



# AWARENESS AND PRACTICES REGARDING MENSTRUAL HYGIENE AMONG WOMEN OF REPRODUCTIVE AGE GROUP ATTENDING A TERTIARY CARE HOSPITAL OF INDORE, INDIA

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## ABSTRACT

**Background:** There is a substantial lacuna in the knowledge about menstruation among adolescent girls and women of reproductive age group. Objective of the study was to assess the knowledge amongst women of reproductive age group regarding menstruation and its hygiene related practices.

**Methods:** All females of reproductive age group (15-45 years) attending gynaecology OPD in the month of January 2015 at Aurobindo hospital was administered a pretested semi-structured questionnaire regarding knowledge and practices related to menstrual hygiene.

**Results:** The mean age of females 30.7 years while 13.2 ±0.75 years, was mean age of menarche. The first source of information regarding menarche came from their mothers as 36.5% were only aware of menstruation before menarche. During menstruation 67.7% used sanitary pads while rest used cloths. The cleaning of external genitalia daily was practiced by 90.3% of urban living participants where in those living in rural areas were 83.09%.

**Conclusion:** Literacy status was found to be significant for awareness about menstruation and the use of sanitary pads. Significant difference was also found in the use of sanitary pad vs cloth in those living in rural and urban areas.

**Key words:** menstruation, menstrual hygiene, adolescent, hygiene

## BACKGROUND

There is a substantial lacuna in the knowledge about menstruation among adolescent girls. Several research studies have revealed this gap and they showed that there was a low level of awareness about menstruation among the girls when they first experienced it<sup>1, 2, 3</sup>. Many studies have revealed that most of the young women

had incomplete and inaccurate information about the menstrual physiology and hygiene. It also revealed that mothers, television, friends, teachers and relatives were the main sources which provided information on menstruation to the adolescent girls<sup>4, 5, 6</sup>. Good hygienic practices such as the use of sanitary pads and adequate washing of the genital area are essential during menstruation. Women and girls of the reproduc-

tive age need access to clean and soft absorbent sanitary products which can, protect their health in the long run<sup>7</sup>. Menstrual hygiene and management will directly contribute to (MDG)-2 on universal education, MDG-3 on gender equality and women empowerment<sup>8</sup>. Objective of the study was to assess knowledge and practices amongst women of reproductive age group regarding menstruation and its hygiene related practices.

**METHODS**

The study was conducted in January 2015 by the department of Community Medicine at Sri Aurobindo Medical College and Post Graduate Institute, Indore (M.P). All females of reproductive age group (15-45 years) attending routine gynecology OPD (including the female relatives of the patients accompanying them) in the month of January 2015 were included in the study after taking their verbal consent. A pretested semi-structured questionnaire was used which consisted of questions regarding the knowledge related to menstrual hygiene and the practices done in routine by the study subjects during their menstrual cycle. Interview method was used for data collection. Approval from institutional ethical committee was taken prior to the start of study.

**RESULTS**

In the present study it was found that 38.7% in urban and 29.5% in rural were aware about menstruation before menarche and the main source of information regarding menarche was mother i.e. 71.3% in urban and 57.7% in rural. In urban area 15.41% and 21.12% in rural area didn't know the cause of menstruation. It was also found that 30.46% in urban area and 42.2% in rural area used cloth during menstruation and 67 % used pad during menstruation. Regarding the menstrual hygiene practices it was found that 50 % used pad during menstruation. Regarding the menstrual hygiene practices it was found that 50 % subjects both in urban and rural cleaned genitalia daily. About 141(50.5 %) in urban and 24 (33.8 %) in rural area used soap and water for cleaning of external genitalia and only 9 (12.6 %) in rural and 24 (8.60%) in urban used antiseptic for cleaning of external genitalia. More than 60 % of subjects in rural and urban area burnt the used cloth /pad of menstruation and only 30 % threw it in waste.

**Table 1: Age wise distribution of patients**

Age (in years)	Total n=350 (%)
15 - 25	161 (46%)
26 - 35	99 (28.2%)
36 - 45	57 (16.2%)
>45	33 (9.4%)

**Table 2: General information about menarche**

	Urban (n=279) (%)	Rural (n=71) (%)	P-value
<b>Awareness about menstruation before menarche</b>			
Yes	108 (38.7)	21 (29.5)	0.231
No	171 (61.2)	47 (66.1)	
<b>Source of information regarding menarche</b>			
Mother	199 (71.3)	41 (57.7)	0.002
Sister	27 (9.6)	3 (4.22)	
Other's	53 (18.99)	27 (38.02)	
<b>Cause of menstruation</b>			
Don't know	43 (15.41)	15 (21.12)	0.000
Curse of God	18 (6.45)	12 (16.90)	
Physiological	218 (78.1)	44 (61.9)	
<b>Ideally what people use during menstruation</b>			
Cloth	85 (30.46)	30 (42.2)	0.059
Pad	194 (69.53)	41 (57.7)	

\*Chi-square test applied in above table

**Table 3: Menstrual hygiene practices**

	Rural n=71 (%)	Urban n=279 (%)	P-value
<b>What material you use during menstruation</b>			
Sanitary pad	39 (54.9)	183 (65.5)	0.001
New cloth	11(15.4)	60 (84.5)	
Old cloth	21(29.5)	33 (11.8)	
<b>Cleaning of external genitalia</b>			
Daily	59 (83.09)	252 (90.3)	0.084
Only during menses	12 (16.90)	27 (9.6)	
<b>How you clean external genitalia</b>			
Only water	38 (53.5)	114 (40.8)	0.040
Soap & water	24 (33.8)	141(50.5)	
Antiseptic	9 (12.6)	24 (8.60)	
<b>Method of disposal</b>			
Burn	47 (66.1)	171(61.2)	0.446
Throw in waste	24 (33.80)	108 (38.7)	
<b>Places of drying cloth if re-used after washing</b>			
Inside house	12 (16.9)	33 (11.8)	0.165
Outside in sunlight	36 (50.7)	168 (60.2)	
<b>How many clothes /pad used during next menses</b>			
1-6 cloth/pads	62 (87.3)	225 (80.6)	0.191
>7 cloth/pads	9 (12.6)	54 (76.05)	
<b>Toilet facility available at home or not</b>			
Yes	57 (80.2)	270 (96.7)	0.000
No	14 (19.7)	9 (3.22)	

\*Chi-square test applied in above table

More than 50% of subjects dried cloth in sunlight if reused after washing and more than 80% of the subjects used 1-6 cloth/pads during menstruation and 80% had toilet facility available at home.

## DISCUSSION

**Awareness about menarche before menstruation-**In the present study 76% of the subjects were not aware of menarche before menstruation. In study done in Nagpur suggest that only 36.95% of the girls were aware of menstruation before menarche while in other study showed that only 40% in urban area and 9.09% in rural area were partially aware of menstruation, 63.38% in urban area and 47.57% in rural area were aware of menstruation before menarche<sup>9,10</sup>. A study done in West Bengal showed that 42% knew about menstrual cycle before their menarche<sup>9</sup>. One more study done in 2008 observed that 67.5% girls were aware about menstruation prior to attainment of menarche while in 2013 in a study done in Manipal observed that around 34% participants were aware about menstruation prior to menarche<sup>12,13</sup>.

**Source of information about menstruation-**In the present study >50% both in urban and rural were the major source of information regarding menstruation was mother. A study done in 2014 found 31.02% girls in urban and 17.51% in rural area were informed by teacher. The major source of information about menstruation for them was found to be their mothers<sup>11</sup>. Main source of information to these girls were their mother, while others found that in most cases their first informant was their friend.

**Knowledge about the source and cause of bleeding-**In study done by in 2011 found that more than three fourth of the girls in the study were not aware of the cause and the source of the bleeding. It was observed that 80.62% of the study subjects were not aware of the cause of the bleeding, 18.35 % girls believed that it was a physiological process while 1.03% believed it as a curse from God<sup>11</sup>. A Study done in 2014 found that 63.39% and 47.57% girls in urban and rural area considered menarche as normal phenomenon. It was also found that 79.66% girls in the urban and 85.42% girls in the rural area did not know about the source of menstrual bleeding. In one study only 63.3% knew bleeding occurs from uterus, 72.8% knew it to be a physiological process.

**Use of sanitary pads-** In the present study it showed the significant results of the subjects used pads. In a study it is found that a majority of them had knowledge about the use of sanitary pads. The mean age of menarche in the study subjects was  $12.85 \pm 0.867$  years; sanitary pads were used by 49.35% of the selected girls. The practice of the use of old clothes was reported 45.74% of the subjects. In 2014 a study, it was also found that 37.97% girls in the urban and 56.60% girls in the rural area were using home-made sanitary pads and reused the same in the subsequent period. Total 112 in urban and 163 girls in rural area reused the pads in subsequent period so hygienic practices in these girls were assessed. Two different studies found that 15.7% of the respondents use old washed cloth while only 11.25% girls used sanitary pads during menstruation<sup>13, 14</sup>. In 2013 a study suggested 70.4% of adolescent girls were using sanitary napkins as menstrual absorbent, while 25.6% were using both cloth and sanitary napkins.

**Cleaning of external genitalia-** It was also found in the present study that > 80% of the subjects practiced cleaning of external genitalia daily and that 12.6% subjects in rural area and 8.60% subjects in urban area used antiseptic for the cleaning of external genitalia. In a study, that satisfactory cleaning of the external genitalia was practiced by 33.85% of the girls. A study in 2014 found that 50.90% in urban and 20.86% in rural area used antiseptic for cleaning of material. A Study which observed that cleaning of external genitalia with soap and water was present only in 25.9% of respondents while for cleaning purpose, 97.5% girls used both soap and water<sup>12</sup>.

**Drying of pad/cloth in sunlight-**In the present study it was found more than 50% of subjects dried the cloth/pad in sunlight. A study showed that only 17.86% in urban and 25.15% in rural area dried it in sunlight which is important for the destruction of micro-organisms. A study stated that almost half of the rural participants dried the absorbent inside their homes.

## CONCLUSION

Mean age at menarche was 13.2 years where mother was the main source of information regarding menarche. The awareness about menstruation before menarche was found more in literate population. Use of sanitary pad is significantly higher among urban women compare to rural women.

## RECOMMENDATIONS

The method of disposal of used pad must be upgraded and should be thrown in waste. They should be encouraged to use sanitary pads in spite of cloth with the help of health education by health workers. Regular cleaning with soap and water should be advised to every urban and rural woman of all age groups.

## Limitation of study

Only women of gynecology OPD were taken for the study, therefore they are not representative of general population.

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