

# Knowledge, Product Choices and Waste Disposal Techniques Regarding Menstruation among Girl Students of Amritsar City

Rajanbir Kaur, Jasmeen Gill, Arpna Kumari and Rajinder Kaur

**Abstract**— In low and middle income countries, girls/women still have to face many problems regarding menstruation. Misconceptions and false religious beliefs further make it difficult for them during periods. The present study was conducted to evaluate the knowledge of menstruation and menstrual hygiene management among girls of Amritsar city. We also evaluate their menstrual product choices and waste disposal methods. A self-designed questionnaire was prepared to assess the knowledge and perceptions of the girls about menstruation. The questionnaire contains 18 questions related to menstruation, personal hygiene, menstrual product choices, disposal methods and menstrual taboos. The questionnaire was filled by 102 high school and graduate students and a written consent was taken from them. From the above study, it was found that most of the girl students are aware of the menstruation, menstrual hygiene and personal hygiene and about urinary and reproductive tract infections during menstruation. The study also shows that girl students feel shy or embarrassed while purchasing menstrual products. Most of them don't feel comfortable and confident during this period. They mostly prefer to use commercial sanitary pads rather than cloth or cotton. Most of them are graduates and residing in the urban areas of the city. There are less restrictions on them and are supported by the family regarding menstrual needs.

**Index Terms**— Knowledge, menstruation, menstrual hygiene management, sanitary pads.

## I. INTRODUCTION

Menstruation is a unique physiological phenomenon in a girl's life which involves shedding of the endometrial lining of the uterus. This process is controlled by the hormones produced by hypothalamus and pituitary glands of the brain and is divided into three phases i.e. proliferative, ovulation, and secretory phase [1]. Although, menstruation is a physiological process but it is still a taboo in many developing countries. There are many misconceptions and false beliefs related to menstruation. In countries like India, there are cultural, religious and social taboos regarding menstruation faced by girls/women [2]. These restrictions include eating certain foods like pickles, going to kitchen or religious places,

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worshiping, participating in social activities and they also have to sit or sleep separately. Girls/women are considered impure and untouchable on their periods [3], [4]. Moreover, there are many taboos related to menstrual blood which makes washing and drying of used menstrual clothes an embarrassing task. Even at homes menstruation is considered as female's issue and male members ignore or don't want to discuss such issues in the family [5].

Menstrual hygiene management (MHM) is further affected by gender inequality in low and middle income countries [6]. A very little knowledge about menstruation before menarche makes the conditions worsen for girls as they feel fear, disgust, anxiety and embarrassed [7]. Girls/women have very few resources available and also, they possess very little knowledge about menstrual hygiene and menstrual disorders. They don't have access to good quality sanitary products due to poor economical conditions and lack of privacy and adequate water and sanitation system further makes it difficult for them. Incorrect and incomplete information about menstruation leads to various health disorders [8]. Adequate water and sanitation facilities in schools and workplaces make it difficult for girl students to remain present during this period. They also face difficulty in disposing the used menstrual products at schools due to lack of dustbins in the toilets [9]. The objective of this paper is to evaluate the knowledge of menstruation and menstrual hygiene management among school/college girls. Their perception for menstruation as a taboo and difficulties they face during this period are also assessed.

## II. METHODOLOGY

**Type of study:** This study was a cross-sectional observational study conducted among the school/college girl students

**Study population:** The study includes 102 girl students of 15-23 years of age who had attained puberty and is willing to participate.

**Study tool:** A questionnaire was prepared in English language having 18 questions related to menstruation knowledge, practices and on menstrual taboos. A written consent was taken from the girl students.

**Data analysis:** The collected data was entered into Microsoft excel spreadsheet, frequencies and proportions were calculated.

### III. RESULTS AND DISCUSSION

#### A. Socio-demographic Study

In developing countries like India, there are still many religious and cultural barriers in the path of good menstrual hygiene management. The socio-demographic profile of the participants is given in Table I. In the present study, the most of the girl students were between 21 and 23 years of age, 43 (42.15%). The education status of the participants shows that most of them are graduate students 68 (66.6%) and belongs to different religions i.e. Sikhs 33 (32.3%), 42 Hindus (41.1%), Christians 9 (8.82%) and others 18 (17.6%). Most of the students were residing in urban areas of the city i.e. 54 (52.9%).

TABLE I: SOCIO-DEMOGRAPHIC STUDY (N=102)

Variable	Subgroups	No. of participants	Percentages
Age (years)	15-17	31	30.39
	18-20	28	27.45
	21-23	43	42.15
Education status	High school	34	33.33
	Graduate	68	66.66
Religion	Sikh	33	32.35
	Hindu	42	41.17
	Christian	9	8.82
	Others	18	17.64
Residence	Urban	54	52.94
	Rural	48	47.05

#### B. Knowledge and Practices Regarding Menstruation

The knowledge of the participants regarding menstruation, menstrual hygiene management and different practices practiced by them during this period are shown in Table II. The

study shows most of the girl students were aware of menstruation and know it is a physiological process as only 8 (7.84%) considered it as a disease. In the present study, only 32 (31.37%) girl students know that the bleeding during menstruation occurs due to the shedding of the uterus lining. Several studies show that education status of the parents and girls contributes towards the better knowledge of the menstruation [5], [10]. Most of the participants in the study 98 (96%) know that personal hygiene during menstruation prevents reproductive and urinary tract infections. One possible reason for their knowledge about personal hygiene is their literacy rate as most of the students are graduates 68 (66.6%). It was also described earlier by Khanna et al that poor menstrual hygiene leads to urinary and reproductive disorders [11]. They learn about menstruation in the school/college curriculum. Many others studies also show that there is an association between the literacy rate and personal hygiene of the girls [12]. The choice of menstrual products mainly depends upon the cultural acceptability, availability in the market and economical status of the family. In this study, girls mostly rely on commercial sanitary pads 92 (90%) as compare to cloth towel 6 (5.8%) and cotton 4 (3.9%). Earlier studies show same results that most of the girls prefer to use commercial sanitary pads because most of them are residing in the urban areas and belong to middle class families [13], [14]. The study shows most of the students dispose their used menstrual pads in the dustbins 92 (90%) whether they are at home or workplace. Only 3 (2.9%) students prefer to burn the used pads or cloths while other 7 (6.8%) flush them in the toilets. The earlier studies shows due to lack of dustbins, proper door locks and water facility in the schools/colleges is a reason given by students to remain absent [15], [16].

TABLE II: KNOWLEDGE AND PRACTICES OF THE RESPONDENTS REGARDING MENSTRUATION (N=102)

Variables	Subgroups	No. of participants	Percentages
Menstruation is a disease?	Yes	8	7.84
	No	94	92.15
Menstrual blood comes from?	Vagina	42	41.17
	Bladder	2	1.96
	Uterus	32	31.37
	Don't know	26	25.49
Personal hygiene during menstruation prevents reproductive and urinary tract infection?	Yes	98	96.07
	No	4	3.92
Sanitary materials used	Cloth towel	6	5.88
	Sanitary pad	92	90.19
	Tampons	0	0
	Natural materials (leaves, ash)	0	0
	Cotton	4	3.92
Methods of disposal	Burn	3	2.94
	Throwing in dustbin	92	90.19
	Bury	0	0
	Dispose into toilets	7	6.86

TABLE III: MENSTRUAL TABOOS (N=102)

Menstrual Taboos	Variables	No. of participants	Percentages
1. Are you comfortable in speaking about menstruation with opposite gender?	Yes	63	61.76.
	No	39	38.23
2. Do you believe there should be restrictions on menstruating women from going to religious places or kitchen?	Yes	5	4.90
	No	97	95.09
3. Have you ever wanted to buy sanitary pad from shop but felt shy/embarrassed?	Yes	37	36.27
	No	65	63.72
4. Do your family support you in menstrual hygiene management by giving money to buy menstrual products?	Yes	96	94.11
	No	6	5.88
5. Do you think periods are embarrassing?	Yes	12	11.76
	No	90	88.23
6. Do you feel as confident in your periods as you are on other days?	Yes	42	41.17
	No	60	58.82
7. Have you ever missed your school/college because of menstruation?	Yes	27	26.47
	No	75	73.52
8. Do you perceive menstruating women as impure?	Yes	16	15.68
	No	86	84.31
9. Do you believe menstruation is treated as natural process within the society?	Yes	10	9.80
	No	92	90.19

C. Taboos Related to Menstruation

In low-income countries like India, there are many taboos prevailed in different religions and ethnic groups related to menstruation. Menstrual taboos and the people’s perceptions towards them are listed in the Table III. The present study shows that most of the girls 63 (61.7%) are comfortable in speaking about menstruation with the opposite sex. Also, 97 (95%) students believed that there should be no restrictions on menstruating women from going to religious places or kitchen. Several earlier studies show that various restrictions by guardians hinder the overall development of the girls. They feel less confident or shy during this period [17]. About 37 (36.27%) students feel shy or embarrassed while purchasing sanitary pads or other products from the shops. The study shows that the families of the girls are supportive towards their menstrual needs and hygiene as only 6 (5.8%) student’s response shows the unsupportive behavior of the family members for buying menstrual products. About 12 (11.7%) students think that periods are embarrassing and 60 (58.8%) students feel less confident on their periods as compare to other days at school or workplaces. This study shows 27 (26.4%) students missed the school during their periods as they don’t feel comfortable and confident enough. Menstrual pain and poor water and sanitation facilities in most of the schools and colleges is also a reason for their absence. The present study shows, 16 (15.6%) students perceive menstruating women as impure. The lack of knowledge, parent’s illiteracy and false cultural/religious beliefs are a reason behind their perception. About 10 (9.8%) students

believe that menstruation should be treated as a natural process in the society. In this study we found that 45 (44%) students feel difficulty in disposing the used menstrual pads/cloths (Fig.1). About 32 (31%) students think that menstruation is a women’s issue and should not be discussed by men (Fig.2).

Participants feel difficulty in disposing used menstrual products

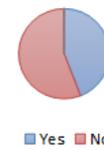


Fig. 1. Participants feel difficulty in disposing used menstrual pads/cloths.

Do you think menstruation is women’s issue and should not be discussed by men?



Fig. 2. Participants think menstruation is women’s issue and should not be discussed by men

#### IV. CONCLUSION

The above study shows that good menstrual hygiene practices are influenced by education status of the parents as well as of the students. As, most of the students are literate and belongs to middle class families, they have good knowledge about menstruation and face less restrictions on them. Also, they are aware of their personal hygiene during menstruation. Most of the girl students have positive attitude and perceptions towards menstruation. The study also reveals the difficulties faced by girls during menstruation at schools/workplaces. So, by providing proper water and sanitation facilities, dustbins, toilet doors with locks, privacy etc. we can make the environment better for them to deal with menstruation with safety and dignity. Efforts are also required to install sanitary napkin vending machines to deal with menstruation emergencies and incinerators for their easy disposal.

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