

Prevalence of dysmenorrhea among girl students in a medical college

Dass Ruhi¹, Kulkarni Meenal²

Abstract :

Menstruation is a phenomenon unique to the females. Dysmenorrhea is the most common and least understood and addressed complaint. Prevalence of dysmenorrhea was found to be 54 % to 87%. Dysmenorrhea has its impact on academic performance, college, sports and social activities of girls. But very few girls seek health care for this problem. A cross-sectional descriptive study was conducted in a medical college attached to a tertiary care hospital to find out prevalence of dysmenorrhea among medical college girl students, to study its impact on various activities and to assess health care seeking behavior during dysmenorrhea. All girl students (first to final MBBS) from a medical college who were willing to participate included in the study (N=150). Data was analyzed in proportions, mean and standard deviation. Prevalence of dysmenorrhea was found to be high (66%). Premenstrual syndrome was present among 44% girls. Nearly half of the girls reported dysmenorrhea every month and among 1/3rd girls intensity of pain of dysmenorrhea was severe. Common relieving factor was found to be rest. 45% girls reported absenteeism from colleges due to it. 87% girls reported limitations in various activities due to dysmenorrhea. Only 1/3rd girls were seeking health care for dysmenorrhea. Maximum number of girls (89%) reported 'no need of treatment' during dysmenorrhea. Hence it was concluded that dysmenorrhea was found to be common problem. There is need to increase awareness among girls regarding importance of health care seeking during dysmenorrhea.

Keywords : Dysmenorrhea, Impact, Healthcare seeking.

¹III MBBS Student, ²Associate Professor, Department of Community Medicine, NKPSIMS & RC, Digdoh Hills, Hingana Road, Nagpur-440019. meenalkulkarni76@gmail.com

Introduction:

Menstruation is a phenomenon unique to the females. The onset of menstruation is one of the most important changes occurring among girls. The first menstruation occurs between 11 and 15 years (1). Although reproductive health in particular related to maternal health and reproductive tract infections is recognized as a health priority in developing countries, much less attention is paid to menstrual health and menstrual disorders. Of all menstrual complaints dysmenorrhea is by far most common and arguably, the least understood and addressed complaints (2). Primary dysmenorrhea is defined as painful menses in women with normal pelvic anatomy usually beginning during adolescence. It is characterized by crampy pelvic pain beginning shortly before or at the onset of menses and lasting 1 to 3 days. It not only disturbs their routine but also causes humiliating suffering (3). Prevalence of dysmenorrhea was found to be 54 % to 87% from various studies (4-10). Dysmenorrhea has its impact on academic performance, college, sports and social activities of girls. But very few girls seek health care for problem of dysmenorrhea. So the present study was designed to study the prevalence and impact of dysmenorrhea among medical college girls and to assess health care seeking behavior among them.

Material and Methods:

A cross-sectional descriptive study was conducted in NKP Salve Institute of Medical Sciences and Research Center,

Nagpur. The study was conducted from June 2011 to September 2011. All healthy girl students (first to final MBBS) from a medical college (NKPSIMS, Nagpur) who were willing to participate were included in the study (N=150). After taking permission from IEC, the project was started. Girls from different semesters from the institute were contacted after finishing their classes or clinics in the college. After taking informed consent the data was collected in self-administered predesigned pretested questionnaire. Questionnaires were collected immediately in 15- 20 minutes. Information regarding pattern of menstrual cycle, pre-menstrual syndrome (pre-menstrual syndrome-a change in mood or behavior or appearance of some abnormal vague symptoms noticed in second half of menstrual cycle), details of dysmenorrhea (dysmenorrhea-painful menstruation of sufficient magnitude so as to incapacitate day to day activities). During last 6 months, impact of dysmenorrhea on various activities and health care seeking behavior during dysmenorrhea was collected. Data was analyzed by using Epi-Info statistical package by calculating simple proportions, mean and standard deviation.

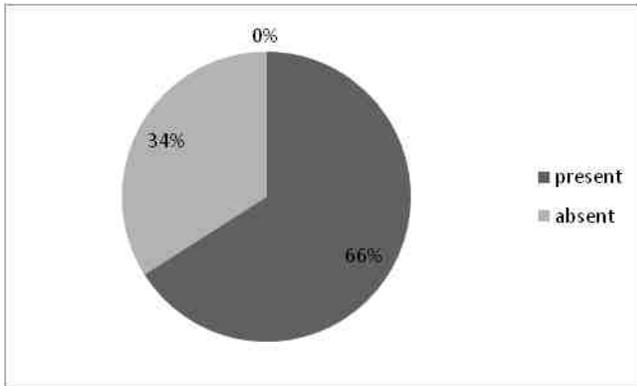
Results:

The girls were in the age range of 18 to 22 years. Mean age of menarche was found to be 12.98±1.44. Maximum number of girls (84%) had attained menarche between 11 to 14 years of age. Most of the girls (79.33%) reported mother as a source of information about menstrual cycle. 81.33% girls reported regular menstrual cycle. Nearly 70% girls had duration of

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menstrual cycle between 3-5 days and length of menstrual cycle between 28-32 days.18% girls reported excess and 7.34 % girls reported scanty blood flow during menstrual cycle. Out of total 150 students, 99 students reported dysmenorrhea so prevalence of dysmenorrhea was found to be 66% (Fig. 1).

Figure 1: Prevalence of dysmenorrhea among medical students (N=150)



44% girls were having premenstrual syndrome. Irritability, headache, constipation and nausea were common complaints present during premenstrual syndrome. Out of total 99 girls, approximately half of the girls (n=49) were suffering from dysmenorrhea every month. More than half (63%) of girls were having dysmenorrhea of moderate or severe intensity (Table 1).

Table1: Frequency and intensity of dysmenorrhea(N=99)

	Every month	Most of the times	Rarely
Dysmenorrhea	49(49.49%)	26(26.26%)	24(24.24%)
Frequency of pain	Mild	Moderate	Severe
Intensity of pain	36(36.36%)	35(35.35%)	28(28.28%)

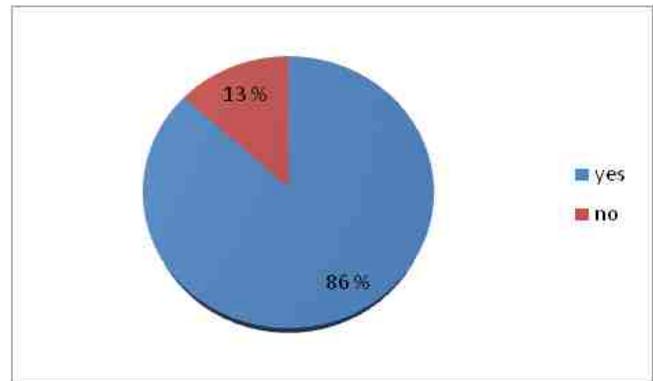
Out of total 99 girls with dysmenorrhea, 45 (45.45%) girls have reported absenteeism in college due to dysmenorrhea. Among 45 girls who remained absent, 25 girls (55%) reported absenteeism from college for one or more than one day (Table2).

Table 2: Duration of absenteeism from college (N=45)

Absenteeism	Number	%
Few periods	20	44.44
1 Day	19	42.22
2 Days	3	6.67
>2 Days	3	6.67

In most of the girls (68.75%) dysmenorrhea was relieved by rest and 27% girls were taking medicines for relief. 86(87%) girls were having limitations due to dysmenorrhea (Fig. 2).

Figure 2: Limitations due to dysmenorrhea (N=99)



Limitations were present among 50(58.14%), 16(18.60%) and 13(15.20%) girls in daily activities, in sports and in academics respectively (Table3).

Table 3: Limitations in various activities due to dysmenorrhea (N=86)

Limitations due to dysmenorrhea	Number	%
Daily activities	50	58.14
Sports	16	18.60
Academics	13	15.12
Socialisation	7	8.14
Total	86	100

Health care seeking behavior was found to be very poor and only 34% girls were seeking health care during dysmenorrhea. Almost all girls (90%) reported no need of treatment as a reason for not seeking health care.

Discussion:

In present study mean age of menarche was found 12.98±1.44. Singh A et al (3) carried out study in 107 medical college students and found mean age of menarche 12.5 ±1.52 years which is similar to the present study. Prevalence of dysmenorrhea was 66% in the present study. Few authors (1, 5, 7) found prevalence of dysmenorrhea (85%,79.6%,83.2% respectively) higher than the present study. SC Chan et al (6), Sharma P, et al(8) and Nabia Tariq et al(10) reported similar prevalence (68.7%,67.2%,67%) like the present study.

Premenstrual syndrome is a prevalent menstrual morbidity among college girls next to dysmenorrhea. Premenstrual syndrome was reported by 44% girls. Sharma et al(8) reported premenstrual syndrome amongst 63.1% girls which is more than the present study. Dysmenorrhea was the commonest cause of college absenteeism of girls. It also caused

limitations in various activities of girls. 45.45% girls remained absent from the college due to dysmenorrhea. Agarwal A and Venkat A (7) also reported school absentees among 24% girls.

Healthcare seeking behavior was found to be very poor. Only 34.34% girls sought healthcare for dysmenorrhea. Agarwal A and Venkat A (7) conducted a study among secondary school and college girls in Singapore and found that only 5.9% girls were seeking medical advice, which is poorer than the present study.

Conclusion:

Mother was found to be a common source of information about menstrual cycle. Premenstrual syndrome was present among 44% girls. Irritability and headache were found to be common complaints during premenstrual syndrome. Prevalence of dysmenorrhea was found to be high (66%). Nearly half of the girls reported dysmenorrhea every month and among 1/3rd girls intensity of pain of dysmenorrhea was severe. Common relieving factor was found to be rest. Dysmenorrhea had impact on various activities of girls. 45% girls reported absenteeism from colleges due to dysmenorrhea. 87% girls reported limitations in various activities due to dysmenorrhea and most of the girls were having limitations in daily activities. Health care seeking behavior for dysmenorrhea was found poor among girls. Only 1/3rd girls were seeking health care for dysmenorrhea. Maximum number of girls (89%) reported 'no need of treatment' as a reason for not seeking health care during dysmenorrhea.

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