A CROSS SECTIONAL STUDY ON AWARENESS ABOUT MENSTRUAL HYGIENE AMONG RURAL WOMEN


Abstract

INTRODUCTION
Poor menstrual hygiene in developing countries has been an insufficiently acknowledged problem. Approximately 50% of world’s population knows from their own experience how important good menstrual hygiene is to be able to function optimally during menstruation period. The increased burden of reproductive tract infection among women due to poor menstrual hygiene remains a concern on public health agenda.

OBJECTIVE
To assess the knowledge attitude and practice of menstrual hygiene among rural women.

METHODOLOGY
This Cross sectional study was done in the village of Alamadhi which is the field practice area of Stanley Medical College and hospital. The study was carried out for a period of 5 months covering 250 subjects by administering oral questionnaire.

RESULTS
57.6% of women using napkins. 42.4 % of women using cloth. 86.3 % of women have the habit of proper disposal. 91.2 % of women have the habit of washing genitals. 72.8% of women have separate latrines at home. 78.8% of women were aware that it is a physiological process. 88.4% of women have regular menstrual cycle. 12.4% of women have menorrhagia. There is a significant influence of education and mass media on absorbent usage.

CONCLUSION
This study shows that though the awareness is good, the practice of menstrual hygiene is poor.

KEYWORDS
Menstrual hygiene, rural women

INTRODUCTION:

Poor menstrual hygiene in developing countries has been an insufficiently acknowledged problem. Approximately 50% of world’s population knows from their own experience how important good menstrual hygiene is to be able to function optimally during menstruation period. The increased burden of reproductive tract infection among women due to poor menstrual hygiene remains a concern on public health agenda.[1] Menstruation is the rhythmic series of changes in the female reproductive organs occurring for about 28 days throughout the reproductive life of women from puberty to menopause except during times of pregnancy.[2] Menstrual hygiene is the personal hygiene explored during menstruation including bathing and showering and usage of sanitary products.[3] Thus, menstruation is a major part of life for millions of young girls and women worldwide. However the needs and challenges faced by many rural women as they struggle to manage their menstrual hygiene are largely ignored.[4] This situation persists despite new developments in hygiene and sanitation sector in recent years. With the above background, this study was undertaken.

OBJECTIVE:

To assess the knowledge attitude and practice of menstrual hygiene among rural women.

METHODOLOGY:

The Cross sectional study was done in the village of Alamadhi which is the field practice area of Stanley Medical College and hospital. Ethical approval was obtained from the Institution Ethics Committee. The study was undertaken for a period of five months from July-November 2013. The
The study population consisted of rural women aged 15-45 yrs of Alamadhi village. Sample size is taken to be 250 subjects. Systematic sampling method was followed. Women those who have attained menopause and those women those who are not willing to participate in the study were exclude from the study. Informed consent was obtained from the participants and a structured questionnaire to ascertain the influence of education on absorbent use, influence of mass media on absorbent use, chances of getting stained on using various absorbent, influence of absorbent on urinary tract infection, genital wash, hand wash opinion about menstrual hygiene, method of disposal of absorbents etc was administered by the investigators. The awareness level of the subject was also assessed and she was advised of the adverse effects of her habit after the study.

RESULTS:

The study population consisted of 250 consenting women from Alamadhi village, average age of the women was 29 years, age at menarche was around 14 years, days of menstrual flow was around 4 days, 57.6% of the women used sanitary napkins and changed sanitary pads 3 times a day (Table 1).

The distribution of women in various age groups is shown in figure 1.

In our study we found that the usage of sanitary napkins among rural women was 57.6% and 42.4% use cloth. 78.8% of women were aware that it is a physiological process. 88.4% of women have regular menstrual cycle. 12.4% of women have menorrhagia. 15.2% women suffered from urinary tract infection. 37.20% suffer from white discharge. 52.80% suffer from lower abdominal pain. 72.8% of women have separate latrines at home. 91.2% of women have the habit of washing genitals. 86.3% of women have the habit of proper disposal. 56.40% of women are restricted from performing pooja during menstruation. 40.60% of women avoid specific food items during menstruation.

In this study, among those women who used clothes, 61.3% uses choose incineration as their method of disposal and among those who used napkins 57.6% chose disposal in bin. 67.90% have the habit of reusal of cloth (Table 3).

From the study, we see 61.3% of literate women use sanitary napkins as absorbent while only 45.8% of illiterate women use napkins and among the women who use sanitary napkin as absorbent 67% had exposure to television advertisements about sanitary napkins, this indicates that there is a significant influence of education and media on absorbent usage.

Only 22.4% of women who use sanitary napkins experienced staining, and only 20.1% of those women who use sanitary napkins as absorbent are at the risk of developing rash. There is a significant increased chance of getting stained and getting a rash among those who used cloth. (Table 4).

We observed that 19.8% of women who use clothes frequently get urinary tract infections while only 11.8% of women who use sanitary napkins get urinary tract infection. The practice of washing private parts frequently during menstruation was followed by 91.2% of the women. 95.2% of the women followed the practice of hand washing during menstruation. 036.4% of those women who do not wash their genital area properly during menstruation and 41.7% of those women who do not wash their hands properly during menstruation prone to develop urinary tract infections. There is significant influence of genital wash and hand wash on urinary tract infection during menstruation (Table 5).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>29.4560</td>
<td>6.6333</td>
</tr>
<tr>
<td>Days of flow</td>
<td>3.8233</td>
<td>1.1850</td>
</tr>
<tr>
<td>No. of children</td>
<td>1.9349</td>
<td>0.7522</td>
</tr>
<tr>
<td>Age at Menarche</td>
<td>13.9080</td>
<td>1.6414</td>
</tr>
<tr>
<td>No. of Napkins day (n=146)</td>
<td>2.3973</td>
<td>0.7744</td>
</tr>
</tbody>
</table>

Table 1. Profile of the population.
### Table 2 Opinion regarding Menstruation

<table>
<thead>
<tr>
<th>Education</th>
<th>Physiological Process N(%)</th>
<th>Curse of God N(%)</th>
<th>Disease N(%)</th>
<th>None N(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>52 (88.1%)</td>
<td>5(8.5%)</td>
<td>1(1.7%)</td>
<td>1 (1.7%)</td>
</tr>
<tr>
<td>Literate</td>
<td>145 (93.9%)</td>
<td>7 (3.7%)</td>
<td>1 (0.5%)</td>
<td>38 (19.9%)</td>
</tr>
</tbody>
</table>

### Table 3 Disposal methods followed for sanitary napkins

<table>
<thead>
<tr>
<th>Absorbent</th>
<th>Incineration N(%)</th>
<th>Disposal In Bin N(%)</th>
<th>Open Space N(%)</th>
<th>Flushing In Latrines N(%)</th>
<th>Others N(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloth</td>
<td>65 (61.3%)</td>
<td>29 (27.4%)</td>
<td>10 (9.4%)</td>
<td>1 (0.9%)</td>
<td>1 (0.9%)</td>
</tr>
<tr>
<td>Napkin</td>
<td>52 (36.1%)</td>
<td>83 (57.6%)</td>
<td>2 (1.4%)</td>
<td>3 (2.1%)</td>
<td>4 (2.8%)</td>
</tr>
</tbody>
</table>

### Table 4 Relationship between type of absorbent and various parameters

<table>
<thead>
<tr>
<th>Absorbent used</th>
<th>Absorbent</th>
<th>Chi-Square</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cloth N (%)</td>
<td>Napkin N (%)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Illiterate</td>
<td>32 (54.2%)</td>
<td>27 (45.8%)</td>
</tr>
<tr>
<td></td>
<td>Literate</td>
<td>74 (38.7%)</td>
<td>117 (61.3%)</td>
</tr>
<tr>
<td>Exposure to media</td>
<td>Yes</td>
<td>68 (33.0%)</td>
<td>138 (67.0%)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>38 (86.4%)</td>
<td>6 (13.6%)</td>
</tr>
<tr>
<td>Rash</td>
<td>Present</td>
<td>40 (33.7%)</td>
<td>29 (20.1%)</td>
</tr>
<tr>
<td></td>
<td>Absent</td>
<td>66 (62.3%)</td>
<td>115 (79.9%)</td>
</tr>
<tr>
<td>Stained</td>
<td>Yes</td>
<td>46 (43.8%)</td>
<td>32 (22.4%)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>59 (56.2%)</td>
<td>111 (77.6%)</td>
</tr>
</tbody>
</table>
DISCUSSION:

In our study, we found that among 250 participating rural women 57.6% use napkin and 42.4% use cloth. Ashashitole et al found that 35% used cloth and 65% used napkin in a study of menstrual hygiene among rural community. [4] In contrast Das Gupta et al found that 68.34% cloth and 31.6% used napkin. [5] The increased usage of sanitary napkins might be due to provision of sanitary napkins at a subsidised rate by the government of Tamilnadu. [6]

In our study it is found that among those who do not use sanitary napkins 67.9% rural women reuse the cloth. Das Gupta et al found that 73.75% of rural community reuse the cloth. [1] In our study, it is found that 80.6% dry cloth under sun and 19.4% in dark. Subash B.Thakre et al found that 52.63% dry the washed cloth under sun and 47.37% under shade among the rural women of Nagpur district. [7] It was also found that 46.8% of rural women dispose their napkins/clothes by burning, 44.8% by public bin, 4.8% dispose in open space, 1.6% by flushing into latrines and 2% by other methods which includes burial, dumping into water pools etc. Lawan UM et al found that 71.2% dispose by public bin, 24.3% by burning, 0.3% by flushing into latrines, 4.3% by other methods in Kano, Northwestern Nigeria. [8]

Around 88.4% of the rural women have regular menstrual cycle and 12.4% have menorrhagia. Asha Shitole et al found that 73% found to have regular menstrual cycle and 22% have menorrhagia in her rural community based study. [4] Karima Badawi et al found that 29% have regular cycle among women in Mansoura, Egypt. [9]

In our study, it is found that 52.8% of the rural women suffer from lower abdominal pain during menstruation and 37.2% of the rural women have white discharge per vaginum. Asha Shitole et al found that 59.2% suffer from lower abdominal pain and 22% have white discharge in a rural community based study. [4] Poor menstrual hygiene is one of the major causes for the high prevalence of reproductive tract infections (RTIs) in the country and its contribution to female morbidity is significant. Many adolescent girls in villages use rags and old clothes during menstruation, increasing susceptibility to RTIs. Government of India in June 2010, proposed a new scheme towards menstrual hygiene by providing subsidized sanitary napkins to rural adolescent girls. Issues like awareness, availability and quality of napkins, regular supply, privacy, water supply, disposal of napkins, reproductive health education and family support are other factors which need simultaneous attention in order to promote menstrual hygiene. [10]

Our study showed that there is a significant influence of education and media on absorbent usage. 61.3% of literate women use sanitary napkins and 67% had exposure to television advertisements about sanitary napkins. Studies have shown there are many misconceptions about menstrual hygiene and this was passed on to them by their mothers who lacked adequate knowledge about the same. The key to bringing any change in menstrual practices is education about the facts of menstruation and its physiological implications which should include the significance of menstruation and development of secondary sexual characteristics, selection of a sanitary menstrual absorbent and its proper disposal. This can be achieved through educational television programmes, compulsory sex education in school curriculum, so that the received education would indirectly wipe away the age old wrong ideas and encourage free discussion about menstrual matters without any inhibitions. [11]
CONCLUSION:

This study shows that though the awareness is good, the practice of menstrual hygiene still has much scope for improvement. This can be done by

- Promotion of campaigns that create awareness about menstrual hygiene in rural areas.
- Education about importance of using sanitary napkins among school girls.
- Easy accessibility of rural women to napkin vending machines.
- Demonstrating rural women on proper usage and disposal of sanitary napkin.
- Provision of sanitary latrine facilities for women in their working places.
- Educating women about health problem that occurs as a consequence of using cloth as absorbant.

CONFLICT OF INTEREST:

Dr.P.Seenivasan & Dr.K.Caroline Priya both members of the editorial board, who have also authored this article were not involved in the selection, review and publication of this article.

Acknowledgement:
We thank all the participants for their co-operation.

REFERENCES:

5. A Resource for improving menstrual hygiene around the world by Sarah house, Therese Mahon and Sue Cavill
7. WSSCC (Water Supply and Sanitation Collaborative Council) about Menstrual Hygiene Management (MHM)