

Knowledge, Attitude and Practice of Menstrual Hygiene among Primary School Adolescents in Surabaya, Indonesia

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Abstract

Background: Menstruation is a normal physiological process of an adolescent female. Adolescence is a very important transition period that requires special attention to ensure progress for all girls. Some studies found that menstruation is taboo to be discussed and many girls just know about menstruation when they have menarche. The genitourinary becomes more sensitive and susceptible to infection during the menstruation period. So the appropriate menstrual hygiene practice is very important to maintain the health of reproductive organs. This study objective is to assess the current knowledge, attitude, and practice of primary school adolescents on menstrual hygiene management in Surabaya, Indonesia.

Method: This is a descriptive cross-sectional study that was carried out from May to June 2019 in a primary school in Surabaya. This study was done among 78 students selected through total population sampling from a primary school in the urban area of Surabaya.

Results: The findings showed that 66,7% of participants have good knowledge, 60,3% have a good attitude and 79,5% have good practice regarding menstrual hygiene.

Conclusions: The majority of the participants have good knowledge, attitude and practice regarding menstrual hygiene. Nevertheless, the knowledge, attitude, and practice of all the participants still need to improve. The school along with the parents and health provider are expected to reinforce the health education program about menstrual hygiene management.

Keywords: *Knowledge, attitude, practice, menstrual hygiene*

Introduction

Menstruation is the release of blood from the uterus which is a natural process experienced by women because of the decay of the uterine wall when the egg is not fertilized by sperm cells. Menstruation lasts 2 to 7 days which occurs every 28 days.^[1] Menstruation is a natural physiological process in adolescent females who usually experience it for the first time at the age of 9-12 years.^[2]

Menstrual hygiene is the act of maintaining cleanliness during menstruation. This act such as cleaning the genitals properly and changing pads every 3-4 hours. Poor personal hygiene during menstruation can increase the potential for reproductive tract infections. To be able to practice menstrual hygiene properly, good knowledge about menstruation and menstrual hygiene management are needed.^[3]

Health effects found based on the Menstrual Hygiene Management Research, one in four women reported problems with itching or pain in the pubic area and 9% stated pain during urination during menstruation. This is because they use sanitary pads too long because they cannot replace it at school. While the impact on education is decreasing participation and learning ability in schools due to illness, low concentration, and fear of being translucent or leaky.^[4]

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Many girls don't have the understanding that menstruation is a normal biological process. They just find out when menarche or when they have menstruation for the first time.^[5] Only 1 in 44 (2%) of elementary school students and 8 of 31 (26%) of junior high school students have an understanding that menstruation is a biological aspect, their knowledge is very limited. Their knowledge of menstrual hygiene is mostly not appropriate according to the recommended standards. In general, female primary school students also don't understand what reproductive organs are and how they relate to menstrual hygiene.^[1]

The main purpose of this study is to assess the knowledge, attitude, and practice of menstrual hygiene among primary school students in Surabaya.

Material and Method

This is a descriptive cross-sectional study. This study was carried out from May to June 2019 in a primary school in Surabaya. This study was done among 78 students selected through total population sampling from a primary school in the urban area of Surabaya.

Measuring instruments in this study using a questionnaire made by the researcher based on theoretical concepts and have been tested its validation and reliability. The level of knowledge, attitude, and practice were measured by using a set of five knowledge related questions, six attitude related statements, and eight practice-related questions. Each correct answer of knowledge and practice items were given score one and zero for an incorrect answer. The attitude item was measured four points Likert scale. All scores were summed and classified into two categories, good (the one with a score higher or similar to median) and poor (the one with a score less than the median).

Findings

The respondents involved in this study were 10-13 years old. The frequency distribution of the respondents

was at most 12 years old with a percentage of 43.6%. As many as 23.1% of respondents were 13 years old and only 3.8% were 10 years old.

The majority of the respondents (46.2%) experienced menarche at the age of 11 years. As many as 28.2% experienced menarche at 12 years of age, 23.1% at the age of 10 years, and only 2.6% at age 13 years.

Most respondents have early menarche so they are vulnerable to early menarche impact which could affect their lives both socially and biologically. The younger age of menarche causes an unwanted pregnancy that causes premarital sexual activity. How it will increase the prevalence of illegal abortion and sexually transmitted diseases in adolescents.^[6]

Respondents stated that information about menstruation and personal hygiene menstruation is very important to know. So they try to get this information from various sources. Some sources of information mentioned by respondents included family members (85.9%), teachers (32.1%), internet (26.9%), friends (15.4%) and books (11.5%).

On the other hand, the school or teachers only delivered a minimum menstrual-related study material because it was considered a sensitive topic. Meanwhile, parents as the main source of information for students usually only provide information after the child has menstruated.

Comprehensive information about menstruation and menstrual hygiene is needed by adolescent girls, especially before they menstruate. This is evidenced by the statement of all respondents or 100% stating the need for information about menstruation and menstrual personal hygiene. So that respondents will not have difficulty in accessing information and are sure of the truth of the information.

Table 1. Knowledge of Menstrual Hygiene

No	Question	Correct		Incorrect	
		n	(%)	n	(%)
1	What is menstruation?	74	94,9	4	5,1
2	What is the aim of menstrual hygiene practice?	73	93,6	5	6,4
3	What is the impact if the urogenital area is moist?	65	83,3	13	16,7
4	What will happen if not changing sanitary pads in long time?	72	92,3	6	7,7
5	How many sanitary pads should be change in a day?	47	60,3	31	39,7

As many as 94.9% of respondents knew that menstruation is the release of blood from the vagina caused by normal biological processes. Respondents who knew that the purpose of maintaining the cleanliness of genital organs during menstruation is to maintain cleans and health as much as 93.6%. The majority of respondents or as many as 83.3% already know if moist genitals will facilitate the growth of bacteria and fungi. As many as 92.3% of respondents knew that if they do not frequently change pads during menstruation, the bacteria will develop more easily into the vagina and cause infection. There are still quite a number of

respondents or as many as 39.7% who do not know that the correct timeframe for changing sanitary napkins is every 4-6 hours.

Based on the analisis, found that the majority of the participants are 12 years old. Also most of them have menarche in the age under 12 years. The participants have good knowledge of menstrual hygiene because they have early menarche and have received the information regarding meanstruation and menstrual hygiene. Moreover they have experience so automatically it will make them gain more knowledge about menstrual hygiene.^[7]

Table 2. Attitude of Menstrual Hygiene

No.	Statement	Agree		Disagree	
		n	(%)	n	(%)
1	You should wash your hands before cleaning the genitals.	78	100	0	0
2	Changing underwear once a day is enough.	5	6,4	73	93,6
3	Sanitary pads should be replaced every 4-6 hours.	67	85,9	11	14,1
4	No need to replace sanitary pads after urinating and defecating.	35	44,9	43	55,1
5	Used sanitary pads must be wrapped in paper or plastic before disposed.	75	96,1	3	3,9
6	You don't need to change pads when you're at school	11	14,1	67	85,9

All respondents agreed to wash their hands before cleaning the genital area. As many as 93% of respondents did not agree to replace underwear only once a day. 85% of respondents agreed to replace sanitary pads every 4-6 hours. There are still quite a number of respondents who agree that there is no need to replace sanitary pads after urinating and defecating. Almost all or 96.1% of respondents agreed to wrap used sanitary pads with paper

or plastic before disposing of it. 85.9% of respondents did not agree that it's no need to change sanitary pads while at school.

Although most of participants' attitude of menstrual hygiene are good. At some points there still some or quite a few participants stated that no need to replace sanitary pads after urinating and defecating.

Table 3. Practice of Menstrual Hygiene

No	Statement	Yes		No	
		n	(%)	n	(%)
Habit of hand washing					
1	Washing hands with soap before and after using sanitary pads.	46	59	32	41
2	Not washing hands before and after using sanitary pads.	7	9	71	91
Habit of replacing sanitary pads					
3	Replacing the pads every 4-6 hours even though the menstrual blood has decreased.	59	75,6	19	24,4
4	Not replacing the pads after urinating and defecating.	32	41	46	59
5	Not replacing the pads while in school.	23	29,5	55	70,5

Continue

Table 3. Practice of Menstrual Hygiene

No	Statement	Yes		No	
		n	(%)	n	(%)
Habit of removing sanitary pads waste					
6	Always wash the used sanitary pads before disposed of.	56	71,8	22	28,2
7	Always wrap sanitary pads with paper or plastic before dumping it in the trash.	75	96,2	3	3,8
8	Once threw the pads waste on a toilet.	2	2,6	76	97,4

Respondents' practice of menstrual hygiene was assessed by analyzing the habit of hand washing, habit of

replacing sanitary pads, and habit of removing sanitary pads waste.

The habit of respondents' hands washing is generally good, because as many as 59% of respondents wash their hands with soap every time before and after changing sanitary pads. And only 9% or 7 people do not wash their hands before and after changing the pads.

Respondents' habits in replacing sanitary pads are shown by as much as 75.6% of respondents keep replacing pads every 4-6 hours a day even though menstrual blood has decreased. 41% of respondents did not replace sanitary pads after urinating or defecating. And as many as 23 female students or 29.5% female students claimed not to change pads while in school.

Respondents' habits in disposing of pads waste are known as many as 71.8% of respondents stated that they always wash used sanitary pads before throw it away. Most of the respondents or 96.2% stated that they always wrap sanitary pads with paper or plastic before dumping it in the trash, only 3 people did not do so. As well as known only 2 or 2.6% female students who claimed ever thrown sanitary trash into the toilet, 76 people remaining or 97.4% claimed to have never done so.

Generally most of participants have good practice of menstrual hygiene. But if we take a look a little closer, it seen that quite a few participants (41%) don't replace sanitary pads after urinating and defecating also 29,5% of participants don't replace the pads when they at school. They choose to hold it until they come home from school even the pads already full of menstrual blood.

Figure 1. Summary Index of Knowledge, Attitude, and Practice Regarding Menstrual Hygiene

This study found the knowledge, attitude, and practice of menstrual hygiene among a primary school adolescents in Surabaya generally are good. As shown on the figure 1, as many as 66,7% participants have good knowledge, 60,3% participants have good attitude, and 79,5% participants have good practice.

Based on this study known that there still quite a lot or as many as 39,7% of participants who don't know when they should replace sanitary pads. Then from the attitude and practice assessment, known some participants state that they don't replace pads after urinating and defecating and they agree with that. Besides that quite a lot of participants who don't replace their pads in school and choose to hold it until they come

home from school.

Besides because of lack of information or knowledge there is another reason that makes students feel lazy to replace sanitary pads at school is that the condition of the bathroom is poorly maintained, the number of toilets is small and the availability of water is inadequate. The poorly maintained condition of the toilet creates an uncomfortable impression for the users, especially for students who will replace the pads. Also, the quantity or proportion of bathrooms in schools is not comparable to the number of students. So that it can result in students urinating carelessly and students are reluctant to replace sanitary pads at school.^[7]

Conclusions

The results indicate that the majority of the participants have good knowledge, attitude, and practice regarding menstrual hygiene. However, it was unsatisfactory, because there are still quite a lot of participants who haven't understand about the right time when they have to replace the sanitary pads yet. Hence, health education program should be conducted in those communities to persuade behavior change. Also, menstrual hygiene management friendly water, sanitation, and hygiene infrastructure and facilities should be developed in school.

Conflicts of Interest: The author declares that there is no conflict of interest.

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Ethical Clearance: This study was approved by The Ethical Board Faculty of Dentistry, Airlangga University.

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