

Menstrual Hygiene Management of Lower Socio Economic Status Females

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Abstract

Background: Hygiene is essential for safeguarding personal health against infectious agents. Around one-fourth of all females of reproductive age (between the ages of 12 to 50), are thought to lack the resources necessary to control their menstrual cycles. Girls in Low- and Middle-Income Countries (LMICs) experience critical challenges maintaining proper menstrual hygiene.

Objective: To assess menstrual hygiene management among low household income females in rural areas around Hyderabad Sindh.

Methods: This cross-sectional study was conducted in rural areas of Hyderabad region from July to December 2022. Participants included premenopausal females aged 15 years and older. After taking informed consent and ascent data were collected on pre-designed questionnaire. Data were stored and analyzed using IBM-SPSS version 23.0; Pearson Chi-Square test was used to evaluate the association of menstrual hygiene with the age group of low socioeconomic class, with p-values less than 0.05 considered statistically significant.

Results Of the 129 low-socioeconomic-status women included in this study, 59.7% were between 15 and 25 years of age. Among the women surveyed, 78.3% used cloth pieces as an absorbent material, and 59.5% changed their absorbent only once per day. Regarding sanitation and hygiene, 27.9% disposed of materials in a dustbin, 98.4% used water alone for washing, and 63.6% bathed only once during their menstrual cycle. Additionally, 88.4% washed and sun-dried their undergarments. While 68.2% experienced complications during menstruation, only 15.5% possessed basic awareness of menstrual hygiene and a mere 0.8% had received formal hygiene information.

Conclusion: Menstrual hygiene management found to be poor among low household income females in rural areas around Hyderabad Sindh. Factors relevant to poor management include high costs or unavailability of sanitary products, flow issues and lower abdominal pain.

Key words: Menstrual hygiene products, menstrual hygiene, lower economic status females, menstruation.

Introduction

Wastes produced by a female throughout her reproductive years are called menstruation wastes. Menstruation commonly referred to as menses, a period, or the monthly bleeding cycle generates this waste.¹ The menstrual cycle is

divided into three primary stages: the follicular (proliferative) phase, the ovulatory phase, and the luteal (secretory) phase. The uterine lining, or endometrium, gradually thickens and sheds off during menstruation, which results in bleeding that typically lasts for 3-5 days but can occasionally last up to 7 days.²

Women, girls, transgender people, and gender nonconforming people who menstruate (also known as "menstruators" or "individuals who menstruate") should be able to manage their menstrual cycles in a safe, respectable, healthy and supported way throughout their lives.³ Globally, an estimated 1.8 billion individuals menstruate every month. A significant portion of these girls, women and transgender men face barriers to managing their cycles in a dignified manner that supports good health.⁴

Menstrual management is a very important human right; yet cultural norms as well as a lack of

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Received: 27 May 2024, Accepted: 22 June 2026

Published: 17 July 2026

Authors Contribution (awaited)

ASZ conceptualized the project. AM did the data collection.. AM & AM* did the literature search. ZPB performed the statistical analysis, drafting, revision and writing of manuscript.

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resources, make it difficult for girls and women to manage their menstrual cycle.⁵ Particularly in rural areas, women possess limited or no knowledge regarding the physiological process of menstruation. Consequently, they face numerous barriers, the most prevalent of which is a lack of access to proper sanitation and menstrual hygiene products.⁶ Different populations exhibit various menstruation disorders and this all happens due to their lack of knowledge regarding menstrual hygiene.⁷ Young girls, especially those new to the process know little to nothing about it making it a very hard and scary situation to go through. Educating women and girls regarding this natural phenomenon has always been an ignored effort and whatever little information they get is through their mothers, which can frequently be either misconstrued or would be based on traditional cultural myths. Sanitary products are either too expensive or less talked about making them out of the reach for most people. In Pakistan, limited awareness surrounding menstruation and inadequate access to sanitary products heavily complicate the management and prevention of reproductive tract infections (RTIs).⁸

The current study is planned to determine the menstrual hygiene management of lower economic-status females of Sindh, Pakistan.

Methods

This cross-sectional study was done in rural areas of Hyderabad, Pakistan from July to December 2022. A survey questionnaire was developed to assess menstrual hygiene management practices. Participants included premenopausal females aged 15 years and older. The study did not include any participants under the age of 15, so assent procedures were not applicable. Menstruating females were asked questions related to menstrual hygiene and as in rural areas, women are uneducated so the surveys were filled out by us based on the information provided. Informed consent was obtained from all participants prior to data collection. For participants under 18 years of age, consent was obtained from parents. Data analysis was performed using IBM SPSS version 23.0. Categorical variables, including age groups and menstrual hygiene responses, were summarized using frequencies and percentages. A Pearson chi-square test was used to examine the association between menstrual hygiene practices and age groups within the low socioeconomic sample. Statistical significance was set at $p < .05$. A pie diagram was used to report the age group of studied samples and a bar diagram was used to report the

problems faced by low socio-economic class women during menstrual hygiene.

Results

The present study evaluated 129 women from a low socioeconomic background; of these, 59.7% belonged to the 15-25 age group (Figure-1).

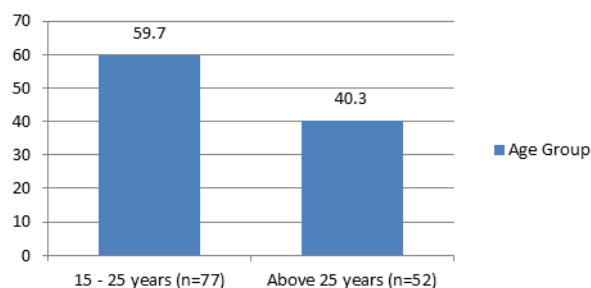


Figure 1: Age group of low socioeconomic background.

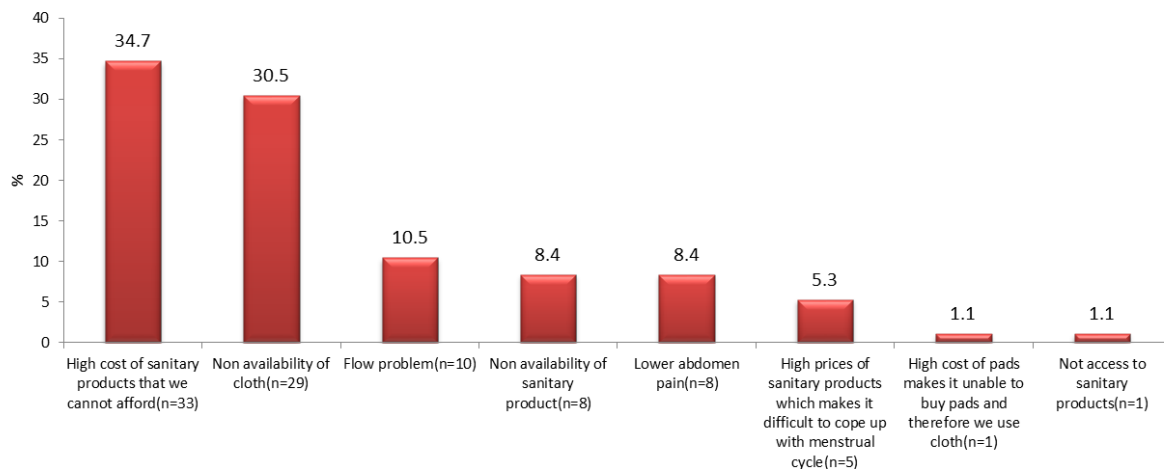
Table outlines critical gaps in menstrual hygiene management among the participants. The majority relied on reusable cloth (78.3%), changed absorbents once daily (59.5%), and used water without soap for cleansing (98.4%). Furthermore, 88.4% sun-dried their undergarments after washing, and 63.6% bathed once per cycle. Although 68.2% faced health problems during menstruation, overall awareness remained remarkably low: only 15.5% had basic knowledge of menstrual hygiene, and only 0.8% had access to structural information. Among participants aged 15-25 years, 74.0% used cloth pieces as an absorbent material, 56.0% changed their absorbent only once per day, and 98.7% used water alone for washing. Within this younger cohort, 28.6% disposed of materials in a dustbin, 67.5% bathed once per menstrual cycle, and 96.1% washed and sun-dried their undergarments. While 70.1% experienced complications during menstruation, only 7.8% possessed a basic conceptual understanding of menstrual hygiene, and a mere 1.3% had received formal hygiene information.

In comparison, among women over 25 years of age, a higher proportion relied on reusable cloth (84.6%) and changed absorbents only once daily (64.7%), while a lower percentage sun-dried their undergarments (76.9%). Similar to the younger cohort, 98.1% used only water for cleansing, 26.9% used dustbins for disposal, and 57.7% bathed once per cycle. Although fewer older women faced health problems during menstruation (65.4%), none had received formal hygiene information, even

Table: Association of menstrual hygiene with age group in low socio economic class.

Parameters		Age Group						p-value
		Total (n=129)		15 - 25 years (n=77)		Above 25 years (n=52)		
		N	%	n	%	n	%	
Absorbent	Pad	28	21.7	20	26.0	8	15.4	0.15
	Piece of cloth	101	78.3	57	74.0	44	84.6	
Disposal	Dustbin	36	27.9	22	28.6	14	26.9	0.22
	None of these	91	70.5	55	71.4	36	69.2	
	Toilet	2	1.6	-	-	2	3.8	
Change	Once	75	59.5	42	56.0	33	64.7	0.32
	Thrice	51	40.5	33	44.0	18	35.3	
Hygiene information	Yes	1	0.8	1	1.3	-	-	0.40
	No	128	99.2	76	98.7	52	100.0	
Face problem	No	35	27.1	21	27.3	14	26.9	0.39
	Yes	88	68.2	54	70.1	34	65.4	
	Sometimes	6	4.7	2	2.6	4	7.7	
Wash	Water only	127	98.4	76	98.7	51	98.1	0.77
	Soap and water	2	1.6	1	1.3	1	1.9	
Tease	No	129	100.0	77	100.0	52	100.0	N.A
	Yes	-	-	-	-	-	-	
Bath	Do not take bath during menstrual cycle	13	10.1	3	3.9	10	19.2	0.01*
	Once	82	63.6	52	67.5	30	57.7	
	Twice	34	26.4	22	28.6	12	23.1	
Penthygiene	Wash and expose to sun	114	88.4	74	96.1	40	76.9	<0.01*
	Hide and discard it	2	1.6	-	-	2	3.8	
	Wash and hide it	13	10.1	3	3.9	10	19.2	
Idea	No	109	84.5	71	92.2	38	73.1	<0.01*
	Yes	20	15.5	6	7.8	14	26.9	

*p <0.05 was considered statistically significant using Pearson Chi Square test

**Figure 2: Problems face by Women for Menstrual Hygiene in Low Socio Economic Class.**

though 26.9% claimed to have some awareness of menstrual hygiene.

No participants reported experiencing teasing or harassment during menstruation. The Pearson chi-square test revealed a significant association between participant age groups and their behaviors regarding bathing, undergarment

hygiene, and conceptual awareness of menstrual hygiene ($p < 0.05$)

Figure-2 illustrates various primary barriers reported by the participants in managing their menstruation. Financial constraints were the most prevalent, with 34.7% citing the high cost of sanitary products, 5.3% noting that high prices made

managing their cycle difficult, and 1.1% stating they used cloth because pads were unaffordable.

Material and structural scarcity were also widespread: 30.5% faced a non-availability of cloth, 8.4% reported a total non-availability of sanitary products, and 1.1% lacked access to any sanitary items. Finally, physiological challenges were reported by a minority of participants, with 10.5% experiencing menstrual flow complications and 8.4% reporting lower abdominal pain.

Discussion

Menstrual waste disposal is a serious issue since it has an impact on the environment and public health. Effective menstruation products with minimal management requirements are required. Mass media platforms are essential for disseminating information regarding menstrual product innovations and legislative updates. Menstrual products should be eligible for subsidies so that every girl and woman may easily afford them. It is important for non-governmental groups to step up and inform rural residents about menstruation, menstrual hygiene management, the value of indoor toilets, hand washing, diseases of the reproductive tract brought on by inadequate cleanliness, and other topics.

In the current study, 78.3% of the surveyed women used cloth pieces as an absorbent material, and 59.5% changed their absorbent only once per day. Regarding sanitation and hygiene, 27.9% disposed of waste materials in a dustbin, 98.4% used water alone for washing, and 63.6% bathed only once during their menstrual cycle. Additionally, 88.4% washed and sun-dried their undergarments. While 68.2% experienced complications during menstruation, only 15.5% possessed a basic conceptual understanding of menstrual hygiene, and a mere 0.8% had received formal hygiene information. D. Ssewanyana et al⁹ concluded that sanitary materials are either manufactured locally or commercially. Given that many cultural conventions will not permit the insertion of a "foreign item" into a young girl, local manufacture is typically limited to pads. Commercial sanitary goods are said to contribute to community trash in addition to being more expensive.⁹ In the survey, by Laura Rossouw et al¹⁰ participants, were asked to name every MH product they had used in the previous menstrual cycle. Because respondents could list multiple MH product types, the categories were not mutually exclusive. Sanitary pads, tampons, fabric, cotton wool, items found in nature, toilet paper, foam (such as from a mattress), a bucket, diapers, or nothing at all were among the items mentioned by the ladies.

Sanitary pads were a consistently big category across nations, and this examination of product access is focused on them.¹⁰

According to a local study¹¹, current menstrual hygiene management strategies must address the underlying causes of inadequate WASH infrastructure in order to be truly effective, and they must ensure that facility design takes gendered and locally ingrained sociocultural values and beliefs regarding menstrual hygiene management into consideration.¹¹

A study done at Karachi Pakistan¹² revealed that 82.5 percent of the 338 individuals had no prior awareness of menstruation at the time of their first period. A total of 41.4% of the women wrongly believed that menstrual blood and urine were released from the same orifice, whereas just a small percentage of women realized that the uterus was the source of monthly blood. Overall 55.5 percent of the participants used disposable sanitary towels. The absorbent was changed between one and three times a day by 65% of the individuals.¹²

According to a study by Aklima Chowdhury Asha et al¹³ et al., 39.9% of individuals reported feeling terrified during their first period. The majority of the information (84.6%) came from mothers. While the majority of participants had positive attitudes around menstruation (67.1), they had poor understanding (56.6%) and habits (68.5%). Age was linked to knowledge scores about menstruation ($p = 0.034$), while family income was linked to attitudes ($p = 0.014$). Knowledge and attitude were both correlated with the father's educational level ($p = 0.049$ and $p = 0.010$). Despite having a decent degree of attitude, the survey respondents had poor knowledge and habits. Mothers were the main source of menstrual hygiene knowledge. Young girls should receive menstrual hygiene information from a reputable, official source.¹³

Conclusion

Menstrual hygiene management found to be poor among low household income females in rural areas around Hyderabad Sindh. Factors relevant to poor management include high costs or unavailability of sanitary products, flow issues and lower abdominal pain. Programmes to control menstrual hygiene must be strengthened. Menstrual hygiene issues must be addressed through education, availability of hygienic absorbents, and proper disposal of menstrual hygiene products. However, due to the sample's limited geographic and socioeconomic scope, the findings of this study may not be generalizable to the entire Pakistani population.

Acknowledgement

We would like to acknowledge Malika Salam Mahesar, Urooj Fatima and Ayesha Salam Mahesar for enormous help in data collection

Funding: None.

Availability of Data: The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Ethical Approval: The Ethical Approval was granted by the Institutional Head, Countess Lady Duffrin Fund Hospital, Hyderabad dated 20/03/2023.

Conflict of Interest: None declared.

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