



Knowledge And Practice Of Menstruation Among Rural Adolescent Girls

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Abstract

Aim of the study: We assessed the age at menarche, the knowledge of menstruation, restrictions, and practices among rural adolescent girls. We also studied the prevalence of premenstrual and menstrual disorders. As this study was conducted in 1998, we also compared it with recent studies to note any change in trends over time.

Methods: It is a cross-sectional community-based study of unmarried girls aged 10-18 years in a rural area of Delhi.

Results: The mean age at menarche was 13.58 years, with half of them (50.6%) having attained it. Knowledge of menstruation was limited to 45.7% in those who attained menarche and 29.1% among those who did not. The common source of information was the mother (41.1%). Restrictions on worship (92%), household activities (69.3%), and food (56.3%) were commonly practiced during the menstrual period. Most girls used homemade pads (74.8%); usage of sanitary napkins was limited to 23.7%. Premenstrual complaints were common in the study group with 62.9%, 45.6% and 49.6% reporting irritability, myalgia, and headaches, respectively. Dysmenorrhea was present in 63.7% while 13.3%, 11.8%, and 3.9% complained of menorrhagia, oligomenorrhea, and amenorrhea

Conclusion: There is a lack of awareness and knowledge about menstruation among adolescent girls. Restrictions in activities and the use of homemade pads is common. Premenstrual and menstrual complaints are frequently experienced by young adolescent girls.

Keywords: Adolescent girls, Menarche, Premenstrual complaints

Introduction

Menarche in many cultures signifies the transition of a girl into a woman. However, a girl on a menstrual period is considered impure in certain sections of Indian society.^{1,2} This has led to taboos and restrictions which further isolate this vulnerable population and inculcates misinformation that may be harmful to their physical and psychological wellbeing.² However, efforts have been made in the last decade to break the taboo around the topic of menstruation¹ On May 28, 2014, a social media campaign was launched to commemorate that day as Menstrual Hygiene Day with the goal end to the

stigma surrounding menstruation by 2030.³ Swachh Bharat Aayan highlighted the improvement of menstrual hygiene as a focus area, to increase public awareness of menstruation, provide menstrual facilities to adolescents, access to toilets and proper facilities to dispose of menstrual waste.¹

This study was conducted in 1998 among adolescent girls in a rural area on the outskirts of Delhi. However, the topic is still pertinent as it is important to explore if the recent government policies and the greater awareness of this topic on social media have helped dispel myths regarding menstruation leading

to an improved understanding and adaptation of better practices.

Material And Methods

Study Design: The study was conducted in the village of Ghazipur in East Delhi. It is community-based and cross-sectional in design. Institutional ethical committee approval was obtained before starting the study. Informed consent was obtained from the subject and the parent before administering the questionnaire.

Study subjects: Unmarried adolescent girls among permanent residents of Ghazipur village were included in the study. As per the village census, there were around five hundred girls between the age of 10 to 18 years. Those who were married were excluded from the study to prevent any bias, as they may be more knowledgeable about reproductive health. A total of 251 girls were recruited for the study

Measures: Data were collected using a pre-coded, pretested, structured, and close-ended questionnaire. The interview was conducted in the local vernacular language with the assistance of a health worker.

Statistical analysis: The quantitative data obtained through clinical interviews were analyzed by calculating frequencies and computing percentages using SPSS software.

Results:

Sociodemographic correlates: The age distribution of the study sample, occupation, and literacy status of parents is depicted in Table 1. Most of the study group were less than 15 years of age as only unmarried women were included in the study. There were only 68 (27%) subjects in the older adolescent group. Though 81.6% of the girls were attending school. The numbers kept decreasing with an increase in age indicating a high dropout rate. The rest (18.4%) were engaged in household work. The literacy rates were much higher among fathers as compared to mothers. The majority (70.5%) of fathers have a high school or greater education while less than a quarter (21.2%) of mothers have a high school education and only 4.0% have attended college.

Age at menarche: There were 127 (50.6%) girls who had attained menarche as noted in Table 2. The mean

age at menarche in the study sample was 13.58 years. Less than a third (29.3%) of girls attained menarche before 13 years while the majority (39.4%) has their first period between 13 and 14 years of age.

Prior Knowledge of Menstruation: Less than half (45.7%) of girls were aware of menstruation before they experienced it. The knowledge about menstruation was limited to 36 (29%) subjects, among those who were yet to attain menarche.

Source of Knowledge on Menstruation: Mothers (39.4%) were the most common source of knowledge about menstruation followed by older sisters (24.5%) and friends (21.3%). Other sources included relatives (6.4%), television (4.3%), books (3.2%), and doctors (1.1%).

Restrictions and practices during menstruation: Most of the study subjects reported that restrictions were placed on them during menstruation. They were reflective of the cultural practices that are prevalent in the community. The majority (91.3%) were forbidden from engaging in religious activities during the period. More than half of the study subjects (69.3%) refrained from doing heavy household work, while 56.6% noted that they avoided eating oily cold, and spicy foods during the cycle.

Menstrual Hygiene: Menstrual hygiene is of utmost importance and is a topic that has received national attention in the last decade. However, most of the study subjects were using homemade pads (74.8%), while sanitary napkins were availed by 23.6%. The rest of the study group used cotton wool.

Pre-Menstrual Complaints: Pre-menstrual complaints were frequent in the study group. There were 80 (62.9%) who experienced irritability before the period, while 63 (49.6%) and 58 (45.7%) experienced headaches and myalgia, respectively.

Menstrual Disorders: As shown in Table 3, dysmenorrhea was a common complaint, experienced by 63.7% of the girls. Menorrhagia, oligomenorrhea, and amenorrhea were also identified among 10.2%, 11.8%, and 3.9% of adolescent girls. They were referred to the community clinic in the village for further treatment and evaluation.

Table 1. Distribution of the study group by age, occupation, and literacy status of parents.

Sociodemographic variable	No (%)
<i>Age (years)</i>	
10-11 years	71(28.3)
12-13 years	60 (23.9)
14-15 years	52(20.7)
16-17 years	35(13.9)
18-19 years	33(13.1)
<i>Occupation</i>	
Students	205(81.6)
Engaged in household work	46(18.4)
<i>Literacy status of parents</i>	
<i>Mother</i>	
Illiterate or just literate	128(50.9)
Less than High school	60(23.9)
High school	53(21.2)
College	10(4.0)
<i>Father</i>	
Illiterate or just literate	26(10.6)
Less than High school	47(18.9)
High school	138 (55.9)
College	36(14.6)

Table 2. Age at Menarche, prior knowledge, practices, and restrictions using menstruation

Menarche and menstrual practices	No (%)
<i>Menarche Status</i>	
Attained Menarche	127(50.6)

Did not attain menarche	124(49.4)
<i>Knowledge of Menstruation</i>	
Prior knowledge among those who attained menarche	58(45.7)
Knowledge among those who did not attain menarche	36(29.0)
<i>Source of knowledge of menstruation</i>	
Mother	37(39.4)
Sister	23(24.5)
Friends	20(21.2)
Others	14(14.9)
<i>Practices and Restrictions</i>	
Restriction on household work	88(69.3)
Restriction on worship	116(91.3)
Restriction on food	72(56.6)
Restriction on the daily bath	2(1.6)
None	10(7.8)
<i>Sanitary measures</i>	
Homemade pads	95(74.8)
Sanitary Pads	30(23.6)

Table 3. Premenstrual and Menstrual complaints in the study population

Symptoms	N (%)
<i>Pre-menstrual Complaints</i>	
Headache	63(49.6)
Irritability	80(62.9)

Myalgia	58(45.7)
No complaints	41(32.2)
<i>Menstrual complaints</i>	
Dysmenorrhea	81(63.7)
Oligomenorrhea	15(11.8)
Menorrhagia	13(10.2)
Amenorrhea	5(3.9)

Discussion

The knowledge of menarche and menstruation was low among the study subjects which may be attributed to the study period as it was conducted in 1998 before the easy accessibility of the internet and social media that aids in more efficient dissemination of information.

The mean age of menarche was 13.58 years which is consistent with other studies conducted across the country.^{4,5,6,7} A 2014 study on secular trends in age at menarche revealed a decrease of one month per decade in age at menarche for Indian women, with the mean age in 2005 being 13.76 years.⁴

The knowledge of menarche and puberty was lacking among the study subjects. Other studies have reported comparable results.⁷⁻¹² Though the mother is the most common source of information in older studies,⁷⁻¹³ a few recent studies have indicated more frequent dissemination of information on menstruation from friends, teachers, and television.^{13,14} However, menstruation remains a taboo topic in multiple cultures. This impact's the proper understanding of the pubertal changes at a physical and psychological level that may lead to physical and mental health disorders in long term.^{13,14} The general, woman is perceived as unclean while menstruation.² Restriction during the period is a widespread practice among Asian cultures as reported by other studies that have explored this topic.¹³⁻¹⁸

Though the restrictive practices placed on menstruating women have their roots in culture and

belief systems, religion, education, and family environment also influence it.^{17,18} Commonly followed practices include forbidding the menstruating girls from entering places of worship, the kitchen, and touching certain food items for the fear of spoiling them.^{2, 17,18} Girls are dissuaded from exercising for the fear of worsening the blood flow, though scientific evidence suggests that it helps relieve some symptoms of dysmenorrhea.¹⁹

It is important to adopt hygienic practices during the period to maintain appropriate reproductive health. The use of sanitary pads in this study was limited to 30 (23.7%) girls. Evidence suggests that usage of commercial napkins has increased with time. As per National Family Health Survey 4, 77.5% of older adolescents and young women between 15-24 years in urban and 48.2% in rural areas used hygienic methods of protection during menstruation.²⁰ Reusable cloth pads were commonly used in rural areas and commercial sanitary pads were preferred in urban areas. Other factors associated with higher usage of hygienic methods were higher education, accessibility to a flush toilet at home, and greater media awareness.²⁰

Pre-menstrual symptoms afflicted most of the study subjects with irritability, headache, and myalgia being common symptoms. In 2014 Bainchin et.al reported that 44.6% of girls reported premenstrual headaches, which is consistent with the results of this study.²¹ A Turkish study reported a 26.1% prevalence of premenstrual syndrome (PMS) and 10% premenstrual dysphoric disorder (PMDD) based on the Diagnostic and Statistical Manual of Mental

Disorders, Fifth Edition (DSM-5) criteria. Anger/irritability was noted among 97.4% with PMDD diagnosis.²¹ Premenstrual disorders are underdiagnosed in Indian society, especially so in rural areas. The majority (67.8%) of the study participants reported premenstrual symptoms, however, we need further studies to clarify the prevalence of PMDD in the community.

Dysmenorrhea was frequently reported by the study group, while a quarter of the girls described more serious conditions like oligomenorrhea, menorrhagia, and amenorrhea. The prevalence of menstrual disorders is similar to those noted in other studies.^{22,23}

Limitations

The study was conducted in 1998 and hence may not be reflective of the changes in awareness, perceptions, and practices brought about in the past three decades. This includes the growing influence of social media which may play a prominent role in dispelling myths and stigma and implementing government policies to improve access to low-cost sanitary napkins.

Another limitation was the unequal distribution of the study group with the majority (72%) of them being younger than 15 years of age. That was because the average age of marriage for girls in the village was 16.24 years and only unmarried girls were included in the study. Hence the findings may not be reflective of the collective knowledge and practices of all the adolescents in the study area, as presumably awareness usually increases with age and attainment of puberty.

Sex, reproductive health, and menstruation are taboo topics in a rural communities

and are not openly discussed. Some of the respondents may not have been forthcoming with the information shared.

Conclusion

A comparison of the results of this study to more recent research reveals that lack of awareness and restrictive practices persist and remains an area of improvement. The use of sanitary pads has increased in urban and rural areas; however, a sizable number of adolescents continue to use homemade pads and neglect menstrual hygiene. Premenstrual dysphoria symptoms and menstrual flow disorders are often

ignored and normalized; however, they can cause significant reproductive health problems if left untreated.

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