Original Research Article

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A cross sectional study reflecting association between common menstrual disorders and college absenteeism

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ABSTRACT

Background: Menstrual disorders affect half of all female adolescents and represent leading cause of periodic college absenteeism but awareness regarding health seeking behaviour is less. Objective was to study association between common menstrual disorders and college absenteeism in first and second year medical students in Mumbai.

Methods: 150 female students from first and second year MBBS were included in the study. Research tool comprised of questions about demographic characteristics, age at menarche, menstrual cycle pattern, complaints and its impact on daily activities including college absenteeism. Behaviour towards health and knowledge about menstrual cycle was observed. Percentage and chi square values were calculated using SPSS 16. The study was conducted in period between August to October 2012.

Results: 150 first and second year female medical students participated in the study. Their mean age was 19.5 yrs. Mean age of menarche was 13-14 years in 78%. Menstrual cycle was regular in 72.6%. Menstrual flow was average in 73.3% of respondents and 88% reported duration as 3-5 days. 92% respondents had painful menses especially reporting moderate pain in 78% while in 70% of those pain resolved on its own. 67.4% reported mother as source of menstrual cycle information. Although menstrual disorder was cause of college absenteeism of 1-2 days in 44% students, 88% students didn't seek medical advice for menstrual disorders.

Conclusions: Improving health seeking behaviour towards common menstrual problems can reduce college absenteeism.

Keywords: Common menstrual disorders, College absenteeism, Medical advice

INTRODUCTION

The outset of menstruation is the most striking event in the whole process of female puberty. Menstruation is a normal physiological phenomenon in a woman indicating her capability for procreation. However, this normal phenomenon is often associated with some degree of suffering and embarrassment. Almost every woman does experience one or the other type of menstrual problem in her lifetime. The prevalence of menstrual disorders has been recorded as high as 87%. The list of menstrual disorders may range from amenorrhea, irregular cycles,

abnormal flow to dysmenorrhoea and premenstrual symptoms. Dysmenorrhoea is the commonest gynaecological disorder among women, with a prevalence of 60% to 93%. Dysmenorrhoea is pain perceived before or during menstruation, confined to lower abdomen, back and thighs, and of varying severity, ranging from mild, moderate to severe. Menstrual periods are said to be regular if they are coming at regular interval varying between 21-35 days from last menstrual period and the menstrual flow lasts for 3-5 days with an average loss of 30-80 ml of blood. Irregular menstrual cycle is any deviation from normal duration. Menorrhagia

denotes regular cycles with bleeding either excessive in amount (>80 ml) &/or, in duration with flow lasting >7 days. Hypo menorrhoea is scanty menstrual flow which lasts for <2 days. Menstrual flow is considered as scanty if 1-2 sanitary pads were used in a day, average if 3-5 sanitary pads were used in a day and heavy if more than 5 sanitary pads were used. In polymenorrhoea, the interval between two consecutive cycles is <21 day and in oligomenorrhea, this interval may extend to>35 days.^{2,3,10}

Painful menstruation (dysmenorrhoea) is major cause of activity restriction and college absence in adolescent girls. However, this condition is often considered as physiological pain and ignored by adolescents, and only few adolescents consult physician for menstrual pain. Considerable percentage of women of reproductive age group suffer from menses associated health problems such as painful menstruation (dysmenorrhoea), unusual heavy bleeding and irregular menstrual cycles. These conditions are not life threatening but they can seriously decrease quality of life of many women and affect their mental health and their productivity. In this study, impact of menstrual disorders in adolescent girls especially medical college students was studied and its association with college absenteeism was explored.⁴⁻⁷

METHODS

A cross sectional study was conducted in a Government Medical College, Maharashtra, India on 150 female medical students. A self administered questionnaire given to 150 female students from first and second year MBBS. Research tool comprised of questions about demographic characteristics, age at menarche, menstrual cycle pattern, complaints and its impact on daily activities including college absenteeism. Each participant was given 20 minutes to complete the questionnaire; they were advised not to write their name on the questionnaire and were told that, their responses would remain confidential. Informed consent was taken from participants and health seeking behaviour and knowledge about menstrual cycle was observed. Prior permission taken from institutional

ethical committee. The study was conducted in period between August to October 2012. Percentage and chi square values calculated using Statistical Package for Social Sciences (SPSS) V16 Software and p value <0.005 was considered as statistically significant.

RESULTS

In the present study, 150 under graduate female medical students, aged between 17-21 years were interviewed through a structured questionnaire. Their mean age was 19.5 yrs. Mean age of menarche was 13-14 years in 117 (78%) respondents. Menstrual cycle was regular in 109 (72.6%) and 41 (27.4%) had irregular cycle. Menstrual flow was average in 110 (73.3%) of respondents while in 25 (16.7%) it was scanty and was heavy in 15 (10%). Among respondents 132 (88%) reported duration of menstrual cycle as 3-5 days. 92% respondents had painful menses especially reporting moderate pain in 78% while in 70% of those pain resolved on its own. 67.4% reported mother as source of menstrual cycle information (Figure 1). Although menstrual disorder was cause of college absenteeism for 1-2 days in 66 (44%) students (Figure 2). 88% students didn't seek medical advice for menstrual disorders (Figure 3).

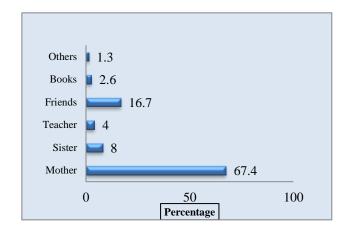


Figure 1: Information sources for menstrual cycle.

Table 1: Nature	of menstrual	cycle vs.	college	absenteeism.

Nature of Menstrual Cycle	College Absenteeis	Total			
	Never	1-2 days	3-4 days	Throughout Cycle	
Painful	46(33.8%)	66(48.5%)	24(17.6%)	0(0.0%)	136(100%)
Not Painful	14(100%)	0(0.0%)	0(0.0%)	0(0.0%)	14(100%)
Total	60(40%)	66(44%)	24(16%)	0(0.0%)	150(100%)

Pearson Chi square test, value = 23.162, df = 3, p < 0.01 (Statistical Highly Significant)

Fishers Exact Test, value = 22.507. df = 3, p < 0.01 (Statistical Highly Significant).

(p < 0.05 Statistical Significant, p < 0.01 Statistical Highly Significant)

In above table, 66(48.5%) respondents were absent for 1-2 days during their menstrual cycle and 24 (17.6%) were absent for 3-4 days. Association between nature of menstrual cycle (painful or not painful) and college absenteeism was found highly significant (p < 0.01).

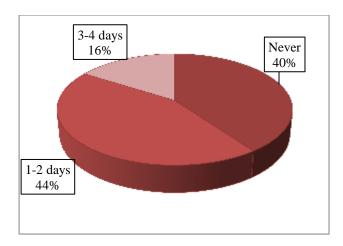


Figure 2: College absenteeism in days during menstrual cycle.

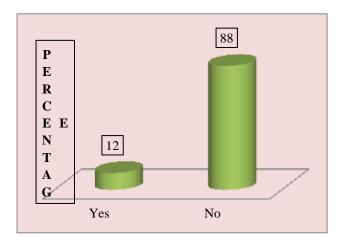


Figure 3: Medical advice taken for menstrual disorders.

DISCUSSION

In Kanchipuram, Tamilnadu, a similar study was conducted among female medical students, it was observed that mean age of menarche was 12 +/- 1.5 years. The prevalence of dysmenorrhoea (painful menses) was 51%. Among respondents, 16% of students were not able to attend their college during menstrual period and 89.3% of participants had not sought medical advice. 8

In a study done among female medical students in Rewa, Madhya Pradesh, India, it was observed that mean age of menarche was 12.5 +/- 1.5 years. The prevalence of dysmenorrhoea was 73.8% and 7.47% of respondents had irregular periods. The average duration of menstrual flow was 4.5+/-2.4 days. Among female medical students who reported dysmenorrhoea 31.6% and 8.6% were frequently missing classes and colleges respectively. Maximum participants did not seek medical advice.⁹

In present study, mean age of menarche was 13-14 years in 78% students. Dysmenorrhoea (painful menses) was seen in 92% respondents had especially reporting

moderate pain in 78%. Menstrual flow was average in 110 (73.3%) of respondents. Menstrual cycle was irregular in 27.4% of students. 88% respondents reported duration of menstrual cycle as 3-5 days. 67.4% reported mother as source of menstrual cycle information. Although menstrual disorder was cause of college absenteeism of 1-2 days in 44% students, 88% of the students did not seek medical advice for menstrual disorders.

CONCLUSION

The prevalence of dysmenorrhoea (painful menstruation) was high (92%) and majority (88%) had menses for 3-5 days. 109 (72.6%) respondents had regular cycle with average menstrual flow. College absenteeism for 1-2 days due to menstrual disorders was found in 66 (44%) respondents though only 18 (12%) respondents had taken medical advice for the same.

Health education on menstrual problems targeting female students and their parents, and routine screening for menstrual problems by healthcare providers.

Prompt health seeking behaviour would further help in reducing the sickness absenteeism due to menstrual disorders in adolescents.

Continuous Medical Examination, workshops emphasizing role of hygienic practices and health seeking behaviour during menstruation will help in reducing health problems of adolescent girls.

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Ethical approval: The study was approved by the

Institutional Ethics Committee

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