

Menstruation Hygiene and Symptoms among School Going Girls in Rural Area of Midnapur district, West Bengal, India

Research Article

Anumita Mallick¹ and Prakash Ch Dhara²

¹Faculty, Department of Nutrition, Belda College, Belda, West Midnapore, West Bengal, India

²Director (Officiating), Centre for Distance and Online Education, and Ex-Professor of Dept. of Human Physiology with Community Health, Vidyasagar University, Midnapore- 721102, West Bengal, India

***Corresponding author:** Prakash C. Dhara, Director (Officiating), Centre for Distance and Online Education, Vidyasagar University, Paschim Midnapore- 721102, West Bengal, India. Phone: +91 9433226695/ 8373063906; Email: prakashcdhara@gmail.com

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Abstract

Menstrual Hygiene for school girls is a neglected issue in low income nations. Restricted accesses to water, sterilization and cleanliness in schools have made it hard for girls to cleanly and unquestionably deal with themselves during menstrual cycle. Social practices and limitations influence girls' capacity to similarly and completely take part in family and social life, and many girls don't know how to maintain the menstrual hygiene. This cross-sectional study was carried out by giving questionnaires to 232 girls. The study tool in this examination was an organized and self-regulated questionnaire. All the girls in the age group of 11-15 years, who had attained menarche and were willing to participate in the study, were included. Their age at menarche was 13 ± 1.6 years. The duration of flow of blood in the menstrual cycle was 3-5 days among the 56.5% of girls. Most of the girls were free from premenstrual symptoms (77.15%). About 40% of the girls have reported that they use sanitary pads during menstruation. New cloths were used by 19.83% girls and 29.74% girls used old clothes during menstruation. There were 76 (32.76%) girls having reportedly irregular periods whereas 156 (67.24%) girls had regular periods. Our study showed that mean age at menarche was 12.7 years. Less than half of the menstruated girls use sanitary pad during menstruation. Girls should be educated about the facts of menstruation and proper hygienic practices.

Keywords: Adolescent girls; Menarche; Menstrual symptoms, Menstrual hygiene management; Sanitary pads

Introduction

Menarche is the first menstrual bleeding. It is the most common achievement of pubescence for women that happens during the period of adolescence [1]. Menstruation is a characteristic marvel among developed females who experience shedding of blood for 1-7 days each month from the time of development until menopause [2]. Menstrual hygiene is good for both physical and psychological of school girls [3]. Consistently, May 28 is the Global Menstrual Hygiene Day. Despite the fact that monthly cycle is a typical natural interaction and a critical indication of reproductive health, in different societies, it is treated as something negative, despicable, or grimy, and it is normal not examined transparently in our general public, thinking about monthly cycle to be a badly arranged or humiliating theme to examine. Menstrual practices are still covered by restrictions

and socio cultural limitations. Different viewpoints, for example, the physiology, pathology, and psychology of monthly cycle have been found to related with the health and well being of women; hence it is a significant issue concerning the morbidity and mortality of female population [4].

Period is important for the female regenerative cycle beginning at puberty [5,6]. Poor menstruation cleanliness has been related with genuine ill health, counting regenerative plot and urinary tract infections [6,7]. Inadequate water and sterilization is a significant obstacle to class participation for girls during period, undermining their capacity to keep up with cleanliness and privacy [8]. The greater part the schools in low income nations either need adequate latrines for girls or they are much of the time not very clean [9]. The age at menarche begins from the age of 10 years, and it goes on until the age

of 19 years. Generally girls achieve puberty by the age of 14-16 years, which is capable by the beginning of menstruation [10,11].

The beginning of menstruation cycle is exceptional to females, menstrual issues are common [12]. Deep-established traditions don't permit girls to understand their rights in numerous parts of the world. Irregular menstrual can be normal during the initial years after menarche, other menstrual signs and manifestations, for example, amenorrhea, extreme uterine dying, dysmenorrhoea, also, premenstrual condition may show a neurotic condition which requires brief consideration and referral [13]. In this way, medical services suppliers are critical for these girls who are going through pubertal transition [14]. Healthcare suppliers have a chance to talk about conceptive medical problems with mothers and their little girls. Hence, a need was felt to consider menstrual issues among school girls in Midnapur district, West Bengal, India.

The present study was undertaken among school-going adolescent girls with the objective to study age at menarche and menstrual problems among school girls in Midnapur district of West Bengal.

Materials & Methods

This cross-sectional study was carried out among adolescent girls in rural regions, after getting proper approval from the Institutional Ethical Committee, Vidyasagar University, Midnapur. The study was carried out by giving questionnaires to 232 students and data were collected from January 2018 to December 2019. Data were collected in a private area at their respective schools only during day time usually between 9 am and 4 pm. A written consent was obtained from their parents as subjects were minor and a short assent including study objective, times, measurements etc was informed to the subjects. Questions were explained to them in their regional language also for better understanding. The study tool in this examination was an organized and self-regulated questionnaire. After taking permission from the school authority, the class teachers of class were explained the purpose of the study and rapport was built up with the girl students and verbal consent was obtained from them. Briefing was done to the students regarding the questionnaire provided to them. Data on sociodemographic variables were collected using a pre designed questionnaire.

All the girls in the age group of 11-15 years, who had attained menarche and were willing to participate in the study, were included in the study. Effort was made to examine the students who were absent on a particular day at the next visit. The survey was organized in such a manner to acquire data identifying with the age at menarche, premenstrual symptoms, and menstrual symptoms, type of napkin uses and duration of menstruation cycle.

Statistical Analysis

All the data were collected, entered and analyzed in MS Excel. The data was analyzed using percentages and proportions through tables.

Results

A total 232 girls of rural area participated in this study and their age at menarche was 13 ± 1.6 . A major portion of girls (37.9%) had attained menarche at 13 years of age and 2.6% of girls had attained menarche at 11 years of age, followed by 22.4%, 19.0% and 18.1% of

girls attained the same at the age of 12, 14 and 15 years respectively (Table 1). Days of flow of blood during menstruation among the girls was classified into four groups as less 3 days, 3-5 days, 6-7 days and more than 7 days. Most of the girls (56.47%) were in 3-5 days group, 23.28% of girls were in 6-7 days group, a few girls (10.77%) were found in less than 3 days group and remaining were having blood flow for more than 7 days (Table 2). Most of the girls (77.15%) were free from premenstrual symptoms (Table 3). Only a few girls (5.17%) were free from menstrual symptoms, where as others reported varied types of symptoms like, depression (2.16%), irritability (2.59%), headache (4.74%), body ache (3.02%), backache (8.62%), uncomfortable (9.91%), cramp (24.57%), and most conspicuously abdominal pain (76.29%) during menstruation (Table 4). A notable percentage of girls (39.66%) used of sanitary pads during menstruation and others used different types of clothes. Some of them (19.83%) used use new cloths whereas a higher number of girls (29.74%) used old clothes during menstruation (Table 5). It was noted from the results that most of the studied girls (67.24%) had regular periods and the remaining girls (32.76%) reported irregular periods (Table 6).

Discussion

Adolescence is a time of progress from pubescence to early adulthood. Change stage includes major physical also, mental changes in the girls. In a conservative family setting in developing country, mothers generally take care of their girls during this menarcheal phase of physical and emotional turn. In a moderate society and in provincial populace, the subject of monthly cycle and its cleanliness is as yet thought to be an untouchable subject for conversation.

Table 1 show that a high percentage of girls (37.9%) had attained menarche at 13 years of age. The age of menarche in this study was 13 ± 1.6 years, which was in conformity with studies conducted in other

Table 1: Information Regarding Menarche.

Age at Menarche (years)	No. of samples	Percentage
11	6	2.6
12	52	22.4
13	88	37.9
14	44	19.0
15	42	18.1
Total	232	100

Table 2: Information regarding duration of Menstruation cycle.

Days of menstruation cycle	No of sample	Percentage
<3	25	10.77
3-5	131	56.47
6-7	54	23.28
>7	22	9.48

Table 3: Information Regarding Premenstruation tension.

Premenstrual tension	No	Percentage
Never	179	77.15
Occasionally	39	16.81
Frequently	9	3.88
Always	5	2.16
Total	232	100

Table 4: Information Regarding Menstruation Symptoms.

Menstrual symptoms	No	Percentage
Abdominal pain	177	76.29
Cramp	57	24.57
Uncomfortable	23	9.91
Backache	20	8.62
Body ache	7	3.02
Headache	11	4.74
Irritability	6	2.59
Depression	5	2.16
No symptoms	12	5.17
Multiple symptoms	232	100

Table 5: Information Regarding Napkin uses.

Type of Napkin used	No.	Percentage
Sanitary pads	92	39.66
New cloths	46	19.83
Old cloths	69	29.74
All	25	10.78
	232	100

Table 6: Information Regarding Menstruation.

Type of menstruation cycle	Percentage	No
Irregular	32.76	76
Regular	67.24	156

parts of the country [15,16]. Several studies have been conducted in different parts of India and it was shown that mean age at menarche in Andhra Pradesh, and Maharashtra was 12.78 years and 12.6 which were also nearer to the finding of the present study.

In the present study, it was observed that the duration of menstrual flow was normal (3-5 days) in rural school girls (56.47%). Karthiga et al., found that two-thirds (66.39%, 239/360) of the girls had menses for the duration from 1 to 5 days, while the rest announced past 5 days [17]. The results of other studies pointed out that the mean value of duration of menstruation cycle was 4.84 ± 1.27 days and 93.6% had ordinary menstruation stream between 3-7 days. The findings of the current investigation was similar with the different examinations directed in different parts of the nation [18,19].

In this study premenstrual symptoms were reported by some of the rural girls. Results showed that 16.81% of the girls had felt symptoms occasionally, 3.88% of girls had felt symptoms frequently and 2.16% of girls had felt symptoms continuously. However, majority of girls (77.15%) reported to have no pre-menstrual symptoms. The girls also reported various symptoms during menstruation. The symptoms like, unexpected state of mind changes (52%), pain in breast (43%), anger (31%), headache (30%), laziness (28 %), lower abdomen pain (18%) were normal in menstruation cycle [20]. Investigation by Gumanga and Kwame-Aryee showed that more than 150 various indications have been connected to premenstrual disorder (PMS) yet the most normal were swelling, breast pain, weight gain, weakness, headache, depression etc [21]. The results of our study revealed that 5.17% of girls were free from menstrual symptoms. Another investigation showed that 93.8% of girls had normal menstruation

and 2.1% of the subjects had menstrual complication. Moreover, most extreme number of girls (68.3%) had stomach torment during period and different manifestations were pain in legs, spinal pain, mental surprise, cerebral pain, constipation etc [22,23].

The results of the present study represented the pattern of using sanitary napkins or other materials during menstruation. It was noted that 39.66% of the girls used sanitary pads, 19.83% of them used new cloths, 29.74% of the subjects used old cloths and 10.78% of girls used all types of napkins during the menstruation period. The rural girls were utilizing homemade napkins than the sanitary napkins because of absence of awareness and accessibility, which was pointed out earlier in some other studies [24,25]. Omidvar et al, moreover, noted that 68.9% of the girls utilized disposable pads and a little extent (7.4% and 19.1%) utilized cotton and cloth material separately [26]. Senthil et al revealed that 90% of the girls didn't had the propensity for cleaning the private parts with cleanser and water routinely during the menstrual days and larger part had the propensity for disposing the pads (45%) alongside the routine waste and 32% of them reused the material after washing it [27].

From the results it was seen that 32.76% school girls had irregular period. Some other studies had also reported menstruation cycle irregularity among girls. Singh et al noticed it in 2.3% of the school girls and Deo et al noticed it in 5.69% of the school girls [28,29]. Some other investigators reported such irregularity among higher percentage of girls - 15.9% (Joshi et al.) [30], 31.8% (Sharma et al) [31], and 48.4% (Agarwal et al) [32].

The age and financial conditions influenced menstruation wellbeing which was the most among the girls of India [33]. The country requires focusing on ways with respect to how to improve the idea about menstruation by imparting valuable information to the rural Indian girls [34-38].

Conclusion

Age of menarche at proper age is a significant achievement during adolescence girls. Our study shows that greater part of girls had achieved menarche at proper age. The utilization of old cloths as napkins was noted among majority of girls. In our study the menstrual cycle was regular in most of the girls. Girls should be educated about the facts of menstruation and proper hygienic practices.

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