogyakarta. Efforts to improve external genital hygiene in adolescents need to be continuously improved with education that is carried out continuously and carried out using various methods.

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Conflic of interest

There is no conflic of interest in this study

Author Contributions

Conception and design: Kusbaryanto, Chapsoh

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Drafting of the article: Kusbaryanto, Chapsoh

Critical revision of the article for important intellectual content: Kusbaryanto, Chapsoh
Final approval of the article: Kusbaryanto

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Collection and assembly of data: Kusbaryanto

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