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Research Article

Common menstrual complaints and use of medication, among undergraduate students of Moradabad, Uttar Pradesh, India: a cross sectional study

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ABSTRACT

Background: Menses is associated with many complaints in girls. Very little work is done on prevalence of menstrual problems among Indian population. Problem of pain is by far the most common problem reported by majority of girls. This has an impact on public and occupational health. In India the girls hesitate to discuss these problems even with their parents. Thus most of the time either they do not take any medication to resolve their problem, or take some pills on their own to get relief. Finding out the common menstrual problems and the pattern of medication use will be helpful in planning a health care program for the population. Objectives of the study were to assess the prevalence of common menstrual complaints among under-graduate students of Moradabad region and to assess the pattern of medication, used by them, for these complaints.
Methods: 396 female first year students pursuing undergraduate course were studied with the help of a structured pilot tested questionnaire.
Results: 93.4% girls were found to have some or the other complaint during menstruation. Body-ache (64%) was the most common complaint reported followed by pain in abdomen (59%) and backache (57%). 37.9% subjects reported to use some medicine for menstrual problems. 65.3% of those who used medicine used it for pain in abdomen, either alone or in combination with some other complaints. Only 23.9% of those belonging to rural background consulted doctor before using medicine, as against 48.3% of those belonging to urban background.
Conclusions: Present study shows a high prevalence of medical problems during menstruation. Mostly medicines were used for the pain in abdomen either alone or in combination with other complaints. Menstrual problems constitute an important unmet area of reproductive health services. Packages of reproductive health care should include modules for education, diagnosis and treatment of most menstrual morbidities.

Keywords: Menstrual complaints, Medication use, Under-graduate girls

INTRODUCTION

Menstruation is a part and parcel of women's physiology starting of which is associated with a number of physical, hormonal, and psychological changes in the body of adolescent girls. These changes mostly results in a lot of stress and physical problems in the girls. Menstruation is dealt with secrecy in most of the underdeveloped and developing countries including India. Discussion on menstruation and menstrual problems is regarded as taboo especially among rural communities. A study on Indian women by Narayan et al revealed that young girls are generally told nothing about Menstruation.[1] Hence, knowledge and information about reproductive functioning and reproductive health problems amongst the adolescent is poor.[2,3] No wonder that menses is associated with many complaints in girls. These complaints are mostly related to either flow of blood or

physical symptom of pain or mood changes like anxiety irritability etc. Whereas a number of studies have been conducted to assess the knowledge and practices of menstrual hygiene, very little work is done on prevalence of menstrual problems among Indian population. Most of the studies conducted on this issue are on population of developed countries. Problem of pain is by far the most common problem reported by majority of girls. This has an impact on public and occupational health.[4,5] However, its prevalence is unclear. Studies performed in different populations showed rates between 20% and 94%.[6-9]

In India as well as in other developing and underdeveloped country, menstruation being dealt with secrecy, the girls hesitate to discuss these problems even with their parents. Thus most of the time either they do not take any medication to resolve their problem, or take some pills on their own to get relief.

Finding out the common menstrual problems and the pattern of medication use will be helpful in planning a health care program for the population. Keeping in view the above advantages, the assessment of common menstrual problems and use of medication among student girls pursuing various undergraduate courses in Colleges of Teerthanker Mahaveer University Moradabad was planned. Objective of the study was to assess the prevalence of common menstrual complaints among under-graduate students of Moradabad region and to assess the pattern of medication, used by them, for these complaints.

METHODS

Study was conducted in Teerthanker Mahaveer University, Moradabad. The University has more than 14000 students studying in 17 colleges and pursuing 125 courses. Of these, three courses were selected by purposive sampling as they had predominantly female students. To minimize the effect of university education we selected only first year female students pursuing the three selected undergraduate courses. All the unmarried students present on the day of visit, who have attained menarche and gave verbal consent, were included in the study.

Thus a total of 396 females were studied. A structured pilot tested questionnaire was used in the study. The data collection technique used was filling of the questionnaire by the study subjects preceded by a formal introduction regarding the purpose & method of study, and reassuring the confidentiality of the results. Participants were not required to disclose their identity in the questionnaire format.

Ethical considerations

Anonymity, confidentiality and rights of the respondents were respected in the study. Informed verbal consent with the respective college's Principal and the respondents was taken before data collection. The type and purpose of the survey, issues of anonymity and confidentiality; voluntary participation and freedom to quit at any stage and absence of any known risk or benefit for participating in the study was explained beforehand.

RESULTS

Socio-demographic characteristics of the respondents:

A total of 396 girls participated in the survey. Age of the subjects ranged from 16 to 30 years. Majority (90.9%) being between16 to25 years (Figure 1). Mean age was 21 years. 58.6% subjects belonged to rural background while 41.4% belonged to urban background (Table 1). In majority (56.1%) of cases the fathers of the girls were laborers or farmers by occupation. In 14 (3.5%) cases they were semiskilled where as in 32 (8.1%) they were skilled workers. In 64 (16.2%) and 26 (6.6%) they were businessman and professionals respectively. Father of fourteen 14 (3.5%) were engaged in some miscellaneous occupations. Mothers of majority of students (88.4%) were either housewives or doing some work from home itself. Only in 44 (11.1%) cases they were employed in some outside job.

Table 1: Background of the subjects n=396.

	No.	%
Rural	232	58.6
Urban	164	41.4

Menstrual pattern

The age of menarche ranged from 12 to 15 years. 136 (34.4%) girls had it by the time they reached13yrs of age. In 156 (39.4%) it was reported to be 14yrs. while 104 (26.3%) had their menarche at the age of 15yrs. The mean age was 13.8yrs. Duration of bleeding period in menstruation was found to be normal (3-9 days) in 319 (80.56%) girls. However in 55 (13.9%) it was less than 3days whereas in 22 (5.6%) it was more than 9 days (Figure 2). In 308 (77.8%) girls the blood flow during menses was reported to be normal, in 42 (10%) it was scanty whereas 46 (12%) found it to be excessive (Figure 3). Menses was reported to be regular by 312 (88.9%) whereas 84 (11.1%) had irregular menses.

Complaints during menstruation

Only 26 (6.57%) girls told that they do not have any complaint during menstrual period. Single complaint was reported by 182 girls while 188 were having two or more complaints (Figure 4). Body-ache was the most common complaint reported by 254 (64.1%) girls, followed by pain in abdomen in 234 (59.1%) and back-ache in 226 (57.1%). Irritability was reported by 106 (26.8%) respondents while excessive bleeding was found only in 46 (11.6%) subjects (Table 2).

Table 2: Type of complaints (n=396).

Type of complaints	no.	%*
pain in abdomen	234	59.09
backache	226	57.07
body ache	254	64.14
irritability	106	26.77
excessive bleeding	46	11.62

*Total may be more than 100 due to multiple complaints by some subjects.

Table 3: Use of medicines for menstrual problems.

	Rural	Urban	Total
Medicine used	92 (39.66%)	58(35.37%)	150 (37.88%)
Medicine not used	140 (60.34%)	106(64.63 %)	246 (62.22%)
Total	232	164	396

Chi-Square - 0.751; df=1; p= 0.223.

Table 4: Frequency of use of medicine (n=150).

Background	Frequency		Total
	Every month	Occasionally	
Rural	34	58	92
Urban	20	38	58
Total	54	96	150

Chi-square = 0.094 df=1 p=0.449.

Table 5: Complaints for which medicines are used.

Complaints	No.	%*
Pain in abdomen	98	65.3
Backache	68	45.3
Body ache	36	24.0
Irritability	16	10.7
Excessive bleeding	6	4.0

*Total may be more than 100 due to multiple complaints by some subjects.

Use of medicines for menstrual complaints

Out of 232 girls belonging to rural background 92 (39.66%) accepted to use some medicine for menstrual complaints, while out of 164 belonging to urban background 58 (35.37%) reported to use medicines. The difference was statistically not significant (Chi-square= 0.751 p= 0.223). Thus out of total 396 subjects, included in the study 150 (37.88%) used some medication for menstrual complaints (Table 3).

As far as the frequency of using medicine is concerned, out of 92 subjects belonging to rural background 34 used it every month while 58 used it only occasionally. On the other hand out of 58 from urban background 38 reported to use it occasionally whereas 20 were using medicine in every cycle (Table 4).

Table 6: Consultation with doctor for using medicines.

Background	Consultation with doctor		Total
	Yes	No	
Rural	22	70	92
Urban	28	30	58
Total	50	100	150

Chi-square = 9.501; df=1; p = 0.002.

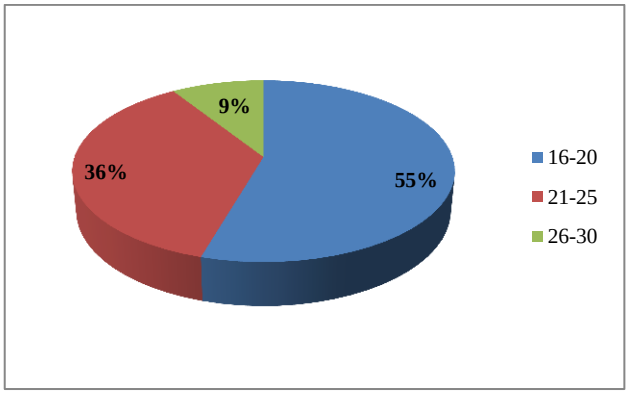

Figure 1: Age of girls (years).

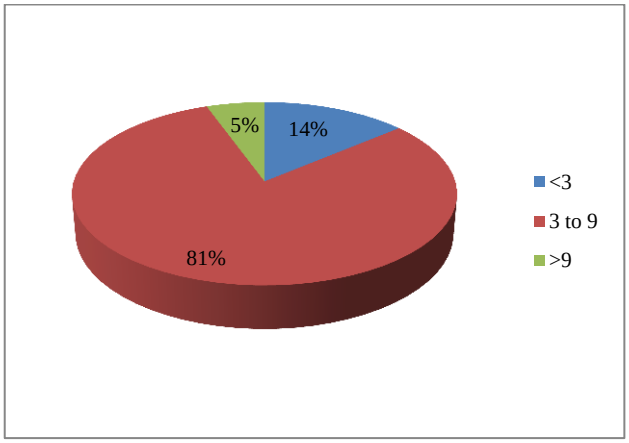

Figure 2: Duration of menstrual bleeding (days).

Among those who used the medicine (n=150) 65.3% used it for pain in abdomen while 45.3% used it for backache. Use of medicine for body ache and irritability was limited in 24% and 10.7% respectively. Merely 4% used medication for Excessive bleeding (Table 5).

A statistically significant difference was noted in the pattern of consultation with the doctors among rural and urban girls. In answer to the question whether the subjects are using these medicines after consultation with some doctor or on their own, only 22 (23.91%) out of 92 belonging to rural background told that they have had a consultation with some doctor before using the medicine. However 28 (48.28%) out of 58 subjects belonging to

urban background consulted doctor before using medicines (Chi-Square = 9.501, p=0.002) (Table-6).

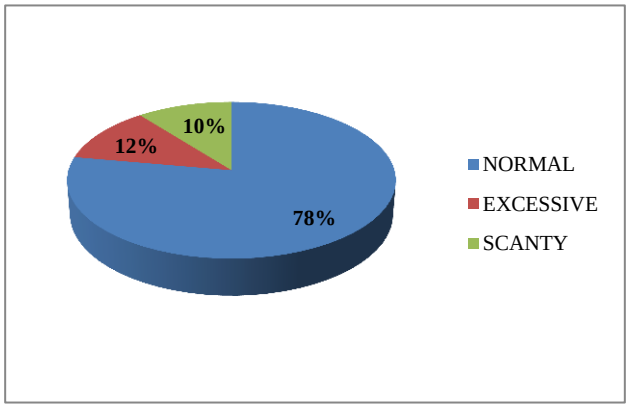

Figure 3: Flow of menses.

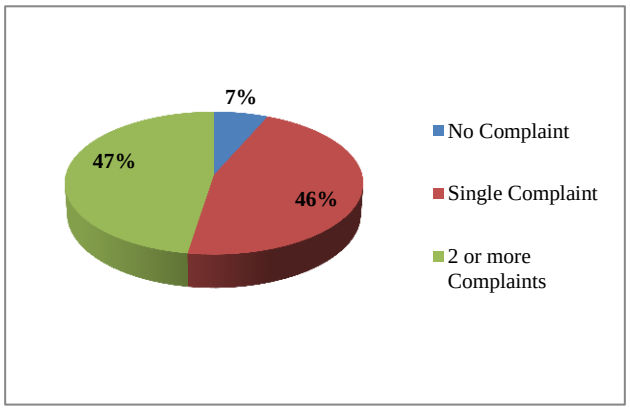

Figure 4: Complaints during menstruation.

DISCUSSION

Whereas a lot of work has been done on the practice of menstrual hygiene among young girls, very few studies have been done on prevalence of menstrual complaints in general among them. Most of the available studies are on primary dysmenorrhea which has no standard definition. Mostly it is defined as a cramp like pain in the lower abdomen at the onset of menstruation without any identifiable pelvic pathology.[10]

In our study we have studied all type of complaints related with and occurring during menstruation. Out of total 396 girls only 26 (6.57%) were found to have no complaint. Among those who were having some complaint, 188 were having two or more complaints while 182 had only one complaint. Most common complaint, reported either singly or in combination, was body ache (by 64.14%). This high prevalence of complaints was probably due to reducing tolerability for pain due to changing life style and due to psychological disturbances. Changes in hormonal levels during menstrual cycle are responsible for various physical changes in the body, e.g. congestion in breast, water retention etc., which cause mild discomfort in many girls. According to some authors a type of menstrual pain that is lighter than dysmenorrhea, called normal menstrual cramps may exist in many girls.[11]

In present study prevalence of pain in abdomen and backache was found to be 59.09% and 57.07% respectively. Avasarala et al in their study conducted in India among 180 adolescent girls reported prevalence of dysmeorrhea to be 54%.[12] Various studies conducted in different countries have shown a wide variation in prevalence of dysmenorrhea. Aytac Polat et.al in their study, conducted in young adult female university students, found 87.8% suffering from pain in menstruation.[13] Other studies around the world have also reported a high prevalence of dysmenorrhea. Giovanni Grandi et al found 84.1% women reporting menstrual pain, in their study conducted on 408 women university students. Murat Cakir et al in their study, conducted on 480 university students of Turkey, reported 89.5% prevalence of Dysmenorrhea while in another study, conducted by Alaettin Unsal in same country, it was found to be 72.7%.[14-16]

In our study excessive bleeding was complained by 12% girls. Similar findings were reported by Bhatia et al and Bang et al who found 15% females to complain profuse bleeding during menstruation. As far as duration of menstruation is concerned 5% subjects reported to have bleeding for more than 9 days. Khatri and Gupta in a community based survey found 4% females to have bleeding for more than 7 days. Filippi et al and Bulut et al reported a long bleeding (>8 days) in 8% of study subjects.[17-21]

In the present study out of total 396 girls studied, 150 (37.9%) used some medication to get relief from menstrual problems. Among those who used medicine, 98% were using it for pain in abdomen alone or in combination with other complaints. Grandi et al reported 55.2% subjects of his study using medication for menstrual problems.[14] The difference in overall use of medicine found in two studies is probably due to difference in the economic conditions and pain tolerability of the study-groups. As far as background of the study subjects was concerned, 35.37% girls belonging to urban back ground as against 37.88% of those from rural background used medicines for menstrual problems. The difference was not statistically significant. However when enquired about consultation with doctor prior to the use of medicine only 33.33% of total girls who used medicine answered positively. Here the percentage of those belonging to urban back ground (48.28%) was significantly higher in comparison to those who belonged to rural background (23.91%) (p= 0.002) This is probably because of difference in the socioeconomic conditions and comparatively poor accessibility to medical consultant.

CONCLUSION

Present study shows a high prevalence of medical problems during menstruation among young student girls. Most of them experience some pain during menstruation. Severe pain can prevent them participating in day-to-day activities. It can also disrupt the productivity. Very few studies have been done to cover this aspect of menstrual cycle. Most of these described the prevalence of dysmenorrhea which is a poorly defined term in itself and authors have included various symptoms to consider a case as suffering from dysmenorrheal. In present study 93% girls reported to have some or the other complaint during her menses. Many of those having complaints had two or more problems. This shows the relative importance of menstrual morbidity as a health priority. Yet little attention is paid to understanding or ameliorating women's menstrual complaints.

Although body ache was found to be most common problem (64%), only 24% of those using medicines used it for this complaint. Mostly medicines were used for the pain in abdomen either alone or in combination with other complaints. Pain in abdomen and backache were found to be the most common complaints for which medications are being used by the young girls.

Only one third of those using medicines were found to use it with doctor's consultation. Others were using them on their own. A significantly higher percentage of girls from urban background consulted with doctor in comparison to girls from rural back ground. Menstrual problems constitute an important unmet area of reproductive health services. Since severe menstrual pain may be associated with other reproductive morbidities, such as infection, their clinical evaluation is mandatory. Packages of reproductive health care should include modules for education, diagnosis and treatment of most menstrual morbidities. Monitoring menstrual complaints may be important in efforts to reduce pelvic infections and anemia.

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