Practices and Problems during Menarche among Adolescent Girls in Sultanpur, Uttarpradesh, India

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ABSTRACT:
Introduction: Menarche is a highly emotional experience for the young pubescent. The intensity of experience for the young pubescent is maximum at the time of menarche and depends on how well she is informed about menstruation and the type of support system around her. The subject of menstruation revolves around notion of dirt, taboos and restrictions in various spheres of a woman’s life. The objective of this study is to ascertain and compare practices and problems during menarche among adolescent girls in Sultanpur, Uttarpradesh (UP), India. Methods: The comparative study was conducted in both urban (Civil Lines) and rural (Wallipur Village) areas in Sultanpur district of UP, India. A cross-sectional study was followed from August to November 2011. Two hundred adolescence girls were selected through simple random procedure. Interview schedule was used to collect information from respondents. Results: The mean age of menarche among adolescence girls was 12.16 years. There was no statistical difference between rural and urban population with regard to knowledge about menstruation. Menstruation was taken as a disease by 20.6% and 23.7%, in each population. Use of sanitary pads was more in urban girls. Unhygienic practices like using no means of menstrual absorbent were more prevalent among rural girls. Conclusion: Unhygienic practices during menstruation among adolescent girls was common in adolescent girls in rural population.

Keywords: adolescence girls • menarche • practices • problems • sultanpur district

INTRODUCTION:
Menstruation is a physiological process but its onset profoundly changes a young woman’s life. It is a well known fact that menarche is a highly emotional experience for a young pubescent. It is now becoming increasingly recognized that the social and cultural significance of menstruation interact with the physiological process. This produces culturally determined norms and practices. Multicultural and multi-religious environment, numerous superstition and practices regarding menstruation are prevalent in India. In various cultures all over the world, the onset of menstruation is related to “puberty-rites”, which is prevalent in some parts of India. In the Indian culture the onset of menarche is associated with physical maturity and the ability to marry and reproduce, however, a culture of silence surrounds menarche. Most adolescent girls were previously unaware that menstruation would happen because the information they were given was sparse. Menstruation is associated with taboos and restriction on work, sex, food and bathing but the taboos observed by most of the women were avoidance of sex and not participating in religious practices. The taboo of not going into the kitchen, which has been observed in rural joint households, was not being observed after migration from the rural areas due to lack of social support mechanism. This study was done to ascertain and compare practices and problems during menarche in areas of Uttarpradesh, India.
METHODS:

This descriptive, cross-sectional, comparative study was conducted in district of UP, India from August to November 2011. Hundred adolescence girls from each urban (Civil Lines) and rural (Wallipur Village) areas in Sultanpur were selected through simple random procedure. Interview schedule was used to collect information. Pretest procedure was applied in order to verify validity of the interview schedules. Data were collected through face-to-face interview procedure. Special care was taken to maintain ethical issues during the time of data collection and anonymity of all participants was maintained. Information was analyzed through SPSS-16.

RESULTS:

Demographic Profile:

The maximum number of respondents were between 12 to 14 years (42%) and 30.5% were between 10-12 years. Most respondents were Hindus 51.5% and Muslims 40%. However, only 4% were illiterate and 45% were done upto higher secondary school. The age at menarche was at 12 years for most of respondents 38% (Table 1).

Knowledge About Practices During Menstruation:

There was no statistical difference between rural and urban population with regard to knowledge about menstruation (p=0.3), but it was significant statistically with respect to knowledge about sanitary pads which was 83.2% Vs 33.3% in urban and rural respondents. However menstruation knowledge received from mother was similar in both groups 51.6 Vs 49.5% (Table 2).

Feeling At The Time Of First Menstruation:

Feeling of fear and anxiety was similar in both groups during menarche, 47.3% vs 41% in rural and urban respondents. Menstruation was taken as a disease by 20.6% and 23.7% in each population (Figure 1).

Practice (Using Materials) During First Menstruation:

Practice of using sanitary pads was more with urban girls 57.9% than rural girls 21.5%. Many rural girls use ragged and rejected clothes 36.6% as compared to urban girls which was only 16.8%. Surprisingly, 4.3% of rural girls said they were nothing as compared to urban girls which was only 16.8% (Figure 2).

Table 1: Demographic profile of participants

| Age         | Rural (%) | Urban (%) | Total (%) |
|-------------|-----------|-----------|-----------|
| 10 – 12     | 31(33.3)  | 29(27.1)  | 60(30.5)  |
| 12 – 14     | 40(40)    | 44(41.1)  | 84(42)    |
| 14 – 16     | 22(23.7)  | 343(1.8)  | 56(28)    |
| Total       | 93(100)   | 107(100)  | 200(100)  |

| Religion    | Rural (%) | Urban (%) | Total (%) |
|-------------|-----------|-----------|-----------|
| Christian   | 11(11.8)  | 18(16.8)  | 29(14.5)  |
| Hindu       | 50(53.8)  | 53(49.5)  | 103(51.5) |
| Muslim      | 19(20.4)  | 21(19.6)  | 40(20.0)  |
| Sikh        | 13(14.0)  | 15(14.0)  | 28(14.0)  |
| Total       | 93(100)   | 107(100)  | 200(100)  |

| Education   | Rural (%) | Urban (%) | Total (%) |
|-------------|-----------|-----------|-----------|
| Illiterate  | 7(7.5)    | 1(0.7)    | 8(4.0)    |
| Primary     | 20(21.5)  | 4(3.7)    | 24(12.0)  |
| Secondary   | 26(28.0)  | 52(48.6)  | 78(39.0)  |
| Higher secondary | 40(43.0) | 50(57.7) | 90(45.0) |
| Total       | 93(100)   | 107(100)  | 200(100)  |

| Age at menarche | Rural (%) | Urban (%) | Total (%) |
|-----------------|-----------|-----------|-----------|
| 10 years        | 12(12.9)  | 19(17.8)  | 31(15.5)  |
| 11 years        | 5(5.4)    | 8(7.5)    | 13(6.5)   |
| 12 years        | 31(33.3)  | 45(42.1)  | 76(38.0)  |
| 13 years        | 26(28.0)  | 27(25.5)  | 53(26.0)  |
| 14 years        | 19(20.4)  | 8(7.5)    | 27(13.5)  |
| Total           | 93(100)   | 107(100)  | 200(100)  |

Mean age(12.16) SD(±1.12)years
clothes which was high compared to urban girls which was only 16.8%. Surprisingly, 4.3% of rural girls said they used nothing which was seen in 0% of urban girls.

**Problems during first menstruation**, 26.2% of total girls did not have any problems during first menstruation. But 32.5% girls had abdominal pain which was similar in both the groups. However only 1% had nausea and vomiting but 18.5% had excessive bleeding which was more with urban girls.

**DISCUSSION:**
Menstruation is considered as a private matter in the domestic sphere. It is barely discussed and young girls take menarche as a surprise. The present shows the average age of menarche in both rural and urban adolescent was 12.16 yrs ($SD=1.12$) which is earlier than the average age of 13.6 years ($SD=0.83$)

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**Table 2: Knowledge about practices duration menstruation**

| Particular                        | Rural (%) | Urban (%) | Total (%) | P value |
|-----------------------------------|-----------|-----------|-----------|---------|
| Knowledge about menstruation      | 70(75.3)  | 73(68.2)  | 143(70.51)| 0.271   |
| Knowledge about sanitary pads     | 31(33.3)  | 89(83.2)  | 120(60.0) | 0.000   |
| Knowledge about age at menopause  | 91(97.8)  | 83(77.5)  | 174(87.0) | 0.000   |
| Menstruation knowledge received by mother | 48(51.6) | 34(31.8)  | 82(41)   |         |
| Menstruation knowledge received by friends | 13(14.0) | 53(49.5)  | 66(33)   |         |
at menarche seen in a study done in Haryana and similar to the average age of 12 yrs \((SD=1)\) among the girls in Riyadh.\(^2\,3\) Maximum (44.0\%) adolescent girls (rural = 41\% and urban girls = 47\%) suffered from fear and anxiety at menarche. Only around 9\% adolescent girls believed that menstruation is a natural physiological event; 20.6\% urban adolescent girls thought it could be a disease and 28\% thought it was internal injuries but 43\% of the girls knew that menstruation is a physiological process. In a study done in Guntur District of India, 12 thought it to be a curse from god, four took it as a cause of sin and five thought it was a disease.\(^4\)

This study indicated that majority of respondents (75.3\%) knew about menstruation and they could get information from their mothers in rural area; while in urban area the major source of information was friends. None of the mothers of the girls in the study had imparted any knowledge to them prior to menstruation and very few consulted their mothers when their menstruation started this finding is similar to a study done in slums of Delhi.\(^5\) The notion of uncleanness attached to menstruation in the study can also be explained by socio-cultural belief of Indian society which is similar to the findings reported from Egypt, Indonesia and Yugoslavia where a considerable proportion of respondents believed that it was inadvisable for menstruating women to visit temple and ritual places because of their impure state.\(^6,7\)

The most common protection used by the adolescent girls in rural area during menstruation was ragged rejected clothes while girls in the urban area used commercially available sanitary pads. In a study in Nigeria, 66.3\% girls used sanitary materials as a menstrual absorbent.\(^8\) Some girls suffered from menstrual problems due to bad practices. Near about half of the girl students in Haryana faced menstrual problems like dysmenorrhoeal, irregular means, pain and weakness.\(^9\) Similarly in the present study, the problems faced by the respondent during menstruation were abdominal pain, nausea, pain in thighs, weakness and excessive bleeding.

**CONCLUSION:**

The mean age of menarche among adolescence girls was 12.16yrs \((SD=1.12)\) yrs. Problems during menarche were more common in both groups. Respondents who had knowledge regarding menstruation and their menstrual practices were significantly associated.

**REFERENCES:**

1. Venkata R, Devi DK. A study on menstrual hygiene among the rural adolescent girls. Ind J Med Sci. 1994;48:139-43.
2. Singh MM, Devi R; Gupta SS. Awareness and health seeking behavior of rural adolescent school girls on menstrual and reproductive health problems. Ind J Med Sci. 1999;53:439-43.
3. Korah, Loredana Knowledge and perception regarding menstruation among the girls. Nursing J Ind. 1991;82:(7).
4. Drakshayani Devi K, Venkata Ramaiah P. A study on menstrual hygiene among the rural adolescent girls in Guntur District. Ind J Med Sci. 1994;48:139-43.
5. Garg S, Goel A. Socio cultural aspect of menstruation in urban slum in Delhi. Reproductive Health Mater. 1999;17:16-26.
6. Rao S. Prevalence of menstrual symptoms in college population. Ind J Clin Psychol. 1984;9:89-94.
7. Severy LJ, Thapa S, Askew I, G lor J. Menstrual experiences and beliefs: a multicountry study of relationships with fertility and fertility regulating methods. Women Health. 1993;20:1-20.
8. Abioye-Kuteyi EA. Menstrual knowledge and practices amongst secondary school girls in Ile-Ife. J Rural Social Health Nigeria. 2000;120:23-6.
9. Chandra PS. Cultural variation in attitudes towards menstruation. Can J Psychiatr. 1992;37:196-8.