



International Journal of Advanced Research in Future Ready Learning and Education

<https://www.akademiabaru.com/submit/index.php/frle/index>

ISSN: 2462 - 1951



A Study of Knowledge and Practices on Menstruation among Adolescent Girls in Rural Areas in Malaysia

Noor Syuhada Abdul Hakim^{1,*}, Mohd Azlan Omar², Muhammad Hafiz Abdul Hakim³

¹ Faculty of Cognitive Sciences and Human Development, University of Malaysia Sarawak, Malaysia

² Narcotics Crime Investigation Department Sarawak (PDRM), Malaysia

³ Malvern Pathology Labs, Petaling Jaya, Selangor, Malaysia

ABSTRACT

Learning about menstrual hygiene is an essential aspect of health education, especially for adolescent girls. Many adolescent girls have insufficient knowledge about menstrual hygiene awareness, which can lead to poor menstrual hygiene practices. This study observed the knowledge of menstruation and menstrual hygiene practices among adolescent girls in rural areas. One hundred adolescent girls from the rural areas located in Negeri Sembilan were involved in this study. Respondents completed three parts of the questionnaire, namely, demographic information, general information about menstruation, and menstrual hygiene practices. The study found that the majority of the respondents attained menarche at the age of 12-15 years. The main source of information about menstruation was from their mothers (60%). In practice, 69% of them change their sanitary pads thrice daily. Most respondents (80%) dispose of used sanitary pads in the waste bin. Also, 60% changed sanitary pads at school. 90% still need more information about menstruation and menstrual hygiene. Hence, educating them about menstruation and menstrual hygiene is essential so they can practice properly and hygienically during menstruation.

Keywords:

Adolescent; knowledge; menstruation;
menstrual hygiene; practices

Received: 12 July 2023

Revised: 9 Aug 2023

Accepted: 13 Sept 2023

Published: 30 Sept 2023

1. Introduction

Menstruation can be defined as one of the unique natural processes that occur every month in healthy teenage girls and perimenopause women [1]. All adolescent girls need to have sufficient information and knowledge related to menstruation, menstrual hygiene, as well as menstrual cycle before they experience menarche [2]. The response during menstruation depends on the knowledge and awareness of the adolescent girls [3]. Misconceptions about the menstrual cycle and menstruation can often lead to unhygienic practices during monthly menstruation [4].

Meanwhile, menstrual hygiene can be interpreted as a personal hygiene practice during monthly menstruation, such as bathing, constantly changing menstrual absorbents, using the correct menstrual absorbents, disposing of used ones properly, and always washing the genital area [5]. Borkar *et al.*, [6] found that most adolescent girls who live in rural areas do not practice proper hygiene during menstruation. This is because most of them are still bound by various restrictions and hesitate

* Corresponding author.

E-mail address: syuhada565656@gmail.com

to discuss sensitive issues, especially those related to menstrual hygiene. Furthermore, some have negative perceptions and behaviour toward menstrual hygiene due to their religious, cultural, beliefs, discriminations, and taboos [5]. Women who have better knowledge about menstrual hygiene and always practice proper hygiene during menstruation are less exposed to reproductive tract infections (RTI), urinary tract infections, gastrointestinal manifestations, dysmenorrhoea, and depression [3,4].

Menstruation is a time when females need to practice hygiene. Healthy practices are essential for well-being and health [7]. Previous studies have found that many adolescent girls lack sufficient knowledge of menstruation and menstrual hygiene practices [7,8]. A study done by Cham *et al.*, [5] indicated that insufficient sanitary facilities at school lead to unhygienic menstrual practices among 70 % of adolescent school girls. To date, only a few studies have focused on knowledge and hygienic practices during menstruation among adolescent girls in rural areas in Malaysia. Therefore, findings from this study are hoped to provide additional information related to this issue.

1.2 Research Question

The research questions of this study are as follows:

1. What kind of knowledge is related to menstruation among adolescent girls in rural areas?
2. How do adolescent girls in rural areas practice menstrual hygiene during their menstruation?

1.3 Research Objectives

To assess the knowledge and hygienic practices of adolescent girls in rural areas during their menstruation and to identify any areas where improvement is needed.

2. Methodology

2.1 Study Design and Selection of Sample

A descriptive cross-sectional study was conducted among one hundred adolescent girls from rural areas located in Negeri Sembilan in Malaysia. The inclusion criteria in this study are adolescent girls who have started menstruating, aged between 12 to 17 years old, unmarried, and free from gynecological and also medical problems.

2.2 Instruments

The instrument of this study is a set of questionnaires. The questions in the questionnaire form were referred from The Menstrual Practices Questionnaire [9]. This questionnaire comprised 16 questions and consisted of bi-language, i.e., English and Malay versions. There are three main parts of the questionnaire form which are:

2.2.1 Part A: Demographic information

In this part, questions consist of respondent's demographic information such as race, mother's education, mother's occupation, relationship with mother, and socio-economic status.

2.2.2 Part B: General information about menstruation

For part B, the questions are based on the respondent's knowledge about menstruation, such as the age of menarche, source of information about menstruation, reaction to first menstruation, perception of the cost of using sanitary pads and also if they need more information about menstruation and menstrual hygiene.

2.2.3 Part C: Menstrual hygiene practice during menstruation

For this part, the questions are related to attitudes and practices during menstruation, such as the frequency of cleaning the external genitals during menstruation, materials used to clean the external genitals, disposal of used sanitary pads, changing of sanitary pads at school, and the number of pads per day.

2.3 Data Collection Procedure

All respondents were explained the purpose of this study, and their confidentiality was ensured. The respondents were instructed on how to fill out the questionnaire, and the researcher explained each question in detail. Adequate time was given to the respondents to fill out the questionnaire.

2.4 Data Analysis Procedure

The data collected from the questionnaire were reported in the form of percentages and frequency using Microsoft Excel.

3. Results and Discussion

3.1 Part A: Demographic Information

Table 1 shows the frequency and percentage results for demographic information among 100 respondents who participated in this study. The majority of the respondents are Malay (75%), followed by Indian (15%) and Chinese (10%). As for mother's education, secondary school shows the highest percentage (81%), followed by primary school (11%), university, and also read and write both show 4% respectively. Besides, it shows that 82% of the respondent's mothers are housewives, and only 18% are employed. Apart from that, most of the students have ordinary relationships with their mothers (59%), followed by very close (23%) and finally close (18%). Regarding socio-economic status, 77 % are in the middle status, low status (20%) and high status (3%).

Table 1

Frequency and percentage results for demographic information

Demographic Data	Frequency (n)	Percentage (%)
Race		
Malay	75	75
Indian	15	15
Chinese	10	10
Others	0	0
Mother's education		

Read and write	4	4
Primary school	11	11
Secondary school	81	81
University	4	4
Mother's occupation		
Housewives	82	82
Workers	18	18
Relationship with their mother		
Very close	23	23
Close	18	18
Ordinary	59	59
Socio-economic status		
High	3	3
Middle	77	77
Low	20	20

3.2 Part B: General Information about Menstruation

Table 2 presents the percentage and frequency results for general information about menstruation. As can be seen from the table, 70% of the respondents reported that their menarche age was 12 to 15 years, followed by 20% < 12 years and only 10% > 15 years. Likewise, this result is similar to the previous study by Ahmad *et al.* (10), who found that the age of menarche for the majority of female students is between 12 to 15 years. Next, the main source of information about menstruation is from their mother (60%), followed by friends (20%), teachers (16%), and television (4%). Many previous studies have disclosed that mothers are the primary source of giving information to their daughters regarding menstruation [4,11,12]. Thus, it is very important for mothers to obtain the correct information and knowledge about menstrual hygiene practices [4]. As for the reaction to the first menstruation, 75% of the respondents showed a scared reaction, subsequently followed by discomfort (18%) and lastly usual (7%). Ordinarily, the first reaction to menarche depends on the adolescent girls' knowledge [3]. Hence, collective knowledge or understanding of menstruation is vital to reduce psychological trauma and fear during their first menarche.

Almost half of the respondents (43%) reported that physical activity was the main restriction during menstruation, followed by schooling (30%), religious occasions (20%), and no restriction at all (7%). Some of them face problems in physical activity and schooling during their menstruation due to dysmenorrhoea (period pain) [13,14]. Next, for the perception of the cost of using sanitary pads, the highest percentage is expensive (85%), followed by not expensive (10%), and lastly, followed by do not know (5%). The majority of the respondents indicated that the cost of using sanitary pads is expensive because most of them are from the middle socio-economic status. For results needing more information about menstrual hygiene, 90% of the respondents need more information. In contrast, 10% do not.

Table 2

Frequency and percentage results for information about menstruation

General information	Frequency (n)	Percentage (%)
Age of menarche		
<12	20	20
12-15	70	70
>15	10	10
Source of information		
Mother	60	60
Friends	20	20

Teachers	16	16
Television	4	4
Reaction to first menstruation		
Scared	75	75
Discomfort	18	18
Usual	7	7
Restriction during menstruation		
Religious occasion	20	20
Schooling	30	30
Physical activity	43	43
No restrictions at all	7	7
Perception of cost using sanitary pads		
Expensive	85	85
Not Expensive	10	10
Do not know	5	5
Need more information about menstruation and menstrual hygiene		
Yes	90	90
No	10	10

3.3 Part C: Menstrual Hygiene Practise during Menstruation

Table 3 reveals the percentage and frequency results of menstrual hygiene practice during menstruation. Around 40 % of the respondents cleaned their external genitals > 4 times, followed by 34% cleaning 2 to 4 times, privacy (20 %), and only 6 % for < 2 times. In order to avoid any infection, discomfort, rash, and odour during menstruation, adolescent girls need to clean their genital area as often as possible [15]. Next, for the materials used to clean the external genitalia during menstruation, 60% of respondents used soap and water, 22 % used water and feminine hygiene products, and 18 % of them only used water. Approximately 80 % of respondents have disposed of the used sanitary pads in the dustbin, while another 15 % flushing the sanitary pads in the toilet bowl, and 5 % do not want to tell. The results of this study found that some of the respondents still disposed of the sanitary pads in the wrong way. Therefore, proper instructions on disposing of sanitary pads need to be reinforced to create hygienic conditions at home, school, and their environment [16].

Moreover, almost 69% of respondents change their pads three times daily, 25 % two times, and only 6 % > 3 times per day during menstruation. Some of the girls tend to use sanitary pads for a more extended time to reduce the cost of sanitary pads [17]. Finally, it was identified that 60% of respondents changed the sanitary pads at school, while 40% did not change. Hence, the school authorities should provide proper menstrual waste containers in the toilet to encourage all female students to change sanitary pads at school [11].

Table 3

Frequency and percentage results for menstrual hygiene practise during menstruation

Menstrual hygiene practise during menstruation	Frequency (n)	Percentage (%)
Cleaning frequency of external genitals		
>4 times	40	40
2-4 times	34	34
Privacy	20	20
<2 times	6	6

Materials use for cleaning of external genitals		
Water and Feminine washing products	22	22
Using soap and water	60	60
Using water	18	18
Disposal of Used Sanitary Pads		
Dispose of the Used Sanitary Pad in The Dustbin	80	80
Flushing in Toilets	15	15
Do not want to tell	5	5
Number of Sanitary Pads Per Day		
2 times	25	25
3 times	69	69
>3 times	6	6
Changing Sanitary Pads at School		
Yes	60	60
No	40	40

Overall, the findings of this study revealed that adequate knowledge and practices on menstruation among adolescent girls are vital for optimum menstrual hygiene. Nevertheless, there are some limitations in this study. Firstly, the respondents of this study only involved adolescent girls in rural areas. Therefore, future studies can include respondents from urban areas. In other words, the findings can be generalized in both areas. Secondly, the sample size of this study is small, so further studies are recommended to repeat this study with a larger sample size to obtain more reliable results.

4. Conclusion

In a nutshell, even though some of the respondents in this study already know and practice proper hygiene during their menstruation, most reported still needing more information about menstruation and menstrual hygiene. A few years later, these adolescent girls will become a mother. Indeed, they must have sufficient knowledge about menstruation, menstrual hygiene, and reproductive health because it can affect the well-being and health of their community and future generations.

Additionally, knowledgeable parents, teachers, and educational television programs play a vital role in imparting information and knowledge about proper menstrual hygiene practices to adolescent girls [3]. Besides, our government can also organize an awareness campaign by distributing brochures, pamphlets, and books or by giving a speech on menstruation and menstrual hygiene practices in order to enhance their consciousness and knowledge about this particular issue.

References

- [1] Ilo, Cajetan I., Nwimo, Ignatius O., and Onwunaka, Chinagorom. "Menstrual Hygiene Practices and Sources of Menstrual Hygiene Information among Adolescent Secondary School Girls in Abakaliki Education Zone of Ebonyi State." *Journal of Education and Practice* 7, no. 31 (2016): 88-95.
- [2] Lawan, Umar Muhammad, Yusuf, Nafisa Wali, and Musa, Aisha Bala. "Menstruation and menstrual hygiene amongst adolescent school girls in Kano, Northwestern Nigeria." *African Journal of Reproductive Health* 14, no. 3 (2010): 201–207.
- [3] Dasgupta, Aparajita, and Sarkar, Madhutandra, "Menstrual Hygiene: How Hygienic is the Adolescent Girl?" *Indian Journal of Community Medicine* 33, no. 2 (2008): 77-80.
- [4] Adinma, Echendu Dolly, and Adinma, J.I.B. "Perceptions and Practices on Menstruation amongst Nigerian Secondary School Girls." *African Journal of Reproductive Health* 12, no. 1 (2008): 74-83.

- [5] Cham, Baboucarr, Edem, Edet Rebecca, and Keita, Mariama. "The Demographical Survey Study of Nature of Menstrual Hygiene Among Adolescents' Girls in St. Theresa's Upper Basic School, Kanifing, The Gambia." *Acta Scientific Women's Health* 4, no. 7 (2022): 101-112.
- [6] Borkar, Sonali K., Borkar, Avinash, Shaikh, Mohammed K., Mendhe, Harshal, Ambad, Ranjit, and Joshi, Abhishek. "Study of Menstrual Hygiene Practices Among Adolescent Girls in a Tribal Area of Central India." *Cureus* 14, no. 10 (2022): 1-8.
- [7] Omidvar, Shabnam, and Begum, Khyrunnisa. "Factors influencing hygienic practices during menses among girls from south India- A cross sectional study." *International Journal of Collaborative Research on Internal Medicine & Public Health* 2, no. 12 (2010): 411-423.
- [8] Okafor-Terver, Ifeoma Stella, and Chuemchit, Montakarn. "Knowledge, belief and practice of menstrual hygiene management among in-school adolescents in Katsina State." *J Health Res.* 31, Suppl.2 (2017): S179-187.
- [9] Hennegan, Julie, Nansubuga, Agnes, Akullo, Agnes, Smith, Calum, and Schwab, Kellogg J. "The Menstrual Practices Questionnaire (MPQ): development, elaboration, and implications for future research." *Global Health Action* 13, no. 1 (2020): 1-4.
- [10] Ahmad, Absar, Surbhi, G. Garg., Gupta, Suman, and Alvi, Ruqayya. "Title article: Knowledge and practices related to menstruation among Lucknow college students in North India: results from cross-sectional survey." (2021).
- [11] Aniebue, Uzochukwu Uzoma, Aniebue, Patricia Nonyelum, and Nwankwo, Theophilus Ogochukwu. "The impact of pre-menarcheal training on menstrual practices and hygiene of Nigerian school girls." *Pan African Medical Journal* 2, no. 2 (2009): 1-9.
- [12] El-Hameed, Neamat A. Abd, Mohamed, Maher S., Ahmed, Nadia H., and Ahmed, Eman R. "Assessment of Dysmenorrhea and Menstrual Hygiene Practices among Adolescent Girls in Some Nursing Schools at EL-Minia Governorate, Egypt." *Journal of American Science* 7, no. 9 (2011): 216-223.
- [13] Gupta, Pratima. "Period pain." *British Menopause Society*, (2022): 1-2.
- [14] Liliwati, I., Verna, Lee Kar Mun, and Khairani, Omar. "Dysmenorrhoea and its Effects on School Activities among Adolescent Girls in a Rural School in Selangor, Malaysia." *Medicine and Health* 2, no. 1 (2007): 42-47.
- [15] Zamri, Nordiana, and Zaw, Cho Cho @ Raheema. "Knowledge and Practices of Menstrual Hygiene among Nursing Students in IIUM Kuantan." *Scholars Journal of Applied Medical Sciences* 9, no. 9 (2021): 1411-1417.
- [16] Mudey, Abhay Bhausaheb, Kesharwani, Naveeta, Mudey, Gargi Abhay, and Goyal, Ramchandra C. "A Cross-sectional Study on Awareness Regarding Safe and Hygienic Practices amongst School Going Adolescent Girls in Rural Area of Wardha District, India." *Global Journal of Health Science* 2, no. 2 (2010): 225-231.
- [17] Mahajan, Tanya. "Imperfect Information in Menstrual Health and the Role of Informed Choice." *Indian Journal of Gender Studies* 26, no. 1&2 (2019): 59-78.