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Menstrual Hygiene: Knowledge and Practice among Adolescent Girls of Rural Sabarkantha District

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ABSTRACT

Introduction: Menarche is a psychological, social as well as behavioural transition for an adolescent girl from girlhood to womanhood. Menstrual hygiene is most important, still neglected area of concern. The objective of the study was to find out menstrual pattern, knowledge and practice for menstrual hygiene among adolescent girls.

Method: A cross sectional study was undertaken in a rural area of Sabarkantha district. Randomly selected 250 adolescent girls were inter-viewed using predesigned pretested questionnaire.

Results: It was evident that 35.6% participants were aware about menstruation before their menarche and important sources of information were mothers in 54.2% girls. 14.8% respondents used only sanitary napkin during menstruation. 83.8% changed absorbent 1 to 2 times a day.

Conclusion: This study has highlighted the need of adolescent girls to have accurate and adequate information about menstruation before the menarche.

Key words: Adolescent girl, Menarche, Menstruation, Menstrual Hygiene, Practices.

INTRODUCTION

Adolescent period is considered between the age of 10-19yrs. among girls and boys both. Adolescence in girls is a phase of transition from girlhood to womanhood and marks the onset of female puberty. This period of attaining reproductive maturity between the ages of 10-19 years is marked by a number of physiological, behavioural and psychological changes, the most notable being the onset of menstruation¹⁻³.

There is a substantial lacuna in the knowledge about menstruation among adolescent girls. Several research studies have revealed this gap and they have shown that there was a low level of awareness about menstruation among the girls when they first experienced it¹⁻³. Social prohibitions and the negative attitude of parents for open discussion on related issues have blocked the access of adoles-

cent girls to right kind of information, especially in the rural and tribal communities⁴. Previous studies have revealed that most of the adolescent girls 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 that provide information on menstruation to the adolescent girls⁴⁻⁶.

However, the attention on this issue is far from sufficient and even the literature on gender mainstreaming in the sanitary section is silent on the issue of menstrual management⁷⁻⁹. A key priority for women and girls is to have the necessary knowledge, facilities and the cultural environment to manage menstruation hygienically and with dignity.

Sabarkantha district is considered as one of the tribal district of Gujarat but it has dual burden of tri-



bal and urban within. Adolescent Health do not have structured implementation program either in health facilities or in community. Rashtiya Kishor Swastya Karykaram (RKSK) is just recently launched program but has not reached up to level of uniform implementation. Most of the studies discussed about the knowledge regarding menstruation and use of sanitary napkin. This study had carried out to have in depth details of menstrual hygiene along with social parameters that can be used for demand generation and service delivery while implementing adolescent health program. Very few studies have included the detailed aspects of the menstrual practices among adolescent girls. It was therefore considered as relevant to investigate the menstruation related knowledge and practices among the school going adolescent girls. Hence, the present study was carried out to find the age of menarche among the girls as well as to know the menstrual pattern and menstrual hygiene practices.

METHODS

It was a descriptive community based study with cross-sectional design among adolescent girls studying in 8th to 12th standard. Adolescent girls who had attained menarche were only included in the study and constituted the study population. A total 250 adolescent girls of age 13 to 18 years were found eligible for the study in the selected 4 rural government schools of Himatnagar Taluka in Sabarkantha district, Gujarat. From the previous studies it was revealed that mean age of menarche was 13.2 years (Deo DS and Ghattargi CH et al⁵ Kajal Jain et al¹⁰). Hence students of only class 8th onwards were decided to be included in the study.

Sample size: It was purposive sampling. Total Government schools (8-12th Std) in Sabarkantha are 81out of that 12 are in Himatnagar taluka, So authors have taken 5% of total schools in the district, that come to four Schools of Himatnagar Taluka.

Data collection: A predesigned pretested questionnaire was prepared for data collection. The schools were visited as per pre-planned schedule for getting information from the adolescent girls during month of February, 2016. A prior to interview, schools and adolescent girls were explained about the purpose of the study and were assured of confidentiality. In schools, only those girls who were received consents from their parents were included in the study. Before initiating the study the questionnaire was discussed with school authority which included questions regarding the knowledge and awareness about menstruation, the source of information and practices followed to

Table 1: Socio demographic profile of the study population (N=250)

| Variable | Girls (%) | |
|------------------|------------|--|
| Age (years) | . , | |
| 13 | 18 (7.0) | |
| 14 | 56 (22.0) | |
| 15 | 94 (38.0) | |
| 16 | 43 (17.0) | |
| 17 | 22 (9.0) | |
| 18 | 17 (7.0) | |
| Religion | | |
| Hindu | 213 (85.0) | |
| Muslim | 37 (15.0) | |
| Type of family | | |
| Joint | 115 (46.0) | |
| Nuclear | 135 (54.0) | |
| Mother education | | |
| Illiterate | 40 (16.0) | |
| Primary | 68 (27.2) | |
| Secondary | 82 (32.8) | |
| Higher secondary | 45 (18.0) | |
| Graduate | 15 (6.0) | |

Table 2: Menstrual profile and knowledge in the study population (N=250)

| study population (N=250) | |
|--|-------------|
| Menstrual profile | Girls (%) |
| Age at menarche (in years) | |
| 11 | 15(6.0) |
| 12 | 37(14.8) |
| 13 | 82(32.8) |
| 14 | 90(36.0) |
| 15 | 20(8.0) |
| 16 | 04(1.6) |
| 17 | 02(0.8) |
| Experience of Inter menstrual interval by pa | articipants |
| Less than 25 days | 27(10.8) |
| 25 to 28 days | 85(34.0) |
| 28 to 35 days | 104(41.6) |
| More than 35 days | 34(13.6) |
| Duration of Menstrual cycle during each pe | eriod |
| Less than 2 days | 9(3.6) |
| 2 to 3 days | 55(22.0) |
| 3 to 5 days | 143(57.2) |
| More than 5 days | 43(17.2) |
| Usual Menstrual cycle | |
| Regular | 157(62.8) |
| Irregular | 93(37.2) |
| Knowledge and belief regarding menstruat | ion |
| Pre menarche knowledge | 69(35.6) |
| Post Menarche Source of knowledge | |
| Mother | 98(54.2) |
| Sister | 53(29.3) |
| Friends | 26(14.4) |
| Other (News, Teacher etc) | 4(2.1) |
| Belief regarding causes of menstruation | |
| Hormonal | 56(22.4) |
| Natural | 87(34.8) |
| physical | 107(42.8) |
| Correct Knowledge of organ from where | 59(23.6) |
| bleeding occurs | |

maintain menstrual hygiene. The questionnaire was filled up by individual interview in separate class room where only adolescent girls were gathered by a female investigator. This was followed by a session educating the girls about the normal physiology of menstruation, the importance of maintaining hygiene and safe hygienic practices during menstruation. Data were then compiled in an Excel sheet and was analysed using Epi Info-7.

RESULT

Table 1 depicts the demographic details of the study subjects. The study showed that age of the respondents (n=250) varied from 13-18 years. Majority (85%) of the participants was Hindu and 54% participants were living in nuclear family. Mothers of 27% of the study girls had completed their primary education (class VII Pass) while 16 % of the mothers were illiterate.

Table 2 shows that the mean age of menarche in the study subjects was 13.44 ± 1.35 years. It was evident that 69 (35.6 %) participants were aware about menstruation before menarche and the most common source of the information were mothers in 54.2% girls.

Table 3: Distribution of Girls according to menstrual practice

| Variables | Girls (%) | |
|--|-----------|--|
| Use of Material during menstruation (N=250) | | |
| Sanitary napkin only | 37(14.8) | |
| Old cloth | 47(18.8) | |
| New cloth | 75(30.0) | |
| Sanitary pad and cloth | 91(36.4) | |
| Frequency of Change (N=250) | | |
| Once a day | 129(51.6) | |
| Twice a day | 83(33.2) | |
| Thrice a day | 32(12.8) | |
| More than thrice | 6(2.4) | |
| Perception regarding sanitary napkin (N=128 |) | |
| Comfortable | 58(45.3) | |
| Adequate absorption | 17(14.2) | |
| Do not stain clothes | 52(40.5) | |
| Reason for not using sanitary napkin (N=122) |) | |
| Cost | 38(31.2) | |
| Difficulty in disposal | 24(19.7) | |
| Lack of knowledge | 41(33.6) | |
| Shyness | 19(15.5) | |
| | _ | |

Table 4: Association between Mothers education and use of sanitary napkins (N=250)

| Use of Sanitary | Mothers Edu | Mothers Education | |
|-----------------|-------------|-------------------|--|
| Napkins | Secondary | Illiterate or | |
| | and above | Primary | |
| Yes | 110 (85.9) | 18 (14.1) | |
| No | 32 (26.2) | 90 (73.8) | |
| Total | 142 (56.8) | 108 (43.2) | |

X² - 88.3363 P value- 0.0000

It was observed that 107 (42.8%) girls believed that it was a physical process and 87 (34.8 %) believed it as a natural process. Total 191 (76.4%) girls were not aware of the source of the menstrual bleeding. Only 59 (23.6 %) girls were aware that the source of the menstrual bleeding was the uterus and 59% girls believed that menstrual blood is impure.

Table 3 shows that 51.2% girls were using sanitary napkins during menstruation whereas 19% were using old cloth. The frequency of changing the material was 51.6% once in a day. Perception towards the use of sanitary napkins was like 58 girls (45.3 %) were comfortable by using them and 41% feels it helps from staining of cloth. Cost and lack of awareness was the main reason for not using the sanitary napkin as cost comes 31.2% and lack of knowledge 33.6%.

Data also shows associated symptoms with periods. Pain in abdomen was the most common associated symptom among 55.2 % girls, followed by excessive bleeding in 15.6 %, Headache, weakness and nausea / vomiting were the other associated symptoms.

Table 4 shows association between mother's education and use of sanitary napkins by their daughters. Association between mother who has the education secondary and above is statistically significant with use of sanitary napkin. It means girls whose mothers are well educated have higher chances to use of sanitary napkins.

DISCUSSION

In present study, data reveals that the mean age of menarche in the study subjects was 13.34 ± 1.35 years. Age at menarche of the participants ranged between 11 to 15 years (97.6%) which is comparable to a study conducted in an urban area of Meerut, Uttar Pradesh (2009), Kajal Jain et al;10 where mean age at menarche was noted to be 13.16 years. Deo DS and Ghattargi CH⁵ highlighted that the age of menarche in their study in Ambajogi, Beed district (1999) ranged from 12 to 17 years with the maximum number of girls between 13 and 15 years of age. 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 reproductive age need access to clean and soft, absorbent sanitary products which can in the long run, protect their health.⁷

In present study 41.6% adolescent girls had 28-35 days cycle followed by 25-28 days (34%), duration of menstruation was 3 to 5 days in 57.2% girls and 62.8% girls found their menstruation to be regular. A study done by P.B. Verma et al, in Bhavnagar(2011) suggested that the most common menstrual pattern found among girls was 30/3-5 days followed by 28/5-7 days and 75.76% girls found their menstruation to be regular and among only 24.24% girl's menstruation was irregular.

About 35.6% girls were found to have premenarche knowledge regarding menstruation which is similar to the study conducted in west Bengal (2012), Adrija Datta et al;11 reported 72.1% in urban and 39.1 % in rural area, while premenarche knowledge regarding menstruation was nearly 97% in a study Lawan UM et al,12 carried out in Kano, Nigeria (2010) and 92% in a study conducted in Nepal, Water Aid / Anita Pradhan et al (2009).13 The present study of rural Gujarat showed social prohibitions and the negative attitude of parents in discussing the related issues openly, have blocked the access of adolescent girls to the right kind of information.

In present study, 48.8% girls were using cloth during menstruation. Most of the respondents (84.8%) changed absorbent 1 to 2 times a day. A study done in Urban Slum of Mumbai (2010.), Prateek S. Bobhate et al; 14 was reported that 72.2% of the subjects were knowing that sanitary pads should be used during menstruation but out of them only 59.8% were actually using it. Frequency of changing sanitary pad or cloth varied from once per day to 3 times per day depending upon the day of menstrual period and type of absorbent material used. A study, P.B. Verma et al, in Bhavnagar (2011) reported majority of girls (87.3%) used old plain cloth during menstruation and only 10.6 % used commercially available sanitary napkins. The reason of not using sanitary pad in present study was found lack of knowledge (33.6%) and cost of the product (31.2%). Menstrual Hygiene Promotion programme is only implemented in four districts of Gujarat. Social marketing of sanitary pads trough ASHA is a part of Menstrual hygiene scheme so that is also not been implemented yet in the Sabarkantha District. However through this study, Authors support the advocacy efforts to implement the MHS across the State.

CONCLUSION AND RECOMMENDATION

Three main problem areas identified in this study were poor knowledge on biology of menstruation, majority of girls having symptoms associated with menstruation and low use of sanitary napkin. This study revealed that most of the rural girls are reusing the cloths during menstruation that can be infectious.

This study has highlighted the need of adolescent girls to have accurate and adequate information about menstruation and its appropriate management. Formal as well as informal channels of communication such as mothers, sisters and friends need to be emphasized for the delivery of such information. In view of the vital role of the mothers, it is very important that the mother to be armed with the correct and appropriate information on reproductive health, so that she can give this knowledge to her growing girl child. Mothers should encourage their daughters to maintain personal hygiene. It is also essential for the teachers, who may not have the necessary skills to impart reproductive health education, including menstrual hygiene to their students.

Schools should be another entry point for improving menstrual health by integrating menstrual hygiene into curriculum, provision of toilets and even supplying sanitary napkin. Menstrual health is an important part of life cycle approach to women's health, so appropriate and clear messages and services on this issue must reach adolescent girls.

ASHAs along with Village health and sanitation committee members must be oriented for menstrual hygiene practices and use them to spread the awareness through IPC. Other local bodies working in the area of adolescent can also be used for the spreading awareness. Professional bodies like IAP and NGOs like UNICEF, UNFPA and PHFI can also be used for the menstrual hygiene awareness among community for better practices.

The study had provided areas where the program has to put emphasis on health and social components for effective implementation of menstrual hygiene promotion program. The parameters guide program managers to focus on dimensions of menstrual hygiene practices

LIMITATION

Study had not explored the other health issue that affects their menstrual cycle and hygiene practices. This study is applicable to the girls in rural area and only in government schools. The follow up of adolescent girls was not conducted to finds out association of unsafe practices and its effect on their health. The study had not included parameters to measure preparedness of front line worker to deal with menstrual hygiene promotion program.

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