

## A Study to Identify the Menstrual Problems and Related Practices Among Adolescent Girls in Selected Higher Secondary Schools in Maharajganj District, U.P., India

Prashansha Madhesiya<sup>1</sup>  
Dr. Kamallesh Pal<sup>2</sup>

### Abstract

Menarche is a significant event in a girl's life, the onset of her first menstrual period or menstruation. It is a biological milestone that typically occurs during adolescence, generally between the ages of 9 and 16, although the exact age can vary widely among individuals. The onset of menarche signifies the maturation of the reproductive system, including the development of the ovaries, the ability to release eggs (ovulation) and the beginning of the menstrual cycle. Menstruation, commonly referred to as a period, is the regular, cycle shedding of the uterine lining (endometrium) in females of reproductive age who have reached menarche. Menstruation is a normal part of the menstrual cycle, which typically lasts about 28 days, although it can vary from person to person. Although menstruation is a normal physiological function, teenage females find it difficult to deal with it. This study's primary goal was to investigate adolescent girls' menstruation issues and associated behaviours.

A descriptive survey approach was used for the study. 210 teenage girls from the 9th, 10th, 11th, and 12th grades of the Government Girls Higher Secondary School in Maharajganj made up the sample, which was chosen by proportionate stratified random sampling. Data on background information, menstrual features, menstrual issues, and associated practices were gathered using a semi-structured questionnaire. The study's participants' average age at menarche was  $13.47 \pm$

$0.87$  years. The typical menstrual cycle lasts for days. 64 girls, i.e. (30.4%) of the girls, reported having bodily aches, and 76.1% of the girls reported having dysmenorrhea. 174 girls, or 82.8%, utilised sanitary pads as absorbents during their periods.

Menstrual issues are a significant aspect of adolescent health, and since they frequently go undetected, they must receive the proper attention and care. Neglecting menstruation issues has adverse effects on older women's reproductive and sexual health. Teenage girls frequently struggle with their periods. Among teenagers,

dysmenorrhea was the most prevalent issue. Teenage girls endure their suffering and accept it as a natural occurrence. Students' psychological and physical stress might be decreased by instructors and health professionals educating them about menstrual health.

Key word: Menstrual Problems, adolescent girls, psychological and physical stress.

---

### **Corresponding author**

\*Research scholar, Department of Humanities and Social Sciences, Veer Bahadur Singh Purvanchal University, Jaunpur, Uttar Pradesh, India

Assistant Professor and Head of Department of Humanities and Social Sciences, Faculty of Engineering, Veer Bahadur Singh Purvanchal University, Jaunpur, Uttar Pradesh, India

### **Introduction**

Adolescence age refers to the period in human development that falls between childhood and adulthood. It is characterised by significant physical, emotional, cognitive, and social changes as individuals transition from childhood into the responsibilities and roles of adulthood. Adolescence typically spans from early puberty to the early twenties, but the specific age range can vary based on cultural, societal and individual factors. According to the World Health Organisation (WHO), an adolescent is between the ages of 10 and 19 and is in their second decade of life. Teenager girlhood is a significant difficulty for parents, children, and those involved with parenting the teenager at this crucial time of identity building and transition from childhood to womanhood. It is characterised by vital to welfare physical, psychological, emotional, and social changes. Menstruation in adolescent girls, often referred to as getting your period, is a significant and natural part of the female reproductive system. It marks the beginning of the ability to bear children and typically starts during adolescence. Menstruation usually begins during early adolescence, typically between the ages of 9 and 16, although the exact age can vary widely from person to person. The first menstrual period is called menarche, a significant milestone in a girl's life. Premenstrual syndrome, dysmenorrhea, extended menstrual bleeding, and emotional disturbances are common menstrual abnormalities that female adolescents may have after menarche; 75% of girls have some menstrual-related issues.

Numerous studies from around the world, including India, reveal that many adolescent females deal with issues linked to menstruation. It causes a rise in the

frequency of absenteeism from work and school. This supports the idea that menstruation should be prioritised as a public health issue. The majority of menstrual bleeding per vaginum is asymptomatic. Even so, some people may still endure backache, leg discomfort, stomach pain, gastrointestinal issues like anorexia and vomiting. During menstruation, dysmenorrhea is a significant issue that affects a woman's daily activities, including her school attendance.

Therefore, for these adolescent girls going through pubertal transition, healthcare providers are pretty important. Healthcare professionals can have a conversation with teenage girls and their mothers about reproductive health issues.

## Objectives

To ascertain the menstrual patterns, prevalence of menstrual disorders, and sanitary practices used by teenage schoolgirls during their periods.

## Methods:

From April to September 2023, 210 teenage schoolgirls in Maharajganj participated in this cross-sectional study. The principal of the school granted permission in advance. All females aged 10 to 19 who had developed menarche and were willing to engage in the study were included as study participants. Serious illness was a factor in the exclusion of students from the research. The pretested, semi-structured questionnaire included the age of menarche, patterns and problems, and menstrual hygiene practices.

Following a literature review, the sample size was determined. Menstrual problems were shown to be prevalent in a range of 13% to 91% of women.<sup>13–15</sup> Consequently, 87.7% of women experience menstrual disorders. The sample size reached 210 at a 95% confidence range, 10% acceptable error, and 10% non-response rate. To determine the age of menarche, menstrual patterns, and related issues, data obtained in MS Excel were analysed.

## Results:

The age range for the adolescent schoolgirls was 11 to 19. Only one girl reached menarche at age 11, and the majority did so between 12 and 14 (Table 1). The average age of menarche was 13.45 ± 0.86. When the intermenstrual gap was examined, 159 (75.7%) girls fell into the range of 21–35 days in most datasets. Blood flow days were divided into three categories: less than three days, three to five days, and more than five days. The majority of the girls, 155 (73.8%), were in the group

with blood flow lasting between three and five days, while only 10 ( 4.7%) had blood flow lasting less than three days.

The majority of the females, 176 (83.8%), reported experiencing abdominal pain or cramps, followed by body aches 64 (30.4%), and irritability 56 (26.6%) during the menstrual cycle (Table 2). The hygiene practices used by teenage schoolgirls during their cycle were examined (Table 3). 174 (82.8%) females used sanitary pads, and the remaining girls alternated between using cloth and sanitary napkins. The majority, 160 (76.2%), changed their absorbent less than 4 times, while the remaining changed more than four times. During cycles, most 150 people (71.5%) cleansed their genitalia with water, while the rest used soap and water. 160 (76.1%) of the adolescent girls reported having dysmenorrhea (Table 4). Twelve people (5.7%) had irregular menstrual cycles, while eleven people (5.2%) had polymenorrhea. 14.6% of girls reported havingmenorrhagia.

Table 1- Distribution of adolescent school-going girls according to their menstrual pattern

Variable	No.270 (%)
<b>Age (menarche)</b>	
11	01 (0.5)
12	27 (12.9)
13	77 (36.7)
14	85 (40.5)
15	18 (8.6)
16	02 (1.0)
<b>Inter-menstrual interval</b>	
Less than 21 days	11 (5.3)
21 to 35 days	155 (73.8)
More than 35 days	44 (20.9)
<b>Amount of blood flow</b>	

Scanty	10 (4.7)
Moderate	140 (66.7)
Heavy	61 (29)
<b>Blood flow days</b>	
Less than 3 days	10 (4.7)
3 to 5 days	154 (73.3)
More than 5 days	46 (21.9)

**Table 2- Distribution of adolescent school-going girls according to menstrual symptoms**

<b>Variable</b>	<b>No.270 (%)</b>
Body ache	60 (28.5)
Backache	42 (20.0)
Abdominal pain	170 (80.9)
Headache	16 (7.6)
Irritability	62 (29.5)

**Table 3- Menstrual hygiene practices among adolescent school-going girls**

<b>Variable</b>	<b>No.270 (%)</b>
<b>Type of absorbents</b>	
Sanitary napkins	165 (78.5)
Sanitary napkins and clothes both	45 (21.4)
<b>Absorbent change times</b>	
4 times	55 (26.19)

4 times	155 (73.0)
<b>Cleaning of genitalia with</b>	
Soap(v wash and all) and water	50 (23.8)
Only water	160 (76.2)

**Table 4- Distribution of adolescent school-going girls according to menstrual disorders**

Variable	No 270 (%)
Menorrhagia	10 (4.7)
Irregular menses	14 (6.6)
Dysmenorrhoea	160 (76.1)
Polymenorrhoea	20 (9.5)
No disorder	06 (2.8)

A time of transition between puberty and early adulthood is adolescence. Significant emotional and physical changes occur throughout this phase in the person. This study's average menarcheal age of 13.45 years, plus or minus 0.95 years, is consistent with findings from similar investigations in other regions of the nation. In the current study, the typical menstrual flow lasted 3.5 days on average, whereas in earlier studies, it lasted 4.5 days on average and 3.95 days on average.<sup>16,18</sup> The results of the studies conducted in various regions of the country do not significantly differ.

According to the analysis of their menstrual patterns, only 5.7% of these 210 adolescent girls had irregular cycles. 5.6% of teenage girls in rural Maharashtra, which was researched recently, had irregular cycles, comparable to our data. Similar findings from a different study on adolescent females in rural Karnataka found that

7.5% had irregular periods. On the other hand, a study found that more significant than our data, 11.2% of adolescent girls had irregular cycles.

In the current study, blood flow continued for 3-5 days for 73.8% of the girls. According to study results, the average menstrual blood flow lasted 4.84 ± 1.27 days, and 93.6% of women had regular menstrual blood flow between 3 and 7 days. The results of the current study are comparable to those of other studies carried out nationwide. Girls with cycles shorter than 21 days, between 21 and 35 days, and more than 35 days were divided into three groups according to their intermenstrual duration. Most study participants spent 159 (75.7%) days in the 21-35 days group. According to a different study, the girls' intermenstrual period was similar to the current study's at 30.21 ± 5.86 days. In research done in Maharashtra, the average time between periods was 28.7

3.26 days. Compared to the study conducted in Karnataka, the results are less favourable, with 92.7% of women reporting an intermenstrual interval of 28 to 35 days and 6.8% reporting more than 35 days. According to the current study, blood flow lasted less than three days in 4.7% of the females and more than five days in 21.5% of them, again consistent with findings from prior studies.

One of the most prevalent menstruation problems in adolescents is dysmenorrhea. According to a recent study, 76.1% of adolescent girls who attend school have dysmenorrhea. In other research, dysmenorrhea incidence was lower. Other studies had noted incidences of dysmenorrhea of 53.6% and 49.13%. Compared to urban girls, rural girls are more tolerant of pain. According to studies, a large number of medical students experience various menstruation issues. Students

(5.7%) experienced irregular menstrual cycles at a lower rate than those in earlier research.<sup>17, 24-26</sup> In contrast, there was a very high prevalence (64.2%) of irregular menstrual cycles in a different study.<sup>21</sup> According to another study, 93.8% of girls reported an average of 2.1 menstruation symptoms. Additionally, the majority of females (68.3%) experienced abdominal discomfort during their periods, and additional symptoms included leg pain, back pain, emotional disturbance, headaches, constipation, etc.<sup>16,17</sup> Menorrhagia (6.6%), polymenorrhoea (5.2%), and irregular cycles (4.7%) were the other issues related to menstruation. In other research, the frequency of the problems related to menstruation was reported to be similar.

In an urban setting, a survey of adolescent schoolgirls revealed that 44.53% utilized cloth and pads as menstrual absorbents, whereas 52.34% solely used sanitary

napkins. According to another study, only 38% of girls in the villages used hygienic pads while menstruating, and 63.7% dried their garments in a corner of the house. In our study, sanitary pads were used more.

28.5% of people cleaned their external genitalia using soap and water. According to other surveys, 63% of people cleaned their external genitalia with soap and water, while the remaining 47% solely used water.

### **Conclusion-**

Menarche at the appropriate age is a significant developmental milestone throughout adolescence because it indicates that the female reproductive system is operating normally. The majority of adolescent girls developed menarche at the appropriate age, according to the study. Three-quarters of the adolescent girls had average blood flow duration and cycle interval. Teenage girls frequently experience menstrual issues. The most prevalent issue among teens was dysmenorrhea. Adolescent girls tolerate their suffering and perceive it as a common occurrence. Most teenage girls regularly use hygienic sanitary pads as an absorbent. Health experts and teachers teaching them about menstrual health might decrease students' emotional and physical stress.

### **Acknowledgement**

The authors are thankful to the anonymous referees of the journal for their handy suggestions to improve the quality of the article.

### **Declaration of Conflict of Interest**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author received no financial support for the research, authorship, and/or publication of this article.

### **References-**

Keda K. Jain I. Menstrual problems in first, second and third-year medical students –A concern! *Int J Current Res.*2017; 9:49878-84. 23

Mohite RV et al. Common Menstrual Problems among Slum Adolescent Girls of



Western Maharashtra, India. JKIMSU.2013; 2(1):89-97.24.

A ref. N. Rizwan F. Abbas M M. Frequency of Different Menstrual Disorders among Female Medical Students at Taif Medical College. World J. Med. Sci. 2015; 12:109-14.

World Health Organization (WHO). Adolescent pregnancy – Unmet needs and undone deeds. A review of the literature and programs. Issues in Adolescent Health and Development, WHO, Geneva, 2007.

Kirk J, Sommer M. Menstruation, and body awareness: critical issues for girls' education. EQUALS, Beyond Access: Gender, Education and Development. 2005 Nov; 15:4-5.

Szilagyi PG. Care of Children with special health care needs. Future Child 13(1), 2003, 137-151.