Original Research Article

Perceptions and practices about menstrual hygiene among women of reproductive age group (15-49 years) attending out-patient department of CIMS, Bilaspur Chhattisgarh

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ABSTRACT

Background: Women suffer due to their ignorance on hygienic requirement during menstruation. Hygiene related practices of women during menstruation are of considerable importance, as it has a health impact in terms of increased vulnerability to RTI. In this paper our objectives is to detect the menstrual health problems and to assess menstrual hygiene practices among women of reproductive age group (15-49 years) attending OPD of CIMS Bilaspur Chhattisgarh (Obstretic and Gynaecology, OPD).

Methods: Females of reproductive age group (15-45 years) attending routine obstetrics and gynaecology OPD during 1st May to 15th September 2015 were included in the study after taking their verbal consent at CIMS hospital. Pretested semi-structured questionnaire were used to take history regarding knowledge and practices related to menstrual hygiene. Statistical test like chi-square test were applied using Epi info 7 software.

Results: 36% of study population belonged to the 21-30 year age group. About 75% were married. Majority of women had primary education (43.3%) and 54.3% belonged to lower middle class. Majority of women 51.8% used cloth during menstruation; about 45.7% used the same cloth by washing and reusing every month.

Conclusions: Most women were found to follow unhygienic practices. Hence, efforts such as improving female literacy and health education regarding the various risk factors should be made by the policy makers to increase menstrual hygiene among rural population. Literacy status was found to be significant for awareness about menstruation and the use of sanitary pads.

Keywords: Reproductive tract infections, Menstrual hygienic

INTRODUCTION

According to India's 2011 census, 89 percent of the nation's rural population lives in households that lack toilets. This absence of proper sanitation presents public health challenges and affects Indian women disproportionately. An estimated 355 million Indian women and girls must find ways to cope with monthly menstrual hygiene. Most of these women either have no access to toilets or are faced with unclean lavatory facilities. Moreover, they usually wait until nighttime before using public toilets or fields, which exposes them to various forms of physical attacks. Swachh, a self-governing organization that provides waste management services to citizens of Pune in west India, recently brought attention to the issue of waste pickers' exposure to infections and other health hazards due to handling feminine hygiene discards."
Menstrual Hygiene Day is an annual awareness day on May 28 to highlight the importance of good menstrual-hygiene management. It was initiated by the German-based NGO WASH United in 2014 and aims to benefit women and girls worldwide. The 28th was selected to acknowledge that 28 days is the average length of the menstrual cycle. In low-income countries, girls’ choices of menstrual hygiene materials are often limited by the costs, availability and social norms. Adequate sanitation facilities and access to menstrual hygiene products are one part of the solution. Creating a culture that welcomes discussion and makes adequate education for girls is of equal importance. Research has found that not having access to menstrual hygiene management products can keep girls home from school during their period each month. In many parts of sub-Saharan Africa, girls can miss up to 5 days of school a month or drop out entirely due to insufficient access to water, sanitation and hygiene (WASH) facilities and menstrual hygiene products. Improving access to WASH facilities can actually increase girls attendance at school. A program for school sanitation in Bangladesh increased girls' enrollment at school by 11%.

Menstrual waste is largely ignored in schools in developing countries, despite it being a significant problem. Girls' access to water and sanitation at school is only available at 47% and 46% of all schools globally. In the United States, girls who are unable to afford feminine hygiene products may miss school in order “to avoid the embarrassment of staining their clothes.”

Menstruation is a normal physiological process among females. Although menstruation is a normal process, it is often linked with myths and misconceptions. Hygienic practices during menstruation are of great importance, the lack of which increases the susceptibility of an individual to reproductive tract infections. Good knowledge and safe practices about menstruation leads to good reproductive health. Most of the adolescent girls in India have little knowledge about menstruation. Large numbers of rural and urban populations believe that menstruation contaminates the body and makes it unholy. As a consequence, the girl often sees herself as impure, unclean and dirty. According to the nutrition foundation of India, the average age of menarche is 13.4 years; yet 50% of girls aged 12-15 do not know about menstruation. This is true for rural as well as the urban poor. The lack of information can be attributed to a veil of secrecy that surrounds menarche.

Menstruation is a normal physiological process but the onset of menstruation is a unique phenomenon for adolescent girls both physically and emotionally. In India it is considered unclean, and young girls are restricted from participating in household and religious activities during menstruation. These restrictions extend to eating certain foods like jaggery and papaya as well. Moreover, as the traditional Indian society considers talks on such topics as prohibited and discourages open discussion on these issues. Which in turn leads to intense mental stress and they seek health advice from quacks and persons who do not have adequate knowledge on the subject. Practices of hygiene related matter of menstruation are of considerable importance as it has health impact in terms of increased vulnerability to reproductive tract infections (RTI). The interplay of socioeconomic status, menstrual hygiene practices, and RTIs are noticeable. Today, millions of women are sufferers of RTI and its complications and often the infection is transmitted to offspring of the pregnant mother.

This study was undertaken with the following objectives as to detect the menstrual health problems and to assess menstrual hygiene practices among women of reproductive age group (15-49 years) attending outpatient department of CIMS Bilaspur Chhattisgarh (Obstetric and Gynaecology OPD).

METHODS

It is an institution based cross-sectional study, conducted in Obstetrics and Gynecology OPD, hospital attach to Chhattisgarh Institute of Medical Sciences (CIMS), Bilaspur (Chhattisgarh) from 1st May 2015 to 15th September 2015. Females of reproductive age group (15-45 years) attending routine gynaecology OPD were included in the study after taking their verbal consent. After ensuring privacy data was collected from participating women regarding their perception about menstrual hygiene and practices adopted by them to maintain menstrual hygiene. Interview method was used for data collection. Statistical analysis was done using Epi info 7 for Windows.

Inclusion criteria

All the women in 15-49 yrs age group having sign and symptoms of reproductive tract infections and having menstrual problems attending the Obstetrics and Gynecology OPD, CIMS, Bilaspur (C.G.) during the study period.

Exclusion criteria

Women not willing to participate in the study and those below 15 or above 49 years of age.

Ethical consideration

Ethical clearance obtained from institutional ethical committee, Bilaspur, Chhattisgarh.

RESULTS

Table 1 shows - majority of study population belonged to 26-30 years of age (31%) followed 36-40 years women
(19%). 68.5% women belongs to rural area and 31.5% belongs to urban area, about 84% were married. Majority of women had primary education (20.5%) followed by 18.5% illiterate, It was found that majority of women belong to lower and upper lower socio-economic class (28% and 27%) according to modified B.G. Prasad’s classification. Most of the women (55.5%) attained menarche at the age of 13-15 years, followed by 10-12 years (27%) (Table 1).

Table 1: Socio demographic variables (n=200).

| Age (in years) | Frequency | Percentage (%) |
|---------------|-----------|----------------|
| 15-20         | 12        | 6.00           |
| 21-25         | 37        | 18.50          |
| 26-30         | 62        | 31.00          |
| 31-35         | 32        | 16.00          |
| 36-40         | 38        | 19.00          |
| 41-49         | 19        | 9.50           |
| Total         | 200       | 100.00         |

| Residence     | Frequency | Percentage (%) |
|---------------|-----------|----------------|
| Rural         | 137       | 68.50          |
| Urban         | 63        | 31.50          |
| Total         | 200       | 100.00         |

| Marital status | Frequency | Percentage (%) |
|----------------|-----------|----------------|
| Married        | 168       | 84.00          |
| Unmarried      | 32        | 16.00          |
| Total          | 200       | 100.00         |

| Education of female | Frequency | Percentage (%) |
|---------------------|-----------|----------------|
| Illiterate          | 37        | 18.50          |
| Primary school      | 41        | 20.50          |
| Middle school       | 37        | 18.50          |
| High school         | 27        | 13.50          |
| Intermediate        | 30        | 15.00          |
| Graduate            | 23        | 11.50          |
| Profession degree   | 5         | 2.50           |
| Total               | 200       | 100.00         |

| Socio-economic status (Modified B.G. Prasad’s scale-May 2014) | Frequency | Percentage (%) |
|-------------------------------------------------------------|-----------|----------------|
| 1-((5571 Rs. & above)                                       | 12        | 6.00           |
| 2-(2786 -5570 Rs.)                                          | 36        | 18.00          |
| 3-(1671-2785 Rs.)                                           | 42        | 21.00          |
| 4-(837-1670 Rs.)                                            | 54        | 27.00          |
| 5-(<836 Rs.)                                                | 56        | 28.00          |
| Total                                                       | 200       | 100.00         |

| Age at menarche | Frequency | Percentage (%) |
|-----------------|-----------|----------------|
| <10-12          | 54        | 27.00          |
| 13-15           | 111       | 55.50          |
| >16             | 35        | 17.50          |
| Total           | 200       | 100.00         |

Table 2: Details of problem faced during menstruation (n=200).

| Frequency                  | Percentage (%) |
|----------------------------|----------------|
| Menstrual irregularity     |                |
| Yes                        | 108            | 54.00          |
| No                         | 92             | 46.00          |
| Total                      | 200            | 100.00         |

| Interval between menstrual cycle | Frequency | Percentage (%) |
|----------------------------------|-----------|----------------|
| <21 days                         | 50        | 25.00          |
| 21-35 days                       | 91        | 45.50          |
| >35 days                         | 59        | 29.50          |
| Total                            | 200       | 100.00         |

| Flow of bleeding                | Frequency | Percentage (%) |
|---------------------------------|-----------|----------------|
| Heavy                           | 21        | 10.50          |
| Medium                          | 142       | 71.00          |
| less                             | 37        | 18.50          |
| Total                           | 200       | 100.00         |

Table 3: Menstrual hygiene practices (n=200).

| Frequency                  | Percentage (%) |
|----------------------------|----------------|
| Frequency of bath during menstruation |           |
| Twice daily                | 54             | 27.00          |
| Once daily                 | 108            | 54.00          |
| Alternate days             | 26             | 13.00          |
| Not at all                 | 12             | 6.00           |
| Total                      | 200            | 100.00         |

| Absorbent used             | Frequency | Percentage (%) |
|----------------------------|-----------|----------------|
| Washed cloth               | 101       | 50.50          |
| Sanitary pads              | 40        | 20.00          |
| both                       | 59        | 29.50          |
| Total                      | 200       | 100.00         |

| Clothes/pads used during menses | Frequency | Percentage (%) |
|---------------------------------|-----------|----------------|
| 1-6                             | 157       | 78.50          |
| >7                              | 43        | 21.50          |
| Total                           | 200       | 100.00         |

| Cleaning genitals             | Frequency | Percentage (%) |
|-------------------------------|-----------|----------------|
| Daily                         | 32        | 16.00          |
| Only during menses            | 168       | 84.00          |
| Total                         | 200       | 100.00         |

Table 2 shows that 54% participants had faced irregularity in menstruation, 29.5% participants were suffering from poly-menorrhea while 25% had problem of oligo-menorrhea (Table 2).

Table 3 shows that 81% of the women had the practice of taking bath daily during menstruation, while 6% of the women did not take bath during menstruation. Most of the women were using washed cloth (50.5%) and only 20% of the women were using sanitary pad. 78.5% of the women used 1-6 clothes/pads during menstruation. Regarding the menstrual hygiene practices it was found that 16% women cleaned genitalia daily while 84% of women clean genitals only during menses (Table 3).

Table 4 shows among illiterate and intermediate educated women majority 54.05% and 56.6%, respectively used cloths during menstruation while among those who had graduate around 39% women use pad and those who had
completed high school and professional degree, majority 48% and 80% use both cloths and sanitary pads during menstruation, respectively. This difference was found to be statistically significant (p<0.01).

Table 4: Relationship between socio-demographic profile and practices of menstrual hygiene in study population (n=200).

| Socio-demographic variables | Menstrual hygiene practices (%) | Total | Level of significance |
|-----------------------------|---------------------------------|-------|----------------------|
|                             | Use clothes | Use pads | Use both clothes and sanitary pads | n=200 |
| Education of female         |             |         |                        |       |
| Illiterate                  | 20 (54.05)  | 5 (13.5) | 12 (32.4)              | 37    |
| Primary school              | 19 (46)     | 11 (26.8) | 11 (26.8)             | 41    |
| Middle school               | 19 (51.3)   | 7 (18.9)  | 11 (29.7)              | 37    |
| High school                 | 13 (48.1)   | 1 (3.7)   | 13 (48.1)              | 27    |
| Intermediate                | 17 (56.6)   | 7 (23.3)  | 6 (20)                 | 30    |
| Graduate                    | 12 (52.1)   | 9 (39.1)  | 2 (8.7)                | 23    |
| Profession degree           | 1 (20)      | 0.00     | 4 (80)                 | 5     |
| Total                       | 101         | 40       | 59                     | 200   |

| Socio-economic status       |             |         |                        |       |
| 1-(5571 & above)            | 6 (50)      | 1 (8.33) | 5 (41.6)               | 12    |
| 2-(2786-5570)               | 21 (58.33)  | 10 (27.7)| 5 (13.8)              | 36    |
| 3-(1671-2785)               | 16 (38.1)   | 12 (28.5)| 14 (33.3)             | 42    |
| 4-(837-1670)                | 32 (59.2)   | 11 (20.3)| 11 (20.3)             | 54    |
| 5-(<836)                    | 26 (46.4)   | 6 (10.7) | 24 (42.8)             | 56    |
| Total                       | 101         | 40       | 59                     | 200   |

It was found that majority (59.2%) of upper lower (class-4) women used cloth during menstruation, while among those of class 2 and 3 use sanitary pads during menstruation (27.7% and 28.5%). This difference was found to be statistically significant (p<0.01) (Table 4).

DISCUSSION

This institution based cross-sectional study was conducted to know various health problems faced during the period of menstruation and to assess menstrual hygiene practices among women of reproductive age group (15-49 years). The present study was conducted in obstetrics and gynaecology OPD CIMS Bilaspur, comprising of 200 women of reproductive age group.

In the present study, majority of women 55.5% attained menarche at the age of 13-15 years, followed by 27% at the age of 10-12 years and 17.5% at the age of 16 and above, similarly a study by Kamaljit et al found that the age of menstruating girls ranged from 10 to 15 years with maximum number of girls falling between 12 and 15 years of age, and the mean age of menarche of the respondents has been observed as 12.5 years. A similar study conducted by Deo et al reported that the age of menstruating girls ranged from 12 to 17 years, with maximum number of girls between 13 to 15 years of age, whereas in a study carried out in Rajasthan by Khanna et al the mean age at menarche was found to be 13.2 years. Our study shows that majority of the women preferred cloth pieces rather than sanitary pads as menstrual absorbent, only 20% women used sanitary pads during menstruation. It was observed that the usual practice was to wash the cloth with soap after use and keep it at some secret place till the next menstrual period. To keep the cloth away from prying eyes, these are sometimes hidden in unhygienic places. Privacy for washing, changing, or cleaning purpose is something very important for proper menstrual hygiene. In a study conducted in Rajasthan by Khanna et al found that 68.7% girls used sanitary pads and 30.5% of the women were using sanitary pad and cloth, contrary to this study regarding menstrual hygiene practices by Kamaljit et al found that 86.7% girls used sanitary pads and 30 (10.0%) respondents practicing any cloth or rag/cotton during menstruation. This study shows among illiterate and intermediate educated, majority 54.05% and 56.6%, respectively used clothes during menstruation while among those who had graduate around 39.1% women use cloth and those who had completed high school and professional degree, majority 48% and 80% use both cloth and sanitary pads during menstruation, respectively. This difference was found to be statistically significant (p<0.01). It was found that socioeconomic classes influenced on menstrual hygiene practices majority of upper lower (class-4) women around 59.2% used cloth during menstruation, while among those of upper middle class (class-2 and 3) majority 27.7% and 28.5% used sanitary pads during menstruation and this difference was found to be statistically significant (p<0.01).
CONCLUSION

It was found that education of women and socio-economic status significantly affects the menstrual hygienic practices of women. Menstrual hygiene, a very important risk factor for reproductive tract infections, is a vital aspect of health education for adolescent girls. Educational television programs, trained school nurses/health personnel, motivated school teachers, and knowledgeable parents can play a very important role in transmitting the vital message of correct menstrual hygiene to the adolescent girl of today. Efforts such as improving the female literacy and health education on the various risk factors should be made by the policy makers to increase menstrual hygiene among rural population. Adoption of high quality menstrual hygiene will play an important role in prevention of RTI and Cancer of cervix among the women population. Therefore, promoting positive attitudes towards management of menstruation and related problems among the adolescent girls is the need of the hour.

A separate National health policy concentrating on improvement of menstrual hygiene and use of sanitary napkin, there by prevention of reproductive tract infections, is needed along with continued health education to measure the success of interventions aimed at improving the menstrual hygiene practices among women. Establishment of a comprehensive school health education program with instruction in hygienic practices related to menstruation is the need of today. Universalized use of sanitary pads or absorbent material needs to be advocated to every reproductive age group female by making the easy availability through social marketing.

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