

Knowledge and Practice of Menstrual Hygiene among Adolescent Girls Living in Slums of Guwahati City

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Abstract: *Background:* Adolescence is a stage of transition from childhood to adulthood. WHO has defined it as the period between 10-19 years of life. In a girl, this stage is marked by a number of physiological, behavioral and psychological changes, the most notable being the onset of menstruation. Menarche is not just a physiological phenomenon but it is a psychological, social as well as behavioral transition for an adolescent girl from girlhood to womanhood. However, menstruation is linked with several misconceptions and bad practices which may in the long run result into adverse health outcomes. *Objective:* To assess the knowledge and menstrual hygiene practices among adolescent girls living in slums of Guwahati city. *Methodology:* A community-based cross sectional study was conducted among adolescent girls living in the slums of Guwahati city from 28th October-28th November 2019. A total of 300 adolescent girls were interviewed using pre-designed pre-tested schedule. *Inclusion criteria:* Adolescent girls (10-19 years) who have attained menarche and who gave consent. In case of minors, consent was taken from their legal guardians. *Exclusion criteria:* Seriously ill adolescent girls. Data was compiled using Microsoft excel and Graphpad INSTAT(version3.05). *Result:* The study shows that around 40% of the respondents belong to the age group 10-13 years. Most of them (40.67%) were using sanitary napkins and majority of them (80.33%) disposes their absorbent as usual waste.

Keywords: knowledge, Practice, Menstrual hygiene, adolescent girls, slums

1. Introduction

Adolescence has been recognized as a special period in girls which signifies the transition from girlhood to womanhood¹. Adolescents (10-19 years) in India represent almost one-third of the total country's population.² This period is characterized by major biological changes such as physical growth, sexual maturation and psycho-social development, the most notable being the onset of menstruation.³ Menstruation, though natural process, is still regarded as something unclean or dirty in Indian society and linked to several misconceptions and practices which results in adverse health outcomes.⁴ Menstruation is still a taboo in India and it is not uncommon for people across society to feel uncomfortable about the subject. Coupled with it, is the fact that there is lack of proper information on the process of menstruation and also the requirements for managing menstruation. The taboos that surrounds this issue in the Indian society also prevents girls and women from articulating their needs and the problems of poor menstrual hygiene management have been largely ignored or misunderstood. Also, there are studies which have proved a direct link between poor menstrual hygiene and urinary or reproductive tract infections and other illnesses³. Good menstrual hygiene such as the use of sanitary pads and adequate washing of the genital area is essential during menstruation. Women and girls of reproductive age need access to clean and soft absorbent sanitary products which in the long run will protect their health.⁴

Adolescents in slums face serious problem of lack of access to reliable knowledge on the process of growing up and

reproductive health practices. Moreover, they are exposed to poor sanitary facilities and unhygienic practices.⁵ Hence this study was conducted to elicit the knowledge and practices of menstrual hygiene in adolescent girls living in slums of Guwahati city in Assam.

Objective

- 1) To study the knowledge and practice of menstrual hygiene among adolescent girls living in slum areas.
- 2) To assess the restrictions practiced during menstruation by adolescent girls

2. Materials and Methods

A community-based cross sectional study was done among the adolescent girls from the age group 10 to 19 years living in the slums of Guwahati city from 28th October to 28th November 2019. Out of the 99 notified slums of Guwahati city by the Guwahati Municipal Corporation, 10 % of the slums were selected by simple random sampling method. From those 10 selected slums, 30 adolescent girls were selected randomly thus giving us a sample size of 300 adolescent girls. In each slum the first household was selected randomly and then house to house visit was conducted till the desired sample size was obtained. All the adolescent girls meeting the inclusion criteria were interviewed using a pre designed pre tested schedule. **Inclusion criteria:** 1) Adolescent girls (10 to 19 years) who have attained menarche. 2) Those who gave consent and in case of minors, consent was taken from legal guardians. **Exclusion criteria:** 1) seriously ill adolescent girls. 2) Those who did not give consent. The data was compiled

using Microsoft Excel and Graph Pad INSTAT (version 3.05)

3. Results

Table 1 presents the sociodemographic details of the respondents. Out of 300 adolescent girls, a total of 120 (40%) respondents belonged to the age group 10-13 years. Most of the respondents (60.33%) were Muslim by religion and around 174 participants (58%) were living in Nuclear family. A total of 145 mothers (48.33%) of the respondents were illiterate.

In table 2, out of 300 respondents, maximum respondents (76%) had attained menarche between 10-13 years of age. It is also seen that only 105 respondents (35 %) were aware about menstruation before menarche and the most common source of the information regarding menstruation were their mothers followed by their sisters in 69.52% and 17.14% respectively.

Table 3 shows the knowledge and practice of menstrual hygiene in adolescent girls. It is observed that 258 girls (86%) know that menstruation is a normal process whereas 18 girls (6 %) believed menstruation is an abnormal process. Out of 300 respondents, only 117 respondents (39 %) were aware that the source of the menstrual bleeding was the uterus. A total of 285 respondents (95%) know that the ideal absorbent to be used during menstruation is sanitary pad. The study also shows that out of 300 respondents, 122(40.67%) girls use sanitary pads during menstruation whereas 94(31.33%) girls use both sanitary napkins and cloth piece together. Most of the respondents (62.67%) change their sanitary pads twice a day. A total of 175 respondents (67.05%) do not change absorbent in school and 241(80.33%) dispose their absorbent along with routine waste.

Table 4 shows the restrictions practiced during menstruation by adolescent girls. Different types of restrictions were practiced where the most common restriction was not attending religious occasions practiced by 95% of the respondents followed by abstinence from routine house-hold work in 44.67%.

Table 1: Showing the Socio-demographic characteristics of the study subjects.

Characteristics		No. of respondents	Percentage (%)
Age (in years)	10-13	120	40
	13-16	96	32
	16-19	84	28
	Total	300	100
Religion	Hindu	119	39.67
	Muslim	181	60.33
	Total	300	100
Type Of Family	Nuclear	174	58
	Joint	126	42
	Total	300	100
Educational Status	Illiterate	39	13
	Primary	51	17
	Upper Primary	96	32
	Secondary	72	24
	Senior Secondary	42	14
	Total	300	100
Educational Status Of Mothers	Illiterate	145	48.33
	Primary	102	34
	Upper Primary	28	9.33
	Secondary	20	6.67
	Senior Secondary	5	1.67
	Total	300	100

Table 2: Showing the general information of the study subjects regarding menstruation.

Characteristics		No. of respondents	Percentage (%)
Age of Menarche (in years)	10-13	228	76
	13-16	63	21
	16-19	9	3
	Total	300	100
Awareness about Menstruation Before Menarche	Yes	105	35
	No	195	65
	Total	300	100
Source of Information Before Menarche (N= 105)	Mother	73	69.52
	Sister	18	17.14
	Friends	8	7.62
	Teachers	4	3.80
	Others	2	1.90

Table 3: Showing the knowledge and practice of menstrual hygiene among the study subjects

Variables	Questions	Response	No. of respondents	Percentage (%)
Knowledge	What do you think menstruation is?	Normal process	258	86
		Abnormal process	18	6
		Don't know	24	8
		Total	300	100
	From which organ does the menstrual blood come?	Uterus	117	39
		Vagina/urethra	74	24.67
		Don't know	109	36.33
		Total	300	100
	What absorbent to be ideally use during menstruation?	Sanitary napkin	285	95
		Cloth	15	5
Total		300	100	
Practices	Type of absorbent used during menstruation?	Sanitary napkin	122	40.67
		Clothes	84	28
		Both sanitary napkin & clothes	94	31.33
		Total	300	100
	Place of drying cloth pieces	Indoor	43	24.16

	(n = 178)	Outdoor without sunlight	96	53.93
		Outdoor in Sunlight	39	21.91
		Total	178	100
	Frequency of changing absorbent?	1	52	17.33
		2	188	62.67
		≥3	60	20
		Total	300	100
	Whether absorbent changed in schools? (n=261)	Yes	86	32.95
		No	175	67.05
		Total	261	100
	Methods of disposal?	Throw it with routine waste	241	80.33
		Burned	39	13
		Buried	5	1.67
		Others	15	5
		Total	300	100

Table 4: Showing the restrictions practiced during menstruation by the study subjects

Restrictions		No. of respondents	Percentage (%)
RESTRICTION PRACTICED (multiple responses)	Religious occasions	285	95
	Routine household work	134	44.67
	Attending school	39	13
	Playing	36	12
	Sleeping separately	24	8

4. Discussion

In the study, out of 300 adolescent girls, most of them belong to the age group 10-13 years as compared to the study done by Mohite R V, Mohite V R³ and Bhattacharjee S, Ray K, Biswas R, Chakraborty M⁴ where majority of the study subjects were 14-16 years of age. In our study, the age of menarche for maximum respondents (76%) falls between 10-13 years which is in accordance with the study done by Mohite R V, Mohite V R³ where the age of menarche for maximum (66.9%) adolescent girls was below 13 years of age. Around 35% respondents were aware about menstruation before menarche and the most common source of information was their mother (69.52%) which is similar to the study by Thakre S B et al⁵ where the most common source of information about menstruation was mothers of the adolescent girls (71.33%)⁵.

In the present study, most of the respondents (86%) knew that menstruation is a normal process and similar findings were seen in a study by Dasgupta A, Sarkar M⁶ where maximum study subject (86.25%) believed menstruation to be a physiological process. It was observed that maximum respondents in our study did not know the origin of menstrual blood. Hygiene related practices during menstruation is of considerable importance as it can affect health by increasing their vulnerability to infections. In our study, we have found that 40.67% of the respondents uses sanitary napkins during menstruation as compared to the studies done by Mohite R V, Mohite V R³ and Thakre S B et al⁵ where the use of sanitary napkins was 12.6% and 49.35% respectively. Also in our study, a total of 67.05% respondents do not change their absorbent in schools which may be due to lack of separate toilets and washrooms for females or lack of bins for proper disposal in schools.

Furthermore, in this study, the community depicted a strong web of restrictions practiced during menstruation by females. It was seen that multiple social and religious restrictions are practiced such as not attending religious

occasions, abstinence from doing household chores, sleeping separately etc. out of which the most common was related to religious occasions seen in 95% of the study subjects which is similar to the findings in the study by Thakre S B et al⁵ (94.74%).

5. Conclusion

In all levels of society, adolescent girls should be educated about the facts of menstruation, implications of menstruation and also the hygienic practices during menstruation. Attention and focus should also be given to proper disposal facility in schools so that adolescent girls can freely change their absorbent in schools. There are still so many taboos related to menstruation in the society and it is important to bring them out of their traditional beliefs and restrictions so as to enable them to lead a healthy life.

Ethical Approval: Approved by the Institutional Ethical committee

Funding: No source of funding

Conflict of Interest: None

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