Original Research Paper



Community Medicine

"A STUDY OF KNOWLEDGE, BELIEFS AND PRACTICES REGARDING MENSTRUAL HYGIENE AMONG ADOLESCENT GIRLS IN AN URBAN SLUM OF METROPOLITAN CITY."

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ABSTRACT Introduction: Issues related to menstruation and its practices are still unclear due to taboos and socio-cultural restrictions which result in adolescent girls remaining uninformed of the technical facts and hygienic practices to keep good health that is why sometimes it results in to adverse health outcomes. **Objectives:** i)To find out the age of menarche among adolescent girls. ii) To know the menstrual pattern and menstrual hygiene practices among adolescent girls. iii)To elicit the beliefs, perception and source of information regarding menstruation among study population. **Materials and Methods:** An epidemiological cross-sectional descriptive study was conducted among 100 adolescent girls in an urban slum of metropolitan city. Information was obtained with the help of Pre-structured questionnaire in a local language. **Results:** (56%) girls were not aware about menstruation prior to attainment of menarche. The mean age of menarche was found to be 12.95 ± 2.25 years. The most common menstrual pattern was 30/3 days. Mother was the first informant regarding menstruation in (55%) girls. (39%) girls believed menstruation as a physiological process. Regarding practices about (80%) girls informed about the use of sanitary pads during menstruation. Most of the girls (53%) girls practiced some different restrictions during menstruation. **Conclusion:** Menstrual hygiene is still a very important risk factor for reproductive tract infections and it is a vital component of health education to the adolescent girls. Educational television programmes, trained school nurses/health personnel, motivated school teachers and knowledgeable parents can play a very important role in transmitting the critical messages of correct practices about menstrual hygiene to the adolescent girls of today.

KEYWORDS: Menstrual hygiene, adolescent girls, urban slum.

INTRODUCTION:

The transition period from childhood to adulthood is Adolescence. During this period physiological, psychological and developmental changes occur. The word "Adolescent" is derived from the Latin word "adolescere" which means to grow to maturity that indicates the defining features of adolescence. WHO definition of adolescence is the age group of 10-19 years.^[1]

Adolescent girls require specific and special attention as they constitute vulnerable group for their social status as well as their health particularly in India where female child is neglected. Adolescent girls constitute about 1/5 th of the total female population in the world. The onset of menstruation represented as a landmark event in pubertal development of adolescent girls. The first menstruation is often horrifying and traumatic to an adolescent girls because it occurs without her knowing about it. Although menstruation is a normal physiological phenomenon for females, it is linked with several perceptions and practices which sometimes may result in adverse health outcomes.

It is still considered unclean and dirty in Indian society. Isolation of menstruating girls, restrictions being imposed on them in family, have reinforced a negative attitude towards this phenomenon. Menstruation and menstrual cycle are characterised by variability in volume, pattern and regularity, which at the earlier stages of the development of the adolescent can create emotional discomfort particularly to the poorly informed girls. ^[3] The low social status of women in Indian society, culture of shame and silence associated with their reproductive health matters make this a taboo. ^[4]

During menstruation, hygiene-related practices are of considerable importance. Unhygienic menstrual practices may affect their health leading to increased vulnerability to pelvic inflammatory diseases (PIDs), reproductive tract infections (RTIs) and its complications which are the result of inaccurate and incomplete information provided to girls through limited sources. [5]

So, right from childhood, adequate knowledge and information about menstrual hygiene may escalate safe practices during menstruation and may help in mitigating sufferings of millions of women. Hence, this study will be conducted to assess knowledge and practices regarding menstrual hygiene among adolescent girls in an urban slum of metropolitan city.

MATERIALS AND METHODS:

Study Design:

An epidemiological cross sectional descriptive study.

Study Area

The respective study was carried out in urban slum of a metropolitan city. Our Medical College provides preventive, curative, promotive and rehabilitative health services through Urban Health Centre. The selected and voluntary participants from the study group which fulfil inclusion criteria were screened out.

Study Population:

Adolescent girls (10-19 years) who have attained menarche and willing to participate in the study were interviewed for the study.

Study Period: One month

Sample Size: Total 100 participants were included in this study.

Sampling Method:

Selection of subjects in the study was done using Simple Random Sampling Technique. All the detail information and objectives of the study was explained. All queries related to study were answered. Prestructured questionnaire was used to interview the participants.

Data Analysis:

Data entry was done in Microsoft Excel Sheet – version 2016. Quantitative data was presented with the help of mean. Qualitative data was presented with the help of frequency and percentage.

RESULTS

Table 1: Demographic characteristics of study population

| Demographic Charac | Frequency | Percentage | |
|----------------------|------------------|------------|----|
| Adolescent Girls | | (%) | |
| Age | 11 – 13 | 21 | 21 |
| (Completed Years) | 14 – 16 | 42 | 42 |
| | 17 – 19 | 37 | 37 |
| Education | Primary | 12 | 12 |
| | Secondary | 54 | 54 |
| | Higher Secondary | 28 | 28 |
| | Graduation | 06 | 06 |
| Occupation of Father | Unskilled | 40 | 40 |
| | Semiskilled | 07 | 07 |
| | Skilled | 53 | 53 |

Table 1 shows that (42%) girls in the study was between 14-16 years of age group. Out of 100 girls, (54%) of girls attended secondary schools. Fathers of the most of the girls were skilled workers (53%) and unskilled workers (40%).

Table 2: Menstrual pattern in adolescent girls

| _ | | _ | |
|-------------------------|---------|-----------|----------------|
| Status of menstruation | | Frequency | Percentage (%) |
| Age at menarche (Years) | < 11 | 03 | 03 |
| | 11 - 13 | 69 | 69 |
| | > 13 | 28 | 28 |
| Duration of Blood Flow | ≤ 3 | 11 | 11 |
| (Days) | > 3 | 89 | 89 |
| Length of Cycle (Days) | 28 - 30 | 96 | 96 |
| | > 30 | 04 | 04 |

Table 2 shows that (69%) girls attended menarche in the age which ranged between 11-13 years, (89%) girls reported blood flow for more than 3 days. While most of the girls' (96%) menstrual cycle was of 28-30 days.

Table 3: Awareness regarding menstruation in adolescent girls:

| Menstruation related information | | Percentage |
|----------------------------------|--|------------|
| | | (%) |
| Present | 44 | 44 |
| Absent | 56 | 56 |
| Mother | 55 | 55 |
| Friends | 05 | 05 |
| Relatives | 14 | 14 |
| Books | 02 | 02 |
| School | 24 | 24 |
| Physiological Process | 39 | 39 |
| Hormonal | 23 | 23 |
| Curse of God | 02 | 02 |
| No Idea | 36 | 36 |
| | Present Absent Mother Friends Relatives Books School Physiological Process Hormonal Curse of God | Present |

Table 3 shows that (56%) girls were not aware about menstruation. Among 100 girls, the main source of information was mother (55%). Most of the girls (39%) believed menstruation as a physiological process, while (36%) girls had no idea of cause of menstruation.

Table 4: General practices of menstrual hygiene among adolescent girls

| General practices of menstrual hygiene | | | Percentage |
|---|---|------|------------|
| | | ency | (%) |
| Prior preparation done | Yes | 77 | 77 |
| | No | 23 | 23 |
| Types of menstrual absorbent | Sanitary pads | 76 | 76 |
| used in first menstruation | Cloths | 18 | 18 |
| | Both | 06 | 06 |
| Menstrual absorbent used in | Sanitary pads | 80 | 80 |
| previous month | Cloths | 19 | 19 |
| | Both | 01 | 01 |
| Reasons for not using sanitary | High cost | 12 | 12 |
| pads | Unavailability | 05 | 05 |
| | Shyness | 02 | 02 |
| | Not comfortable | 08 | 08 |
| Willing to use sanitary pads | Yes | 92 | 92 |
| Ç 71 | No | 08 | 08 |
| Method of disposal of menstrual absorbent | Rap in paper and throw it in routine waste in dustbin | 78 | 78 |
| | Throw in landfill | 07 | 07 |
| | Throw in pond | 04 | 04 |
| | Throw in garden | 03 | 03 |
| | Wash cloths and reuse | 08 | 08 |
| Toilet facilities at home | Yes | 60 | 60 |
| | No | 40 | 40 |
| Daily bath | Yes | 56 | 56 |
| - | No | 44 | 44 |
| Handwashing | Water | 06 | 06 |
| E . | Soap and water | 94 | 94 |

Table 4 shows that prior preparation was done by (77%) girls. Most of the girls (76%) used commercially available sanitary pads during menarche and (18%) girls used cloth. This study showed that (92%)

girls wanted to use sanitary pads as a menstrual absorbent. Regarding the method of disposal of the used material, (78%) girls informed that they properly disposed the sanitary pads used i.e. they wrapped in paper and threw it in routine waste in dustbin and disposed in a place identified for solid waste disposal. (60%) girls informed that toilet facility was available at their home. (56%) girls informed that they used to take bath daily as well as in menstruation. (94%) girls regularly washed their hands with soap and water.

Table 5: Type of problems faced during menstruation

| Problems faced during menstruation | | Frequen | Percentage |
|------------------------------------|----------------------|---------|------------|
| | | cy | (%) |
| Any problem during | Yes | 89 | 89 |
| menstruation ($n = 100$) | No | 11 | 11 |
| Types of problem | Lower abdominal pain | 75 | 75 |
| | Waist pain | 23 | 23 |
| | Pain in whole body | 19 | 19 |
| | Breast tenderness | 01 | 01 |
| | Vomiting | 02 | 02 |
| | Giddiness | 12 | 12 |

Table 5 shows that about (89%) adolescent girls faced problems during menstruation. (75%) girls had lower abdominal pain, (23%) girls had waist pain and (19%) girls had pain in whole body.

Table 6: Social taboos and restrictions followed during menstruation

| Different social taboos and restrictions | Frequency | Percentage (%) |
|--|-----------|----------------|
| In general, some restrictions practiced | 53 | 53 |
| Do not allow to do household work | 01 | 01 |
| Do not allow to attend school | 02 | 02 |
| Do not allow to play | 04 | 04 |
| Do not allow to go outside home | 04 | 04 |
| Ask to sleep separately | 01 | 01% |

Table 6 shows that majority (53%) of adolescent girls informed that some forms of restrictions are practiced in their family during the period of menstruation. (4%) girls were not allowed to play and go outside home.

DISCUSSION:

In our study, 69% girls attained menarche between 11-13 years which is similar finding of the study done by Verma P. et.al ^[6] in which majority girls attended menarche between 11-13years. The mean age of menarche among participants was found to be 12.95 ± 2.25 years. The results are almost same as reported by Verma P. et.al. ^[6] In their study, they found mean age of menarche to be 12.98 (± 0.77) years. In another study which was conducted by Singh M.M. et.al. ^[7] they found mean age of menarche to be 13.6years. In our study, 89% girls reported blood flow for more than 3 days which is contrary to the finding of the study by Verma P. et al. in which 76.6% girls reported blood flow less than or equal to 3 days. Similar finding was also observed in a stud done by P.B. et.al. ^[8] The most common menstrual pattern in our study was 30/3-5 days. It is almost similar finding reported by Lawan et.al. ^[9] and Verma P. et.al. ^[6]

In our study, we found that 44% girls were aware about menstruation before menarche. In another study conducted by Verma P.et al. [6] they found that 58% girls were aware of menstruation before menarche. Another study by Dasgupta et.al. [10] reported that only 32.5% girls had prior knowledge of menstruation. Another study by Deo et.al. [11] found in their study that 42.5% urban and 55.4% rural girls had knowledge about menstruation prior to attainment of menarche. In 55% participants, mother was the first informant regarding menstruation in our study. Another study conducted by Verma P. et al. [6] reported in their study that mother was the first informant in case of 41% girls while in 37.5% cases, mother was the key informant in study conducted by Dasgupta et.al. [10]

In our study, 39% participants believed that menstruation was a physiological phenomenon while 36% girls had no idea of cause of menstruation while in study by Verma P. et.al. [6] they reported in their study that 85% girls believed menstruation to be as a physiological process. This finding of their study was very similar to the study done by Dasgupta et.al. [10] where 86% girls believed menstruation to be a physiological process. In another study which was conducted by Khanna et.al. [12] 70% girls believed that menstruation was not a natural process.

Regarding practices, about 80% participants were using sanitary pad as menstrual absorbent.76% girls used commercially available sanitary pads during menarche and 18% girls used cloth. This study showed that 92% girls wanted to use sanitary pads as a menstrual absorbent. The apparent reasons for not using sanitary pads, observed in this study were 8% girls did not feel comfortable, high cost in 12% girls, shyness in 2% girls and unavailability 5% girls. Regarding the method of disposal of the used material, 78% girls informed that they properly disposed the sanitary pads used i.e. they wrapped in paper and threw it in routine waste in dustbin and disposed in a place identified for solid waste disposal. 60% girls informed that toilet facility was available at their home. 56% girls informed that they used to take bath daily as well as in menstruation while 44% did not.94% girls regularly washed their hands with soap and water and 6% girls washed their hands with water only.

Our study reported that 89% adolescent girls faced problems during menstruation.75% girls had lower abdominal pain, 23% girls had waist pain, 19% girls had pain in whole body.12% girls had giddiness during menstruation.

Majority that is 53% of adolescent girls informed that some forms of restrictions were practiced in their family during the period of menstruation like girls were not allowed to enter the temple and worship the God. Likewise, some girls were not allowed to touch their religious books and pray. 4% girls were not allowed to play and go outside home.

CONCLUSION AND RECOMMENDATION:

This study has highlighted the need of health education of adolescent girls. Girls should have accurate and adequate information about menstruation and its appropriate management. Girls should be informed about physiology of menstruation, the process involved and its importance before the age of menarche. Social taboos which are followed during menstruation are still issues which need to be addressed at all levels. Mothers are primarily responsible for communication of such type of information. This will help the girls to take it positively. Hygiene during menstruation should be maintained to avoid any reproductive tract infection. The above findings reinforce the need to encourage safe and hygienic practices among adolescent girls and bring them out of traditional beliefs, misconceptions and restrictions regarding menstruation. Forming peer groups can help girls to discuss these issues openly.

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