

# Pattern of Menstruation and Health Seeking Behavior of College Going Girls in Latur City, Maharashtra

Holambe V. M. \*, Thakur N. A. \*\*, Wadagale A. V. \*\*\*

{ \*Assistant Professor, \*\*Epidemiologist-cum-Lecturer, \*\*\*Statistician-cum-Lecturer }

Department of Preventive and Social Medicine, Government Medical College, Latur, Maharashtra, INDIA.

\*Corresponding Address:

[drnandini.dole@rediffmail.com](mailto:drnandini.dole@rediffmail.com)

## Research Article

**Abstract: Introduction:** Menarche, the signal of female fertility has both social and medical perspectives. The main concern is irregular cycles and pain during menses. Menstrual problems are generally perceived as only minor health concern and often neglected by the females particularly women in developing countries who may face life threatening conditions. **Aim:** To assess the pattern and symptoms of menstruation, and health seeking behavior of college going girls. **Methodology:** This was a community based cross sectional observational study undertaken among the girls of a polytechnic college. All the girls (n=252) of the college were enrolled in the study. Pre structured and pretested questionnaire was used as a study tool. The questionnaire included topics related to socio demographic information, pattern and problems of menstruation, advice sought for the problems, hygienic practices during menstruation. **Results:** Mean age of the girls was 17.11 (SD=1.40) years. The proportion of rural and urban background of the girls was equivalent. Mean age at menarche was 14.25 (SD=0.98) years. Pain in abdomen and weakness were the most common menstrual symptoms reported. Dysmenorrhoea was the leading menstrual problem. One fourth of the girls didn't do anything for their symptoms while more than half of the girls sought help from their mother. Out of all the, 111 had regular menstrual pattern. It was statistically significantly associated with duration since menarche, p value = 0.015. **Conclusions:** Pain in abdomen and weakness are the most common menstrual symptoms. Health seeing behavior is not satisfactory. Out of 252 girls, 111 had regular menstrual pattern. It was statistically significantly associated with duration since menarche.

**Keywords:** menstrual pattern, symptoms, health seeking behavior.

## Introduction

Menarche is a complex process of growing up. Menarche, the signal of female fertility has both social and medical perspectives. There are variations in the age at menarche. Menarche needs special attention because of physical and emotional problems associated with it. Though menstruation is a normal physiological phenomenon throughout the childbearing years of the women, but the main concern is irregular cycles pertaining to hormonal fluctuations and pain during menses.<sup>1</sup> Menstrual problems are generally perceived as only minor health concern and often neglected by the

females particularly women in developing countries who may face life threatening conditions.<sup>2,3</sup> With this background, present study was conducted to assess the pattern and symptoms of menstruation, and health seeking behavior of college going girls.

## Methodology

This was a community based cross sectional observational study. The present study was undertaken among the girls of a polytechnic college. All the girls (n=252) of the college were enrolled in the study. Pre structured and pretested questionnaire was used as a study tool. After taking permission from the college authority, the girls were explained the purpose of study. Informed consent of the girls was taken and briefing of the questionnaire was done to them. The questionnaire included topics related to socio demographic information, pattern and problems of menstruation, advice sought for the problems, hygienic practices during menstruation. Pattern of menstruation includes regularity of menstrual cycle, days of menstrual bleeding, interval between cycle and amount of blood flow. A menstrual cycle was considered regular if it occurs every  $28 \pm 2-3$  days in which the menstrual flow lasts for 3-5 days with an average flow of 50- 200 ml. Otherwise it was labeled as irregular. Oligomenorrhea refers to 4-9 periods per year. Menorrhagia: denotes excessive bleeding in amount i. e.  $>500\text{ml}$  ( soaked pads  $> 5/\text{day}$ ) or periods that last longer than 7 days. Metrorrhagia is the breakthrough bleeding or spotting in-between periods. Hypomenorrhoea (scanty bleeding) denotes regularly timed bleeding but scanty ( $<50$  ml) in amount. Dysmenorrhoea is the lower abdominal pain during menstruation.<sup>4,5,6,7</sup>

Quantitative variables were summarized with mean and standard deviation while qualitative data was summarized with proportions. Chi square ( $\chi^2$ ) test was used as a test of significance. Statistical software, Epi info 3.5.1, 2008 was used for analysis of data.

## Results

The age range of the 252 girls was 15 to 23 years. Mean age of them was 17.11 (SD=1.40) years the proportion of rural and urban background of the girls was equivalent. Most of the parents had secondary school education. Nearly 90% of the mothers were housewives while main occupation of fathers was Clerical/ shopkeeper/ farmer. (Table 1) All the girls had attained menarche. Mean age at menarche was 14.25 (SD=0.98) years, with range of 11 to 17 years. Around 70% of the girls have attained menarche at 14-15 years of age. Most of the girls, 144 (57.14%), had intermenstrual interval of 25-31 days. Median duration of bleeding was 5 days. Majority of the girls (84%) had average amount of blood flow. (Table 2) Pain in abdomen and weakness were the most common menstrual symptoms reported. (Table 3). Dysmenorrhoea was the leading menstrual problem (60.71%). (Table 4) Figure 1 shows the health seeking behavior of study subjects. One fourth of the girls didn't do anything for their symptoms while more than half of the girls sought help from their mother. Out of 252 girls, 111 had regular menstrual pattern. It was statistically significantly associated with duration since menarche, p value = 0.015. (Table 5)

## Discussion

In present study, 70% of the girls had attained menarche at 14-15 years of age. The findings are comparable with Patil *et al*<sup>2</sup> where 50.4 % had reported menarche at the age of 14 years. Also Jogdand *et al*<sup>8</sup> in their study from Andhra Pradesh have found that 72.77% have attained menarche in the age ranged between 12-14 years. Although two different studies by Dasgupta *et al*<sup>9</sup> and Mohite *et al*<sup>3</sup> have found the mean age at menarche as 12.8 yrs, which is lower than present study. The difference may be attributable to the nutritional status of the girls. In present study, Most of the girls, 144 (57.14%), had intermenstrual interval of 25-31 days. Median duration of bleeding was 5 days. Majority of the girls (84%) had average amount of blood flow. Jogdand *et al*<sup>8</sup> reported that In 66.54% girls, menstrual cycle was of 28-32 days. 76.65% girls have reported blood flow for 3-5 days and 78.59% girls had normal blood flow. Patil *et al*<sup>2</sup> have observed in their study that 92.7% of the adolescent girls were menstruating at the interval of 21 to 35 days, amount of blood flow was moderate in 90.5 % girls and 87.7% girls had blood flow for 3-5 days. Present study reports that pain in abdomen and weakness were the most common menstrual symptoms. Dysmenorrhoea was the leading menstrual problem (60.71%). Similar findings are noted by Pragya Sharma *et al*<sup>1</sup> (67.2%), Mohite *et al*<sup>3</sup> (49.13%). Although Patil *et al*<sup>2</sup> have found lower occurrence of dysmenorrhea (28%). The other common menstrual disorders noticed in present study

were menorrhagia (9.92%), Hypomenorrhea (6.75%), Polymenorrhea (6.35%), Metrorrhagia(4.76%). Patil *et al*<sup>2</sup> have reported Menorrhagia in 5.9% and Polymenorrhea in 0.45% of study subjects. Mohite *et al*<sup>3</sup> have found that oligomenorrhea, menorrhagia, metrorrhagia, hypomenorrhea, dysmenorrhea were present in 16.08%, 17.82%, 27.39%, 59.56%, 49.13% respectively. The health seeking behavior of the study subjects in present study revealed that 24% of the girls didn't do anything for their symptoms while 56% of the girls sought help from their mother, 8% from doctor and 6% from the pharmacist medical store. Similar findings are noted by Pragya Sharma *et al*<sup>1</sup>. Although Mohite *et al*<sup>3</sup> have noticed that only 25.73% were seeking the treatment where as 74.26% not made any attempt to take the treatment for menstrual problems. Out of the girls who consulted for their menstrual problems, 59.01% girls took the treatment from doctors/physicians, and remaining took treatment from pharmacist and other sources.

## Conclusions

Pain in abdomen and weakness are the most common menstrual symptoms reported. One fourth of the girls didn't do anything for their symptoms while more than half of the girls sought help from their mother. Out of 252 girls, 111 had regular menstrual pattern. It was statistically significantly associated with duration since menarche.

## References

1. Sharma P, Malhotra C, Taneja DK, Saha R. Problems related to menstruation amongst adolescent girls. *Ind J Paed*, 2008;75(2):125-29.
2. Menstrual pattern among adolescent girls in rural area of Bijapur Manjula S. Patil<sup>1</sup>\* and M.M. Angadi Al Ameen J *Med Sc i* 2013; 6(1) :17-20.
3. Mohite RV, Mohite VR, Kumbhar SM, Ganganahalli P., Common Menstrual Problems among Slum Adolescent Girls of Western Maharashtra, India JKIMSU, Vol. 2, No. 1, Jan-June 2013
4. Dutta DC. Textbook of Obstetrics, 20th ed. Central Book House publisher: 2010: p69.
5. Howkins and Bourne. Shaw.s text book of Gynecology, 12th ed. Elsevier India Private Ltd:2004:p 226.
6. Glueck CJ, Morrison JA, Daniels S, Wang P, Stroop D. Sex hormone-binding globulin, oligomenorrhea, polycystic ovary syndrome, and childhood insulin at age 14 years predict metabolic syndrome and class III obesity at age 24 years. *J Pediatr* 2011; 159(2):308-13.
7. Mackay HT. Abnormal menstrual bleeding. Current medical diagnosis and treatment. McGraw Hill 2005; 704.
8. Keerti Jogdand Pravin Yerpude A community based study on menstrual hygiene among adolescent girls *Indian Journal of Maternal and Child Health*, 2011;13(3)
9. Dasgupta A, Sarkar M. Menstrual hygiene: how hygienic is the adolescent girl? *IJCM*, 2008;33(2):77-80.

**Table 1:** socio demographic characteristics of study subjects

Variable		Number	Percentage(%)
Age	15	22	8.73
	16	64	25.4
	17	92	36.51
	18	40	15.87
	>18	34	13.49
Residence	Rural	109	43.25
	Urban	143	56.75
Education of Mother	Illiterate	23	9.12
	Primary	11	4.36
	Secondary	130	51.59
	HSC/diploma	55	21.83
	Graduate/above	33	13.10
Education of Father	Illiterate	9	3.57
	Primary	4	1.59
	Secondary	63	25.00
	HSC/diploma	90	35.71
	Graduate/above	86	34.13
Occupation of Mother	Profession	2	00.79
	Semi Profession	13	05.16
	Clerical/ shopkeeper/ farmer	6	02.38
	Skilled	3	01.19
	Semi skilled	00	00.00
	Unskilled	3	01.19
	Housewife	225	89.29
Occupation of Father	Profession	22	08.73
	Semi Profession	48	19.05
	Clerical/ shopkeeper/ farmer	132	52.38
	Skilled	19	07.54
	Semi skilled	05	01.98
	Unskilled	26	10.32

**Table 2:** Menstrual pattern of study subjects

Age at menarche	Number	Percentage
11	1	00.40
12	7	02.78
13	49	19.44
14	86	34.13
15	92	36.51
>15	17	06.74
<b>Intermenstrual interval</b>		
<25 days	16	6.35
25-31days	144	57.14
>31 days	92	36.51
<b>Duration of bleeding</b>		
<4	28	11.11
4	80	31.75
5	105	41.67
6	27	10.71
>6	12	04.76
<b>Amount of bleeding</b>		
Less than average	17	06.75
Average	210	83.33
More than average	25	09.92

**Table 3:** Menstrual symptoms of the study subjects

Menstrual symptoms	Number	Percentage
No problems	9	03.57
Pain in abdomen	153	60.71
Weakness	150	59.52
Headache	14	05.56
Breast pain	6	02.38
Nausea/Vomiting	5	01.99
Itching around genitalia	7	02.78
Other(leg cramp, backache)	2	00.79

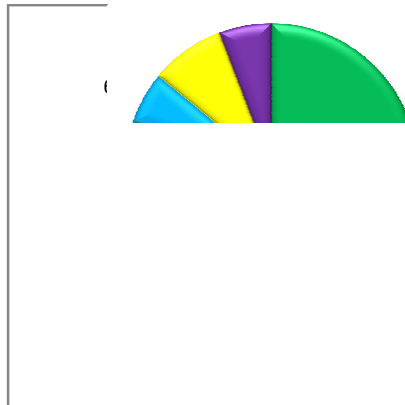
**Table 4:** Menstrual disorders among the study subjects

Menstrual problem	Number	%
Oligomenorhera	2	0.79
Polymenorrhea	16	6.35
Menorrhagia	25	9.92
Hypomenorrhea	17	6.75
Metrorrhagia	12	4.76
Dysmenorrhea	153	60.71

**Table 5:** Association of duration since menarche with menstrual pattern

Duration since menarche	Regular menstrual pattern	Irregular menstrual pattern
0	00	10
1	21	23
2	21	37
3	27	29
4	29	23
≥5	13	19
Total	111	141

Fischer's exact test, p value = 0.015



**Figure 1:** Health seeking behavior of study subjects for their menstrual symptom