

ORIGINAL RESEARCH

## TO ASSESS THE SEVERITY OF PAIN IN PRIMARY DYSMENORRHEA AMONG MEDICAL AND NURSING STUDENTS

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### ABSTRACT

**Background:** Dysmenorrhea is a cyclical lower abdominal or pelvic pain which may also radiate to the back and thighs; it occurs before or during menstruation, or both. The present study was conducted to assess severity of pain among primary dysmenorrhea in medical and nursing students.

**Materials & Methods:** 176 medical and nursing students age ranged 18- 26 years were included. Menstrual pain, intensity of pain, pain characteristics, menstrual symptoms, impact of dysmenorrhea and symptoms, menstrual pain management methods and socio- economic status (SES) was recorded. The numerical pain scale was used for assessing pain intensity.

**Results:** Age group 18-20 years had 65, 21-23 years had 70 and 24-26 years had 41 patients. Pain length was 1-2 days seen in 82, 2-3 days in 64 and entire period in 30. Pain intensity was mild in 41, moderate in 75 and severe in 60. Menstrual symptoms was seen in 90. Frequency of dysmenorrhea occurrence was more frequently (every month) in 102 and less frequently (once in 3 month) in 74. The difference was significant ( $P < 0.05$ ). Self- medication was seen in 50 and sickness absenteeism such as normal daily life in 86 and college absenteeism was seen in 90. The difference was significant ( $P < 0.05$ ).

**Conclusion:** Most of students had moderate pain in dysmenorrhea.

**Key words:** Dysmenorrhea, headache, Menstrual symptoms

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### I. INTRODUCTION

Dysmenorrhea is a cyclical lower abdominal or pelvic pain which may also radiate to the back and thighs; it occurs before or during menstruation, or both. Cramps and pain are experienced in the lower abdominal after regular ovulation is established. It begins soon after menarche.<sup>1</sup> It is the most common gynaecological complaint among adolescent and adult females. Menstruation-associated symptoms are a broad collection of affective and somatic concerns that occur around the time of menses.<sup>2</sup> Symptoms, such as headache, vomiting,

tiredness, dizziness, and diarrhoea are few commonly experienced menstrual symptoms. Symptoms typically start at the onset of menstrual flow or occur within a few hours before or after onset, and last for the first 24-48 hours.<sup>3</sup>

Dysmenorrhea has different detrimental effects on individuals and the community.<sup>4</sup> For instance, school and work absenteeism, interference with daily living activities, limitation in socialization, and higher intake of sedative medications are positively associated with the higher prevalence and intensity of dysmenorrhea.<sup>5</sup> The present study was conducted to assess severity of pain in primary dysmenorrhea in medical and nursing students.

## II. MATERIALS & METHODS

The present study comprised of 176 medical and nursing student's age ranged 18- 26 years. The consent was obtained from all enrolled participants.

Data such as name, age, gender etc. was recorded. A careful examination was carried out. Menstrual pain, intensity of pain, pain characteristics, menstrual symptoms, impact of dysmenorrhea and symptoms, menstrual pain management methods and socio- economic status (SES) was recorded. The numerical pain scale used for assessing pain intensity, patient being asked to indicate verbally or graphically on a scale of 0- 10 a number which describes the intensity of pain with 0 meaning no pain and 10 the worst possible pain. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

## III. RESULTS

**Table I Distribution of patients**

Age group (years)	Number	P value
18-20	65	0.17
21-23	70	
24-26	41	

Table I shows that age group 18-20 years had 65, 21-23 years had 70 and 24-26 years had 41 patients. The difference was significant (P< 0.05).

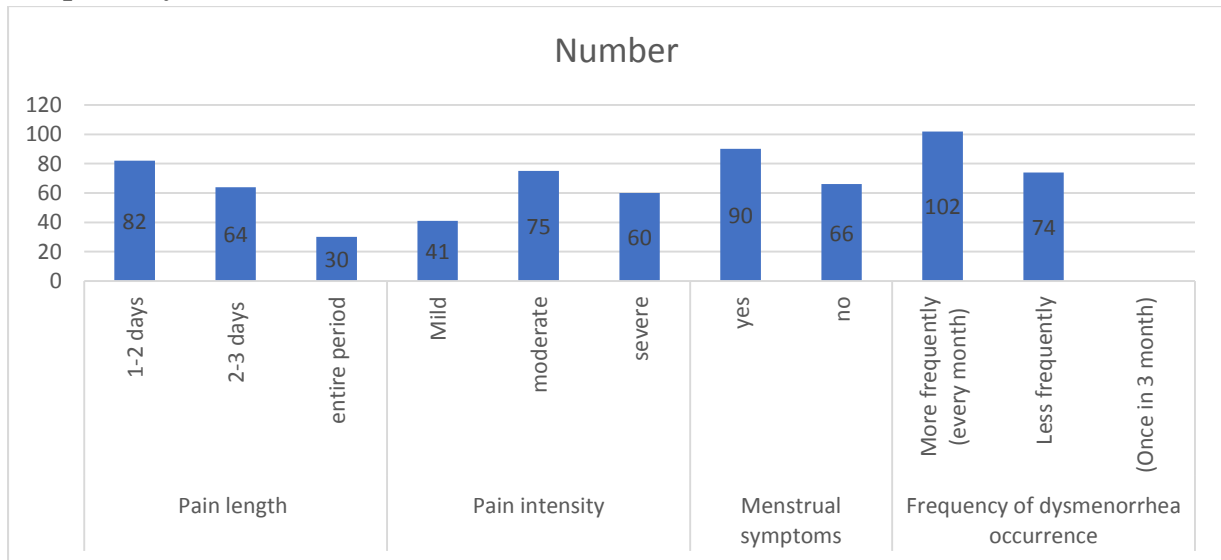
**Table II Dysmenorrhea and associated features**

Parameters	Variables	Number	P value
Pain length	1-2 days	82	0.05
	2-3 days	64	
	entire period	30	
Pain intensity	Mild	41	0.05
	moderate	75	
	Severe	60	

Menstrual symptoms	Yes	90	0.21
	No	66	
Frequency of dysmenorrhea occurrence	More frequently (every month)	102	0.04
	Less frequently (Once in 3 month)	74	

Table II, graph I shows that pain length was 1-2 days seen in 82, 2-3 days in 64 and entire period in 30. Pain intensity was mild in 41, moderate in 75 and severe in 60. Menstrual symptoms was seen in 90. Frequency of dysmenorrhea occurrence was more frequently (every month) in 102 and less frequently (once in 3 month) in 74. The difference was significant ( $P < 0.05$ ).

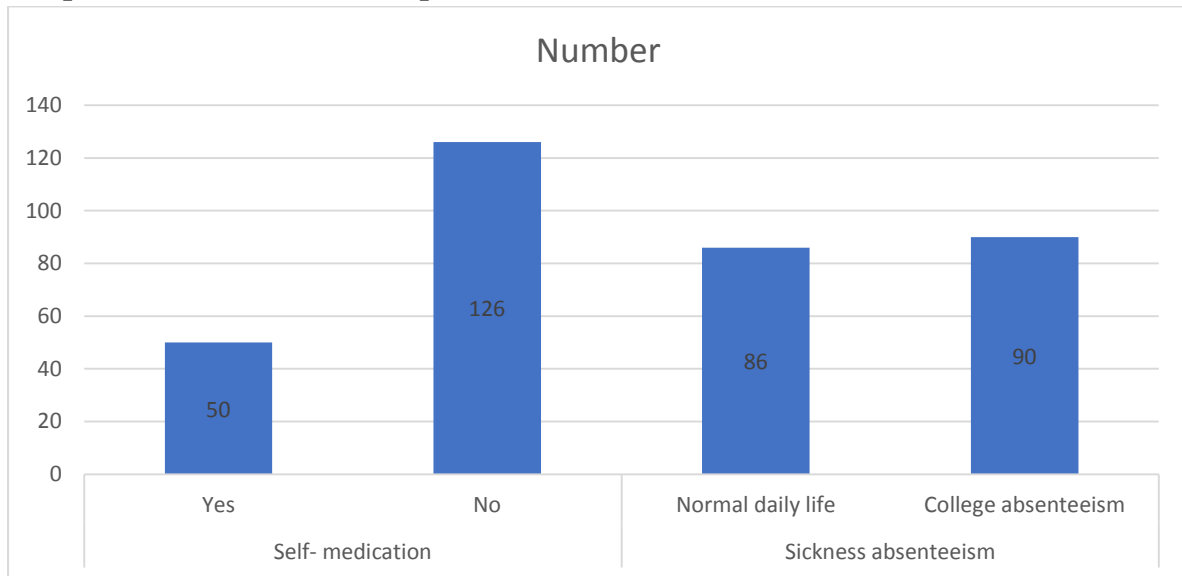
**Graph II Dysmenorrhea and associated features**



**Table III Assessment of other parameters**

Parameters	Variables	Number	P value
Self- medication	Yes	50	0.01
	No	126	
Sickness absenteeism	Normal daily life	86	0.21
	College absenteeism	90	

Table III, graph II shows that self- medication was seen in 50 and sickness absenteeism such as normal daily life in 86 and college absenteeism was seen in 90. The difference was significant ( $P < 0.05$ ).

**Graph II Assessment of other parameters**

#### IV. DISCUSSION

Menstrual period is a cyclic physiological phenomenon in which several problems can arise including irregular cycles, excessive bleeding and dysmenorrhea.

Dysmenorrhea is commonly described as a severe, painful, cramping sensation in the lower abdomen that is often associated with other symptoms, such as sweating, headache, nausea, vomiting and diarrhea.<sup>10</sup> These symptoms can occur during or few days before menstruation.<sup>10</sup> The present study was conducted to assess severity of pain in primary dysmenorrhea in medical and nursing students.

We found that age group 18-20 years had 65, 21-23 years had 70 and 24-26 years had 41 patients. Omidvar et al<sup>11</sup> recorded prevalence, and impact of primary dysmenorrhea in student girls and their management behaviors. Prevalence of dysmenorrhea was 70.2%. Majority of the subjects experienced pain for 1-2 days during menstruation. 23.2% of the dysmenorrheic girls experienced pain for 2-3 days. The most common symptom in both dysmenorrheic and non dysmenorrheic girls during the menstrual periods was tiredness and second most prevalent symptom was back pain. Females experiencing mild pain on an average absented for one and half day a month while  $2.1 \pm 1.2$  and  $2.5 \pm 1.3$  days for those who experienced moderate and severe forms of dysmenorrhea respectively. A small proportion of girls sought pharmacological management (25.5%) and 83.2% depended on non-pharmacological methods. Only 14.2% had sought medical advice.

We found that pain length was 1-2 days seen in 82, 2-3 days in 64 and entire period in 30. Pain intensity was mild in 41, moderate in 75 and severe in 60. Menstrual symptoms were seen in 90. Frequency of dysmenorrhea occurrence was more frequently (every month) in 102 and less frequently (once in 3 month) in 74. Habibi et al<sup>12</sup> carried out study among 311 undergraduate female students aged 18 to 27 years. The prevalence of primary dysmenorrhea was 89.1%. Residing at home, younger age, lower number of years of formal education for the mother, positive family history of dysmenorrhea, higher severity of bleeding, and shorter menstrual period intervals were significantly associated with the higher intensity of primary

dysmenorrhea. Primary dysmenorrhea is a common health concern among young women. Being aware of the factors that are associated with its intensity makes it possible for health professionals to organize better focused programs to reduce the adverse effects of dysmenorrhea.

We found that self-medication was seen in 50 and sickness absenteeism such as normal daily life in 86 and college absenteeism was seen in 90. Daley et al<sup>13</sup> showed that in studies where more than 500 participants were included there tended to be no association between dysmenorrhea and exercise/physical activity patterns but smaller studies. Zhou and Yang et al<sup>14</sup> conducted a prospective study on 2,640 Chinese female students showed that severity of dysmenorrhea was associated with greater amount of menstrual bleeding.

Sima et al<sup>15</sup> assessed the prevalence and management of dysmenorrhea and determined the impact of dysmenorrhea on the quality of life of medical students. The study comprised 1720 students in total. The prevalence of dysmenorrhea was 78.4%. During their menstrual period, most female students felt more agitated or nervous (72.7%), more tired (66.9%), as if they had less energy for daily activities (75.9%) and highly stressed (57.9%), with a normal diet being difficult to achieve (30.0%). University courses (49.4%), social life (34.5%), couples' relationships (29.6%), as well as relationships with family (21.4%) and friends (15.4%) were also affected, depending on the duration and intensity of the pain.

## CONCLUSION

Dysmenorrhea has a high prevalence among medical students and could affect the quality of life of students in several ways. The intensity of the symptoms varies considerably and, with it, the degree of discomfort it creates. The study showed that most of the students had moderate pain in dysmenorrhea. And use both pharmacological and non-pharmacological methods to reduce pain. Furthermore there should be an awareness of negative consequences of dysmenorrhoea to reduce the physical and psychological stress among medical students.

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