

Awareness of adolescent girls regarding menstruation and practices during menstrual cycle

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Abstract:

Although adolescent period marks the beginning of women's menstrual and reproductive life, adolescent girls constitute a vulnerable group. Hygiene related practices of menstruation are of considerable importance as it has health impact in terms of increased vulnerability to reproductive tract infections (RTI). Therefore, increased knowledge about menstruation right from childhood may escalate practices and may mitigate the sufferings of women. With this in mind, the present study was carried out to gather information regarding menstruation, hygiene related practices of menstruation, and its related problems among adolescent girls. A cross-sectional study was carried out in 100 adolescent girls of age group 12-18 years. They were interviewed through pretested questionnaire. We found that 89% girls thought menstruation to be a normal process, 79% girls used sanitary napkins while 21% girls used clothes as absorbent during menses. Mother seemed to be the first source of information in 88% girls. The girls should be educated about the menstruation and hygienic practices which can be achieved by educational television programs, school/nurses health personnel, compulsory sex education in school curriculum and knowledgeable parents.

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Introduction:

Childhood to adulthood transition takes place during adolescence period which is characterized by major biological changes like physical growth, sexual maturation, and psycho-social development. As per World Health Organization (WHO), adolescence is the age group of 10-19 years. Adolescent girls constitute 1/5th of the total Indian population. It is marked by enhanced food requirement, increased basal metabolic and biochemical activities, endogenous processes like hormonal secretions with their influence on the various organ systems of which menarche is the most important event in case of adolescent girls that requires specific and special attention (1). It marks the beginning of woman's menstrual and reproductive life which occurs between 11 and 15 years with a mean of 13 years. It is qualitative event of major significance in woman's life, denoting the achievement of major functional state.

During this phase of growth, the girls first experience menstruation and related problems marked by feelings of anxiety and eagerness to know about this natural phenomenon (2). Adolescent girls constitute a vulnerable group, particularly in India where female

child is neglected one. They do not get the proper knowledge due to lack of appropriate health education program in schools. Moreover, the traditional Indian society considers talks on such topics as prohibited and discourages open discussion on these issues. This leads to intense mental stress and they seek health advice from quacks and persons who do not have adequate knowledge on the subject (2).

Menstruation is still regarded something unclean or dirty in Indian society (3). The reaction to menstruation depends upon awareness and knowledge about the subject. The manner in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menarche. Moreover, the routine health services do not have provisions for adequate care of adolescent health problems which in turn exaggerates the problems in multiple. Understanding the health problems related to menstruation, the health seeking behavior of the adolescent girls, their awareness about pregnancy and reproductive health will help us in planning programs for this vulnerable group.

Hygiene related practices of menstruation are of considerable importance as it has health impact in

terms of increased vulnerability to reproductive tract infections (RTI). The interplay of socio-economic 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 (3). Women having better knowledge regarding menstrual hygiene and safe practices are less vulnerable to RTI and its consequences. Therefore, increased knowledge about menstruation right from childhood may escalate practices and may help in mitigating the suffering of millions of women. With this in mind, the present study was carried out to gather information regarding menstruation, hygiene related practices of menstruation, and its related problems among adolescent girls along with to review perceptions, belief and expectations regarding menstruation among adolescent girls.

Material and Methods:

A questionnaire based prospective cross-sectional study was carried out in N.K.P. Salve Institute of Medical Sciences and Lata Mangeshkar Hospital, Nagpur in 100 female adolescent girls (age group 12-18 years) attending OPD. The study was carried out for the duration of 2 months from June 2014 to August 2014. They were explained the purpose of study and prior written informed consent was obtained from them. A good rapport was established with them. They were informed about the confidentiality of the information collected so as to get more reliable answers from them.

The study tool used was pre-designed, pre-tested, structured and self-administered questionnaire which was developed and translated into local language. The questionnaire was structured to obtain information relating to age at menarche, awareness about menstruation, source of information regarding menstruation, practices during menstrual cycles, menstrual history, regarding menstrual problems and treatment practices. The data thus obtained was tabulated and analyzed statistically for number and percentage using Epi-Info statistical version 7.

Results:

In the present study, 100 adolescent girls of age group 12-18 years were included. We observed that maximum girls (44%) attended menarche at the age of 12 years with the mean age of menarche as 14 years (Range 12-16 years) (Table 1). Regarding right age of menarche, only 40% girls were aware. We observed that in 46% girls, response to menarche was sad, in 28% girls it was normal, 17% girls were scared, and 6% girls were happy, but we could not get any response in 3% girls. Sixty-eight girls (68%) knew

about the source of menstrual blood and 67% girls knew about the right interval between the two menses.

Table 1: Information about menarche (n=100)

Age of menarche in years	Number (%)
12	44 (44%)
13	20(20%)
14	18(18%)
15	08(08%)
16	07(07%)

Ninety-six (96%) girls thought menstruation to be good for health and 89% girls thought menstruation to be a normal process. As in Table 2, the source of information about menstruation, we observed that Mother seemed to be source of information in maximum (88%) girls followed by relatives and friends (7%). 92% girls thought menstruation to be dirty, 98% girls bathed during menses, 87% girls performed household activities during menses, 66% girls attended social activities during menses, 84% girls did not visit holy places during menses, 52% girls felt isolated during menses.

Table 2: Source of information (n=100)

Source of information	Number (%)
Mother	88 (88%)
Relatives and friends	07 (07%)
Social programs	04 (04%)
Teachers	01(01%)

Out of 79 girls who used sanitary napkins, 1.3% girls changed it once a day, 35.4 % twice a day, 40.5% girls thrice a day, 18.9% girls changed it 4 times a day, and 3.8% girls > 4 times a day. Only paper for wrapping the used napkins was used by 40.5% girls, 32.9% girls used paper and plastic, and 10.1% girls used only plastic. 82.2% girls threw the pads in house dustbin and 2.5% girls threw on roadside. Out of 21 girls who used clothes as absorbent during menses, 66.6% girls used clothes of cotton variety while 33.4% used clothes of other variety. Frequency of changing clothes was 2 times a day in 52.4% girls, 3 times a day in 38.1%, and 4 times a day in 9.5% girls. The used clothes were washed using soap and water by 80.9% girls, 9.5% used only water, and 9.5% used disinfectant. The clothes were dried in house corner by 80.9% girls and 19.1% girls dried the clothes in sunlight whereas 80.9% girls finally disposed off the used clothes after 2-3 months, 4.8% after 4-5 months, and 9.5% after 6-12 months by burning(19.1%), throwing in dustbin (14.3%), and 4.8% threw on roadside. 41% girls washed the genitals with only water, 40% girls with soap and water, and 19% girls with water and disinfectant.

Menstruation was regular in 84% girls and irregular in 13% girls. Length of the menstrual cycle was normal in 70% girls. Quantity of menstrual blood flow was normal in 79% girls, excess in 15% girls, and scanty in 5% girls. Sixty-six (66%) girls knew that excess bleeding leads to anemia. Only 14% girls knew about the reproductive tract infections. 59% girls suffered from premenstrual syndrome, out of which 30.5% had headache, 33.8% had irritability, 13.5% had breast pain, 6.7% had vomiting, 1.7% had edema, 1.7% had headache and breast pain, 1.7% had headache with edema, and 3.4% had irritability and headache. Ninety-four (94%) girls experienced dysmenorrhea, frequency being every month in 42.5% girls, rare in 32.9% girls, and in 13.8% girls it was most of the times. Intensity of pain was mild in 30.9% girls, moderate in 52.1% girls, severe in 14.8% girls. As remedial measures, 2.1% girls used analgesics and salt water (1.1%). During menses, 14% girls bunked the schools due to dysmenorrhea (28.6%) and excessive bleeding (42.9%).

Discussion:

The present study was conducted in 100 adolescent girls of which majority girls (61%) were of age group 15-16 years. Drakshayani DK et al (1) reported the age of menstruating girls as 14-17 years with maximum (76.3%) number of girls between 14-15 years of age which is in accordance with our findings. We observed that maximum number of girls (44%) attained menarche at 12 years, the mean age being 14 years which is in concordance with a study conducted (3-6).

Though it is desirable to have school teacher or health worker to be the first source of information ensuring that right knowledge has been imparted, it was seen that major source of information in the study was mother (88%) followed by relatives and friends (7%) which is also similar to other studies (1-2,4-8). It was observed that the mothers were the most common source of information which retells the fact that mothers of adolescents should be integral part of all programs on adolescent health and especially menstrual hygiene. It was seen that though almost all girls had heard about menstruation, the level of knowledge was poor which is similar to study by Shanbhag D et al (3).

It was observed that 89% girls thought menstruation to be a normal process which is in accordance with similar study conducted in West Bengal by Dasgupta et al (7) nearly 86.25% girls believed that menstruation was a natural process. It was sad to observe that only 40% of girls knew about the right age of menarche, only 68% girls knew about the source of menstrual blood and only 67% knew about the right interval between the two menses.

In the present study though most of the girls knew about menstruation, majority of girls (46%) were sad followed by 17% girls who were scared at the time of menarche. In the study done in Bangalore by Shanbhag D et al (3), 44.1% girls felt fear, 26.1% were anxious at the time of menarche. The reason for this may not be due to lack of prior knowledge regarding menstruation, but may be due to inadequate or wrong knowledge and low levels of education especially among the mothers.

It was seen in present study that 79% used pads and 21% used clothes whereas in similar study conducted it was found that 62% girls used clothes while 38% used sanitary pads. The use of pads was higher which was probably due to the fact that availability was high in these areas and also due to influence of television which has increased awareness regarding availability and use of sanitary napkins. It was observed that the usual practice was to wash cloth with soap and water after use and dry it at some secret place like house corner. To keep the clothes away from prying eyes, they are hidden in some unhygienic places (3, 6). Privacy for washing, changing or cleaning purpose is something very important for proper menstrual hygiene. In the study, it was found that 40% girls washed the genitals with soap and water, 41% with only water and only 19% with water and disinfectant. This when compared to another study undertaken in rural West Bengal which showed that 97.5% girls used soap and water (1). This shows that personal hygiene practices were unsatisfactory in the study population. Regarding the method of disposal of the used material, most of the girls reused cloth pieces for 2-3 months and 19.4% properly disposed the used clothes (1,4,6,8).

Dysmenorrhea prevailed among 94% of the girls and premenstrual syndrome prevailed among 59% of the girls (5). Most of the participants desired for more information regarding menstruation and hygienic practices. Awareness regarding the need for information for information about healthy menstrual practices is on rise among young women. It is possible that mechanism be introduced to provide knowledge about menstrual health and self-maintenance among women (3).

Different restrictions like 84% girls were restricted from visiting holy places and 34% were restricted from doing social activities in the current study, possibly due to ignorance and false perceptions regarding menstruation. Family life has been recognized as an important component of school health program. It emphasizes upon developing healthy attitude towards human reproduction and family life among older school students. Health professionals should organize educative sessions for

parents so that they can be trained to give adequate knowledge on reproductive health problems to their children.

Conclusion:

We concluded that the proper menstrual hygiene and correct perception can protect the women from suffering. Before bringing any change in menstrual practices, the girls should be educated about the facts of menstruation, physiological implication, about the significance of menstruation and development of secondary sexual characters, and above all about proper hygienic practices and selection of disposable sanitary menstrual absorbent. This can be achieved through educational television programs, school/nurses health personnel, compulsory sex education in school curriculum and knowledgeable parents so that her received education should wipe away the age-old wrong ideas and make her feel free to discuss menstrual matters including cleaner practices without any hesitation. All mothers being the first source of information in maximum girls should be taught about the menstruation and hygienic practices and to break their inhibitions about discussing with their daughters about menstruation much before the age of menarche. Thus the above findings reinforce the need to encourage safe and hygienic practices among adolescent girls and bring them out of traditional beliefs, misconceptions and restriction regarding menstruation.

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