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Original Research Article

Assessment of knowledge and practices of menstrual hygiene among urban adolescent girls in North India

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ABSTRACT

Background: Menstruation and menstrual practices are still associated with socio-cultural restriction and taboos which results lack of knowledge and awareness in adolescent girls and remain ignore of scientific facts and hygienic practices during menstruation leads to severe reproductive health problems. The aim of the study is to assess the knowledge and menstrual hygiene practices among urban adolescent girls.

Methods: A cross sectional observational study conducted. Total 120 adolescent girls enrolled in this study who were attended in gynaecological OPD. A structured questionnaire was used for data collection. Data was collected regarding menstrual cycle, knowledge about menstruation, practices during menstruation and menstrual hygiene. Data entry and analysis was carried out in Microsoft excel and analysis done by using frequency.

Results: All participants were doing schooling, most of them they have done their high school study (47.5%) and 52.5% of adolescent girls were attended menarche between 10-13 yrs of age. Majority of participants were knowing about the menstruation before menarche (62.5%). Friends followed by mothers were the major sources of knowledge i.e. 35% and 27.5% respectively. 22.5% of adolescent girls still using cloth as menstrual absorbent.

Conclusions: All adolescent girls should be educated about the menstruation, physiological implications, its significance and proper hygienic practices during menstruation. Incorrect restrictions, myths and beliefs associated with menstruation can be removed by the help of parents, teachers, trained school nurses/ health personnel.

Keywords: Adolescent girls, Menarche, Menstrual hygiene, Menstrual practices

INTRODUCTION

According to WHO, the term 'adolescents' defines, young people between the ages of 10 and 19 years.¹ Adolescence is very important transition period from girlhood to womanhood, during which pubertal development and sexual maturation takes place.²

Menarche and menstruation is one of the very important events during this period for adolescent girls. Adolescent girls often lack knowledge regarding reproductive health including menstruation which can be due to socio-cultural barriers in which they grow up and menstrual

practices are still shadowed by taboos and socio-cultural restrictions as linked with several misconceptions and false practices.³ Menstrual irregularities are the commonest presenting complaint in the adolescent age group and unhygienic practices during menstruation can lead to adverse health consequences like pelvic inflammatory diseases, reproductive tract infection, infertility.⁴

Therefore, with this background present study was undertaken to assess the knowledge, practices for menstrual hygiene, and source of information regarding menstruation among the adolescent girls.

METHODS

A cross sectional observational study was performed. We enrolled 120 adolescent girls (after excluding exclusion criteria) who attended the gynecological OPD of Govt Doon Medical College, Dehradun. After their consent of participation, ensure of privacy and confidentiality a pre-designed, pre-tested semi-structured questionnaire was filled. The semi-structured questionnaire included topics relating to knowledge regarding menstruation, source of information regarding menstruation and hygiene practiced during menstruation.

Inclusion criteria

- Unmarried, non-pregnant, non-lactating adolescent girls.
- Age 10-19 years.

Exclusion criteria

- Not willing to give consent.
- Married, pregnant, lactating adolescent girl.

Data were collected and analyzed statistically by simple proportions.

RESULTS

A total of 120 adolescent girls participated in this study. Majority of adolescent girls were between 16-19yrs of age (38.4%). All participants were doing schooling, most of them they have done their high school study (47.5%). Most of participants had menarche between 10-16 years, amongst them 52.5% were attended between 10-13 years of age and 27.5% were had between 14-16 years of age (Table1).

Table 1: Age and education.

Age (Years)	Numbers (120)	Percentage
10-12	31	25.8
13-15	43	35.8
16-19	46	38.4
Education		
Middle	33	27.5
High school	57	47.5
Intermediate	30	25
Age of menarche		
10-13	63	52.5
14-16	33	27.5
17-19	24	20

Majority of participants were knowing about the menstruation before menarche (62.5%). Among most of participants, friends followed by mothers were the major sources of knowledge i.e.35% and 27.5% respectively. Teachers were source of knowledge in only 10%.

(Table2). Friends followed by mothers were the major sources of knowledge i.e.35% and 27.5% respectively. Majority of adolescent girls were using sanitary pads as menstrual absorbents and only 22.5% were cloth users and 4.2% of them reuse the cloths. 10% of them still disposed them on road side. (Table3).

Table 2: Knowledge of menstruation.

Knowledge (Before menarche)	Number (120)	Percentage
Knew	75	62.5
Didn't knew	45	37.5
Source of knowledge		
Mother	39	32.5
Other family member	15	12.5
Friends	36	30
Media	20	16.7
Teacher	10	8.3

Table 3: Practices during menses.

Menstrual absorbents	Numbers (120)	Percentage
Sanitary pads	93	77.5
Cloths	27	22.5
Cloth user		
once	22	18.3
reuse	5	4.2
Dispose of absorbents		
Dustbin	108	90
Road side	12	10

DISCUSSION

Present study shows most of adolescent girls had menarche between the age 10-13 years (50.8%) which is similar as Narayan et al and Keerti Jagdand had reported.^{5,6} 62.5% of adolescent girls were aware of menstruation before menarche. Findings of this study almost corroborating the findings of studies conducted by Adrija et al, and Patle et al. reported 72.1% and 63.38% respectively, of the urban participants had knowledge prior to menstruation.^{7,8}

On the contrary, according to Gupta et al. found that 68% of adolescent girls were not aware about menses before menarche.⁹ Similar finding studies stated by Dasgupta et al. (32.5%) and Subhas et al (36.95%).^{10,11}

Mother followed by friends are the major sources of knowledge about menstruation, similar findings were reported in many studies like, singh et al.¹²⁻¹⁸

But according to Juyal R et al in Uttarakhand, friends were the first source of information in 31.8% of girls.¹⁹ Present study also states that only 8.3% school teachers were the source of menstrual knowledge in urban

adolescent girls. Although school teachers should be desirable sources to ensuring correct knowledge has been imparted but their participation is significantly very less in present study.

It is observed in the present study that use of sanitary napkin is higher i.e.77.5% and only 22.5% adolescent girls were using cloths as menstrual absorbent, increase in the use of sanitary pads could be due to the awareness and literacy of the participants and their mothers.

Similar findings were also reported in a study conducted by Ray S et al, and Omidvar S et al.^{14,15} But previous studies had completely different scenario where cloths and its reuse were main menstrual absorbent.^{20,21}

CONCLUSION

All adolescent girls should be educating about the menstruation, physiological implications, its significance and proper hygienic practices during menstruation for prevention of reproductive tract infection and they may enable to live healthy reproductive life.

All mothers should be encouraged to break their inhibitions about discussing with their daughters regarding menstruation and menstrual hygiene before start of menarche. Education regarding reproductive health and hygiene should be given by social-workers as well as included as a part of school curriculum so that correct knowledge and practice can be imparted. Universalized use of sanitary pads can be advocated to every girl by social marketing. Incorrect restrictions, myths and beliefs associated with menstruation can be removed by the help of parents, teachers, trained school nurses/ health personnel.

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