



Original Article

Knowledge, Attitude and Practice regarding Menstrual Hygiene among Adolescent Girls of Rural Community in Lahore

Ghulam Fatima¹, Faisal Majeed² and Ayesha Shahzadi³¹Shalamar College of Nursing, Lahore, Pakistan²Doctors Hospital Nursing Colleges and Allied Health Sciences, Lahore, Pakistan³Allama Iqbal Medical College, Lahore, Pakistan

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*Corresponding Author:

Ghulam Fatima

Shalamar College of Nursing, Lahore, Pakistan
ghulamfatima460@gmail.comReceived Date: 10th November, 2023Acceptance Date: 27th December, 2023Published Date: 31st December, 2023

ABSTRACT

Menstruation, a natural occurrence, usually starts in young women aged 14 to 18. Maintaining proper menstrual hygiene is essential to avoid infections in the urinary and reproductive systems. Insufficient knowledge about menstrual processes and hygiene can lead to negative attitudes and improper practices. **Objective:** To assess the knowledge, attitudes, and practices concerning menstrual hygiene among adolescent girls in a rural area of Lahore. **Methods:** The cross-sectional study carried out of rural community in Lahore. The project was carried out December 2018 to February 2019. Data were collected from 200 girls in rural community and after data collection all the information were entered and analysis by using SPSS. After analyzing the data, we assessed 75-80% have good knowledge, attitude and practice in adolescents. Only 10 - 20% girls have lack of knowledge about menstruation hygiene attitude and practice. **Results:** The Results shows high awareness of menstruation as a normal process (99.5%), with most respondents understanding the uterus as the blood source (83%) and the importance of hygiene during menstruation (96.5%). The majority use sanitary pads (74%), know about the menstrual cycle length (95.5%), and recognize bathing as beneficial during menstruation (69.5%), with mothers being the primary source of menstrual information (50.5%). **Conclusions:** The majority of the participants in this study demonstrated a strong understanding, positive attitudes, and effective practices regarding menstrual hygiene. However, a minority still exhibited either moderate or poor levels of knowledge, attitudes, and practices in this area.

INTRODUCTION

The process by which a woman releases blood and other materials from the lining of her uterus at regular intervals of around one lunar month, starting at adolescence and continuing until menopause, with the exception of pregnancy, is known as menstruation [1, 2]. Adolescence is defined as the time in a girl's or boy's life when hormonal changes and physical development take place, often between the ages of 10 and 18 [3]. Menstrual hygiene refers to proper and sufficient hygienic practices throughout the menstrual cycle, including the use of sanitary pads, cleanliness of the external genitalia, prevention of undesirable odors, and regular pad change [4]. Adolescent girls may experience gynecological issues and urinary tract infections as a result of unsanitary menstrual behaviors

[5]. Reproductive health is becoming more widely seen as a social concern. Because of this, focusing on adolescent reproductive health presents both a challenge and an opportunity for health care providers [6]. Although adolescents are generally considered to be a healthy age, many of them lack the knowledge, experience, and comfort to access reproductive health services on par with adults [7, 8]. Given this, it is imperative to look into this issue in order to create a baseline for data on adolescents' knowledge, attitudes, and perceptions [9, 10].

Therefore, the present study was conducted to assess knowledge among adolescents about menstruation, attitude and practice among girls about personal hygiene during menses.

METHODS

The cross-sectional study carried out of rural community in Lahore. The research was carried out December 2018 to February 2019. The study focused on adolescent girls residing in a community, with the inclusion criteria being females aged between 14 to 18 years who had experienced menarche and had regular menstrual cycles. The exclusion criteria encompassed females younger than 14 or older than 18 years, as well as participants with incomplete data or those unwilling to participate. The questionnaire was validated from five experts. Content Validity index testing was done to check the content validity. The CVI for knowledge questionnaire was (0.8611), attitude questionnaire was (0.801) and practice questionnaire was (0.8611). Data was collected from 200 girls in rural community and after data collection all the information were entered and analysis by using SPSS version 23.0. The study participants were adolescent's girls living in community. For quantitative variables, the results were presented as frequency and percentages. The study was approved by Institutional Board, Shalamar Nursing College in March 2019.

RESULTS

Majority (99.5% or 199 respondents) recognize menstruation as a normal physiological process, while only 0.5% (1 respondent) are unaware of this. Majority (99.5% or 199 respondents) recognize menstruation as a normal physiological process, while only 0.5% (1 respondent) are unaware of this. A significant majority (83% or 166 respondents) correctly identify the uterus as the source of menstrual blood, 8% (16 respondents) incorrectly believe it's from the vagina, and 3% are unaware of its origin. A high percentage (96.5% or 193 respondents) acknowledge the importance of personal hygiene during menstruation, while 2.5% (5 respondents) do not see its importance and 1% (2 respondents) lack knowledge on the subject. Most respondents (74% or 148) consider sanitary pads as good absorbents, 25.5% (51 respondents) opt for old cloths/towels, and 0.5% (1 respondent) lack knowledge about suitable absorbents. A majority (95.5% or 191 respondents) are aware of the normal menstrual cycle length, whereas 4.5% (9 respondents) have less knowledge about it. Out two-thirds (67% or 134 respondents) have heard about menarche, while 33% (31 respondents) have not. The primary sources of information about menstruation are mothers (50.5% or 101 respondents), followed by sisters (40.5% or 81 respondents), friends (7.5% or 15 respondents), and other sources (1% or 2 respondents). A majority (69.5% or 139 respondents) understand the usefulness of taking baths during menstruation, 21.5% (43 respondents) do not bathe during their period, and 9% (18 respondents) are unaware of the

benefits of bathing during this time. (Table 1)

Table 1: Knowledge of adolescent's girls about menstruation

Sr. No.	Variables	Frequency (%)
1	Is menstruation being normal process for woman?	
	Yes	199 (99.5%)
	No	1 (0.5%)
2	What is a cause of menstruation?	
	Hormone	192 (96.0%)
	Disease	7 (3.5%)
	Past sins	1 (0.5%)
3	What is an origin of blood?	
	Ovary	12 (6%)
	Uterus	166 (83%)
	Vagina	16 (8%)
	Don't know	6 (3%)
4	Is it important to take care of personal hygiene?	
	Yes	193 (96.5%)
	No	5 (2.5%)
	Don't know	2 (1.0%)
5	What is a good absorbent during menstruation?	
	Sanitary pad	148 (74%)
	Old cloths / towel	51 (25.5%)
	Don't know	1 (0.5%)
6	What is a normal cycle length?	
	21-35 days	191 (95.5%)
	>35 days	9 (4.5%)
7	Have you ever heard about menstrual before menarche?	
	Yes	134 (67%)
	No	66 (33%)
8	What source of information about menstruation?	
	Sister	81 (40.5%)
	Mother	101 (50.5%)
	Friend	15 (7.5%)
	Television	1 (0.5%)
	Others	2 (1%)
9	Is taking bath useful during menstruation?	
	Yes	139 (69.5%)
	No	43 (21.5%)
	Don't know	18 (9.0%)

Table 2 highlights various responses related to menstruation experiences and practices. A significant number of respondents (41.5%) felt discomfort during their first menstruation, while 35.5% were emotionally disturbed, and 18% scared. Majority (90%) experience menstrual symptoms, and 63.5% attend school during their period. More than half (56%) face restrictions during menstruation. In terms of hygiene, 70% understand the importance of maintaining it to prevent diseases, and 77.5% recognize the need for clean water and soap for genital care. Regarding materials, 67% prefer cotton panties for sweat absorption, and 75% believe washing hands before cleaning the genital area prevents infections. However, there's a divide in beliefs about cleaning panties, with 55.5% thinking water alone is sufficient, and practices vary regarding drying panties, with 41% drying them outside and 38.5% inside.

Table 2: Attitude of adolescent's girls about menstruation

Sr. No.	Variables	Frequency (%)
1	What is a reaction to first menses?	
	Happy	10 (5%)
	Scared	36 (18%)
	Discomfort	83 (41%)
2	Do you have a presence of menstrual symptoms?	
	Yes	180 (90%)
	No	20 (10%)
3	Do you attend school during menstruation?	
	Yes	127 (63.5%)
4	Do you experience restriction during menstruation?	
	Yes	112 (56%)
5	Do not take care of hygiene during menstruation can cause disease?	
	Yes	140 (70%)
	No	50 (25%)
6	Access to clean water and used of soap for cleaning genital are important to keep genital in clean condition?	
	Yes	155 (77.5%)
	No	43 (21.5%)
7	Panties which made of cotton are the best material to absorb sweat?	
	Yes	134 (67%)
	No	54 (27%)
8	Washing hand before cleaning genital area can prevent reproductive infection?	
	Yes	150 (75%)
	No	45 (22.5%)
9	Cleaning panties using only water is enough as the blood disappear?	
	Yes	83 (41.5%)
	No	111 (55.5%)
10	Is drying the panties inside room enough as the panties drying outside?	
	Yes	77 (38.5%)
	No	82 (41%)
	Don't know	41 (20.5%)

Table 3 shows menstrual hygiene practices among respondents: 71% use sanitary pads, while 18.5% use rags and 10.5% rely on toilets. In terms of changing absorbents, 45% do so twice a day, 34.5% three or more times, and 20.5% once. Panty changing frequency varies, with 35.5% changing once, 33% twice, and 31.5% three or more times. For disposal, 86.5% use dustbins, and 55.5% wrap pads in plastic bags. Most respondents (93.5%) clean their genital area during menstruation, but only 53.5% take baths. Handwashing before genital cleaning is practiced by 78.5%, and for drying panties, 62% do it inside, while 12% use sunlight. Lastly, 78% use water and soap for washing panties, compared to 22% using only water.

Table 3: Practice of adolescent's girls about menstruation

Sr. No.	Variables	Frequency (%)
1	What type of absorbent material use during menses?	
	Sanitary pad	142 (71%)
	Rag /used cloth	37 (18.5%)
	Toilet	21 (10.5%)
2	What frequency of changing absorbent material during?	
	Once	41 (20.5%)
	Twice	90 (45%)
3	What frequency of changing panties during menses?	
	Once	71 (35.5%)
	Twice	66 (33%)
4	What method of disposing of used pad?	
	Dust bin	173 (86.5%)
	Drain	5 (2.5%)
5	What types of pad wrap use for disposing of pad?	
	Papers	84 (42%)
	Plastic bag	111 (55.4%)
6	Do you clean your genitalia during menstruation?	
	Yes	187 (93.5%)
	No	13 (6.5%)
7	Do you take bath during menstrual?	
	Yes	107 (53.5%)
	No	93 (46.5%)
8	Do you wash hand before cleaning genital?	
	Yes	157 (78.5%)
	No	43 (21.5%)
9	At what place you dry panties?	
	Inside the room	52 (26%)
	Inside the bathroom	24 (12%)
10	What thing you use for washing panties?	
	Water only	44 (22%)
	Water and soap	156 (78%)

DISCUSSION

Practicing hygiene during menstruation is an essential action, as menstruation is a recurring event in a woman's life, typically occurring for about 3 to 7 days each month from its onset until it ceases [11]. In Ali's 2010 research, the majority of participants identified their mothers (71.33% or 102 respondents) as their primary source of menstrual knowledge, followed by sisters (23.78% or 34 respondents) and friends (18.18% or 26 respondents) [12]. This contrasts with Thakur et al., findings, where in the current study, a significant portion of respondents (44.54% or 106 individuals) being the eldest child in their families, often turned to friends for information after their mothers [13]. Meanwhile, another study showed that friends were the most common primary information source (31.8% or 93 respondents), followed by mothers (31.2% or 91 respondents) and sisters (28.1% or 82 respondents) [14]. In the current study, participants reported that their primary

sources of menstrual knowledge were sisters (40.5% or 81 respondents), followed by mothers (50.5% or 101 respondents), and then friends (7.5% or 15 respondents), with sisters being the secondary source of information after mothers. All the respondents in this study, 238(100%), understood menstruation as a physiological process. This is in contrast to Shanbhag et al., study, where only 87% of the participants recognized menstruation as a part of the physiological process, indicating that despite a high percentage of correct responses, there remains a 13% portion of girls who do not share this belief [15]. In a separate study carried out in India by Sharma et al., approximately 50 participants, accounting for 16.6%, held the belief that menstruation is a curse from God [16]. Meanwhile in this present study their respondent who also believe 199 (99.5%) was aware that menstruation is a physiological process. In present study 192 (96%) respondents was know the cause of menstruation is hormone, 7 (3.5%) know its cause by disease and 1 (0.5%) know it due to past sins. The difference may be due to lack of knowledge [17]. The study reveals that a significant majority of the participants, 220 (92.44%), were aware that sanitary pads are the most suitable absorbents to use during menstruation. Conversely, a smaller group, 14 (5.88%), opted for old cloths or towels instead of sanitary pads. In a study conducted by Fakhri et al., the respondents 230 (96.64%) was known about to take care of personal hygiene. Only 8 (3.36%) not know about this [18]. In present study 193 (96.5%) was known about care is important of personal hygiene. In another study conducted washing hands and cleaning of genitals before changing pad 235 (98.74%) respondent was known this condition. Only 3 (1.2%) are not know about that knowledge [19]. In present study 155 (77.4%) respondent was known to keep cleaning of hand and genitals before changing pad. But 43 (21.5%) respondents do not know that importance. This difference may be due to lack of good knowledge and rural community. In present study, 124 (62.0%) respondents place the panties for drying inside the room, 52 (26%) inside the bathroom [20]. Only 24 (62%) respondent dry panties under sunlight. This difference may be due to socio-cultural factors in rural community as reported by Gaferi, and colleagues [21].

CONCLUSIONS

In the light of current study findings, it is concluded that menstrual knowledge among adolescents was satisfactory based on the correct answer, while more than one-fourth of the participants have insufficient knowledge. The majority of the adolescents know correct knowledge about puberty, menses and perception of guidance related personal hygiene. Mostly adolescents heard about menses before menarche through source of social media or mother and sister. Satisfactory knowledge and majority have positive

attitude about menstrual symptoms, about required materials or if don't care personal hygiene cause disease.

Authors Contribution

Conceptualization: GF

Methodology: FM

Formal analysis: FM

Writing-review and editing: FM, AS

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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