

**Research Article****Psycho-Social Behaviour of Urban Adolescent Girls of North India During Menstruation****Harinder Sekhon<sup>1\*</sup>, Sukhmeet Minhas<sup>2</sup>**<sup>1</sup>Chief Medical Officer (Psychiatrist), Composite Hospital, Group Centre, Central Reserve Police Force, Bantalab, Jammu-181123, Jammu & Kashmir, India<sup>2</sup>Reader, Department of Community Medicine, Armed Forces Medical College, Pune – 411040, Maharashtra, India**\*Corresponding author**

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**Abstract:** Menstruation is part of the female reproductive cycle that starts when girls become sexually mature. Studies have revealed a range of psychosocial factor affecting this phenomenon as well as a huge gap in the knowledge, attitude and practices of adolescent girls, regarding menstruation. The aim was to study the psycho-social behaviour of urban adolescent girls of North India during menstruation. It is a school-based, descriptive, cross-sectional study, conducted in North India. The study was conducted among adolescent girls studying in the tenth class of schools in an urban area of North India. Data was collected in the form of personal particulars, anthropometric measurements and an examiner administered questionnaire. Data was analysed using EpiInfo. Majority of girls attained menarche at 12 to 13 years of age. Majority of the girls used branded sanitary napkins available in market and disposed them of in dustbins. Restrictions were imposed on the girls due to customs and traditions, especially related to visiting places of worship during this period. Based on the findings of this study and analysis of the findings, we realise that this age group is ideal to be targeted in order to encourage them to resort to good menstrual hygiene and maintain a good reproductive health.**Keywords:** Adolescence, Behaviour, Girls, Menstruation, Psycho-social, Urban

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**INTRODUCTION**

Adolescence, as defined by the World Health Organisation is the age range of 10 to 19 years. It is the period between childhood and adulthood and is marked by enhanced basal metabolic activities, in addition to endogenous processes like secretion of hormones and their influence on the body [1].

Menstruation is part of the female reproductive cycle that starts when girls become sexually mature [2]. Many studies have revealed a range of psychosocial factor affecting this phenomenon as well as a huge gap in the knowledge, attitude and practices regarding menstrual hygiene [1-3].

WHO is focussing on making existing health facilities more 'friendly' to adolescents [4, 5]. Menstrual hygiene and management is an issue that is insufficiently acknowledged [6-10]. Indian society is interwoven into a set of traditions, myths and misconceptions, especially regarding menstruation and related issues [1, 3, 11, 12]. In view of this, the present study was undertaken to study the psycho-social behaviour of urban adolescent girls of North India during menstruation.

**MATERIAL AND METHODS**

This study was school-based, descriptive, cross-sectional study conducted among adolescent girls studying in the tenth class of six schools in an urban area of North India. All the schools which were only for girls were approached for permission to conduct the study. Due permission was obtained from the school authorities before conduct of the study. Subsequently, a talk on this topic was given to the girls in the morning assembly by the principal worker, so as to acquaint them with the aims and objectives of the study. Data was collected from all the 1870 girls who were present on the day of the study and consented to participate. Data collection from the study subjects broadly consisted of the personal particulars, anthropometric measurements and an examiner administered questionnaire. Age was recorded to the nearest completed year as per official records of the school. Record of educational status of the girl was restricted to the class in which she was studying at the time of data collection. Besides, anthropometric measurements recorded were the weight, height and Body Mass Index [5].

A pre-tested, validated questionnaire consisting of questions targeted at information regarding menstruation and issues related to psychosocial aspects was administered by the investigator. Informed consent was taken. Anonymity was maintained throughout. Data was collected, compiled and analysed thereafter, using appropriate statistical software, keeping in view the aims and objectives of the study.

**RESULTS**

On completion of the study and analysis of the results, it was found that most of the girls in the study population were between 14 to 16 years of age (Table 1). There was a predominance of nuclear families (47.86%) followed by three generation families (35.19%) and joint families (16.95%) (Table 2). The distribution of study population by age at attainment of menarche (Table 3) showed that majority of the girls attained menarche at 12 to 13 years of age (66.47%). A significant majority of the study population (93.53%) used company made branded sanitary napkins available in market (Table 4). Only 0.48% used home-made reusable pads, which were prepared from used cotton clothes, in all these cases. This is an important reflection on the knowledge, attitude and practices of the female population in the rural area, as well as the availability and affordability of the sanitary napkins. Over 99% of the study population claimed to be changing the used pads as and when required while only 0.48% used a single pad per day (Table 5). During menstruation, over 95% of the girls slept at their usual place in the home while the remainder were told to sleep in a separate room by their families (Table 6). Majority of the girls disposed of the used napkins in dustbins while the remainder resorted to other methods of disposal as shown in Table 7. It was noticeable that in all the cases that it was impressed upon the girls to keep this aspect of their physiology hidden from the people around, including their family members. Only 2.99% girls stated that they were not allowed by their families to enter the kitchen area during menstruation, while the majority (97.01%) had no such practise being observed in their families (Table 8). It was found out that the reason for the former was more to do with the customs and traditions followed by the families since generations. Almost half of the girls stated that the common restrictions observed during this period were mainly related to entering a place of worship (Table 9). Besides that, the commonest restrictions imposed were related to consumption of certain type of food stuffs. 12.67% of the study population absented from school during menstruation (Table 10). The common reasons given were discomfort, easily getting tired and the fear of staining their clothes. Absence from school was more during the first two days of the period that corresponded to heavier flow, in all the cases.

**Table: 1 Distribution Of Study Population By Age Group**

Age group	Total (%)
≥12 to <13	01 (0.05)
≥13 to <14	47 (2.51)
≥14 to <15	765 (40.91)
≥15 to <16	1049 (56.10)
≥16	08 (0.43)
<b>Total</b>	<b>1870 (100)</b>

Note: Numbers in parenthesis correspond to the respective percentages.

**Table: 2 Distribution of study population by type of family**

Type of family	Total (%)
Nuclear	895 (47.86)
Joint	317 (16.95)
Three generation	658 (35.19)
<b>Total</b>	<b>1870 (100)</b>

**Table: 3 Distribution of study population by age at attainment of menarche**

Age (in years)	Total (%)
<12	7 (0.37)
≥12 to <14	1243 (66.47)
≥14 to <16	616 (32.94)
>16	4 (0.21)
<b>Total</b>	<b>1870 (100)</b>

**Table: 4 Distribution of study population by type of pads used during menstruation**

Type of pads used	Total (%)
Home-made disposable pads	112 (5.99)
Home-made reusable pads	9 (0.48)
Branded sanitary napkins available in market	1749 (93.53)
<b>Total</b>	<b>1870 (100)</b>

**Table: 5 Distribution of study population by frequency of changing pads during menstruation**

Frequency of changing pads	Total (%)
1 pad/ period	0
Once a day/ period	9 (0.48)
Depending on requirement to change	1861 (99.52)
<b>Total</b>	<b>1870 (100)</b>

**Table: 6 Distribution Of Study Population By Sleeping Quarters During Menstruation**

Sleeping quarters	Total (%)
As usual	1783 (95.35)
In separate room	87 (4.65)
Total	<b>1870 (100)</b>

**Table: 7 Distribution of study population by mode of disposal of used pads during menstruation**

Mode of disposal	Total (%)
Dustbin	1514 (80.96)
Burying	87 (4.65)
Burning	257 (13.74)
In latrine	12 (0.64)
Total	<b>1870 (100)</b>

**Table: 8 Distribution of study population by practise of not-entering the kitchen during menstruation**

Entering kitchen/ cooking food during periods	Total (%)
No	56 (2.99)
Yes	1814 (97.01)
Total	<b>1870 (100)</b>

**Table: 9 Distribution of study population by restrictions during menstruation**

Restrictions during menstruation	Total (%)
Sour food	738 (39.47)
Rice, curd, kheera	46 (2.46)
Visiting a place of worship	912 (48.77)
None	174 (9.30)
Total	<b>1870 (100)</b>

**Table: 10 Distribution of study population by school attendance during menstruation**

Going to school during periods	Total (%)
No	237 (12.67)
Yes	1633 (87.33)
Total	<b>1870 (100)</b>

## DISCUSSION

In the present study, it was observed that most of the girls attained menarche at 12 to 13 years of age. In a similar study, age of menarche of girls ranged from 11 to 15 years and maximum number of girls were between 13 and 14 years of age [15]. In another study, 72.77% have attained menarche at 12-14 years [16]. Therefore, we see that results of the present study are

comparable to that of others. Mean age of menarche was also found comparable to that of the other studies [7, 8, 15, 17]. Distribution of study population by type of family in the present study, showed a predominance of nuclear families (47.86%), followed by three generation families (35.19%) and joint families (16.95%). In a similar study, the family structure showed 72.2 per cent (n=195) in the urban and 73.6 per cent (n= 206) from rural areas lived in nuclear family [18]. This is important since we know that young girls seek advice at home from the elder ladies in the household. Hence, the presence as well the awareness of the elder ladies is an important influencing factor. The aspect of use of company made branded sanitary napkins was also found to be similar to that of other studies [18-21]. Majority of the girls claimed to change the used pads as and when required. In a similar study, the median number of absorbents used during the last menstrual period was 8 (3.18) by each subject (range, 1-18) [20].

In the present study, only about 13% of the girls absent from school during menstruation, while there was no variation in the attendance of the remainder of the study population. Another cross-sectional study conducted in India found that 17% of girls reported missing school due to dysmenorrhoea, while 60% of them reported disruption in their daily activities [2]. The rate of absenteeism in case of rural participants was more [20]. In yet another study, 83% girls attended school during menstruation; out of which 72% were rural [17]. A variety of restrictions are imposed on the girls during menstruation. The common ones found in this study were – not allowed to go to a place of worship, not allowed to cook or serve food, not allowed to eat and sleep with the rest of the family. Similar results were found in other studies [16, 17]. In the present study, during menstruation, over 95% of the girls slept at their usual place while the remainder were told to sleep in a separate room by their families. The reason for the latter was more to do with the customs and traditions followed by the families since generations. In similar studies it was found that almost half the girls had to sit separately during menses [17, 22].

## CONCLUSION

The present study was aimed at studying the psychosocial behaviour of urban adolescent girls of North India during menstruation. This study brings out the common practices and perceptions related to menstruation in this part of the country. Based on the findings of this study and analysis of the findings, we realise that this age group needs to be targeted, in order to encourage the girls to practice good menstrual hygiene and bring about a positive change in their psychosocial behaviour as well as that of their families and community. Although, on the whole, majority of the girls have satisfactory practices during menstruation, still there are certain misconceptions and

restrictions associated with this physiological process. Although the result of this study were quite encouraging where the psychosocial behaviour of the study population during menstruation was concerned, it is imperative that this vulnerable population of girls be still encouraged to practice safe and hygienic practices for a good reproductive health.

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