



Knowledge and Practices of Dysmenorrhea and its Effect of Life Among Female Medical Students in Jalalabad

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ABSTRACT

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Dysmenorrhea or painful menstruation is defined as a severe, painful, cramping sensation in the lower abdomen that is often accompanied by other symptoms, such as sweating, headaches, nausea, vomiting, diarrhea, and tremulousness, all occurring just before or during the menses. This study aimed to assess the Knowledge and Practices of dysmenorrhea and its effect of life among female medical students in Jalalabad.

Materials and Methods: A descriptive cross-sectional study was done through online Google forms for a period of 3 months from January to March 2024. A structured questionnaire was administered to 173 randomly selected Undergraduate Medical students. Data were analyzed using Statistical Package for Social Sciences (SPSS) version 22.0.

Objective: To gain more insight should think about dysmenorrhea is, if not it's can have alarming consequences sexual life of female. To gain knowledge about dysmenorrhea. To study and practice about dysmenorrhea increase the awareness of immature hygiene and self medication.

Results: In total, 173 medical students from 1st year and 2nd year were selected for this study where age range was 17-22 years with mean age of (20±1). Majority of 74% of the participants were found in to have good knowledge about dysmenorrhea. Majority of students who has good knowledge and also had good practices where as students with poor knowledge has poor practice (p value 0.021)

Conclusion: Majority students concluded that dysmenorrhea is a very common problem of female students, and they experience a number of physical and emotional symptoms associated with dysmenorrhea. Mostly students are silently suffer the pain by dysmenorrhea and discomfort associated with it due to lack of knowledge about dysmenorrhea also affects their academic performance. However, their practices were found to be a matter of concern. An educational intervention can be introduced to bring about changes their life style regarding practices about dysmenorrhea among students.

KEYWORDS:

Knowledge, practice, Results, Conclusion

INTRODUCTION

Dysmenorrhea or painful menstruation is defined as a severe, painful, cramping sensation in the lower abdomen that is often accompanied by other symptoms, such as sweating, headaches, nausea, vomiting, diarrhea, and tremulousness, all occurring just before or during the menses.

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In India reported that dysmenorrhea affects up to 90% of women of childbearing age to varying degrees. Pain is significant in 5-20% who report severe dysmenorrhea or pain that prevents them from participating in their usual activities. In the United States, the annual economic loss has been estimated as 600 million work hours worth 2 billion dollars. The prevalence estimates range from 25 to 90% among women and adolescents (Oksana, 2009). Studies from India reported the prevalence range between 50 to 87.8%. (1)

There are 2 types of dysmenorrhea. Primary dysmenorrhea is defined as spasmodic cramping in the lower abdomen occurring just before or during menstruation. Menstrual pains not a symptom of any underlying disorder but part of the normal menstruation process. "primary dysmenorrhea usually

peaks between 20-24 years of age. Symptoms include stomach cramps, backache, diatheses, fatigue, headache, edema, nausea, vomiting and mood changes. These symptoms last for more or less three days. The pain of primary dysmenorrhea is caused by excessive E₂ and F_{2a} prostaglandin production within secretory interstitial cells.

This prostaglandin release, in turn, causes uterine contractions, uterine muscle ischemia and increased peripheral reined sensitivity. Coupled with their elevated prostaglandin levels, dysmenorrhea women have higher levels of uterine activity during menstruation compared to asymptomatic women. Menstrual bleeding is triggered by progesterone withdrawal following the demise of the corpus luteum. As progesterone levels drop prior to menstruation, prostaglandin levels increase together with stimulation of the type-C pain fibers and play a big role in pain, inflammation and other physiological processes regulating body temperature.

Secondary dysmenorrhea is menstrual pain associated with an identifiable disease such as endometriosis, uterine fibroids, or infection. (2)

In contrast to primary dysmenorrhea it usually affects older women in their thirties and forties. Elevated prostaglandin production may also play a role in women with secondary dysmenorrhea, but pelvic pathology must be present. Women with secondary dysmenorrhea may be more susceptible to developing other chronic pain conditions later in life.

Risk factors: Dysmenorrhea does not usually occur within the first six months, after the first menstruation.

We aimed to determine the prevalence of dysmenorrhea and predictors of dysmenorrheic pain severity among female university students. The results of our study showed that the prevalence of dysmenorrhea was relatively high (85.1%) but fits within the reported values from developing and developed countries. Published studies showed variable rates of dysmenorrhea ranging from 34% in Egypt, 80% in Australia, 85% among Hispanic female adolescents, and 94% in Oman [33,34,35]. Furthermore, studies showed that the prevalence of severe dysmenorrheic pain varies from 0.9% reported from Korea to 59.8% reported from Bangladesh. (3)

First-line procedures in the diagnosis of primary dysmenorrhea include a clinical history and physical examination. It is important to rule out any other possible pathological causes for the menstrual pain, as well as to determine the best approach for the management of pain. If the etiology remains unknown after an appropriate non-invasive evaluation, a laparoscopy is indicated.

Treatment of dysmenorrhea is aimed at providing symptomatic relief as well as inhibiting the underlying processes that cause symptoms. Grading dysmenorrhea according to the severity of pain and the degree of limitation of daily activity may help guide the treatment strategy. Medications used may include NSAIDs and opioid analgesics, as well as hormonal contraceptives. In addition to pain relief, mainstays of treatment include reassurance and

education. Other therapies have been proposed, but most are not well studied.

Treatment of secondary dysmenorrhea involves correction of the underlying organic cause. Specific measures (medical or surgical) may be required to treat pelvic pathologic conditions (e.g., endometriosis) and to ameliorate the associated dysmenorrhea. Periodic use of analgesic agents as adjunctive therapy may be beneficial. (4)

Global data: Primary dysmenorrhea is the most commonly reported gynecological and menstrual disorder. It affects a large proportion of women of reproductive ages. It affects millions of women during their reproductive years.

Globally, the previous epidemiological investigations have reported that the magnitude of dysmenorrhea ranges from 41.7% to 94%. (5)

In sub-Saharan Africa, the prevalence of primary dysmenorrhea ranges also from 51.1% to 88.1%. In Ethiopia the prevalence of primary dysmenorrhea ranges from 62.3% to 85.4%.

The common risk factors for primary dysmenorrhea are a positive family history of dysmenorrhea, obesity, being younger age, shorter or longer menstrual cycle interval, stress, menstrual cycle irregularity, early menarche before 12 years and circumcision. (6)

METHOD AND METHODOLOGY

A descriptive cross-sectional study was done through online Google Forms for a period of 3 months from February to April 2024. A structured questionnaire was administered to 173 of 1st year and 2nd year selected Undergraduate Jalalabad medical students.

Data were analyzed using Statistical Package for Social Science (SPSS) version 22.0. Association between dependent and independent variables was done using a Chi-square test.

RESULT

Socio demographic information

In the study we have 173 respondents among them 53.8% belong to 1st year and 46.2% belong to 2nd year. Similarly regarding their religion, maximum 52.6% were from Hindu religion followed by 42.2% Muslim and remaining 4.6 and 0.6 were from Christian and Jew religion respectively.

Respondents on the basis of their age, maximum 55.5% (n=96) of the respondents belong to age of 20-22 years, 37.6% (n=65) were from 17-19 years and remaining 6.9% (n=12) were from 23-25 years age group.

Almost (64.7%) were from single family background where as (35.3%) they were from joint family background.

Respondents regarding family income status majority 64.2% respondents were from middle income and remaining 30.1% and 5.8% were good and bad income status. Similarly regarding respondents' mother level of education (69%) had done their secondary level of education, (21%) completed University education and remaining 20% had only completed their primary education.

On the information of relationship status majority 96% respondents said that they were single where as remaining 4% were married.

among 173 respondents majority 68.8% respondents mother were housewife and 31.2% respondents mother are employee.

Table 1: Distribution of respondents according to their knowledge on dysmenorrhea

Responses	Frequency	Percentage
Painful menstruation	128	74.0
Heavy bleeding during menstruation	11	6.4
Little amount of bleeding during menstruation	6	3.5
All of the above	28	16.2
Total	173	100.0

Above table shows that among 74% of respondents agree that dysmenorrhea is painful bleeding,6.4% of respondents agree that dysmenorrhea is heavy bleeding during menstruation 3.5% respondents agree that dysmenorrhea is little amount of bleeding during menstruation, remaining 16.2%

Table 2: Distribution of respondents according to their Age of first menstruation

Age of first menstruation	Frequency	Percent
9-11 years	27	15.69
12-14 years	117	67.6
Above 15 years	29	16.8
Total	173	100.0

Above table shows that majority of respondents 67.6%(n=117) agree that age of first menstruation when they are 12-14 years old,15.6%(n=27) of respondents were 9-11 years remaining 16.8%(n=29) respondents were above 15 years old.

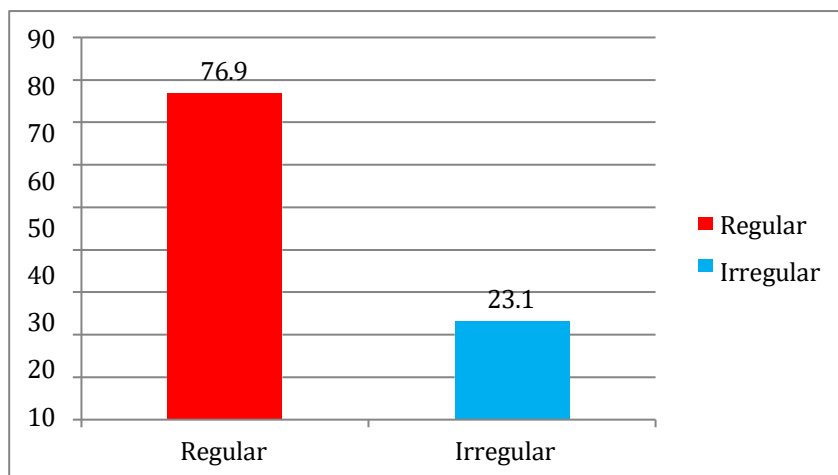


Figure 1: Distribution of respondents according to the nature of their menstruation cycles

Above figure shows that majority respondents 76.9% were regular menstruation cycle and 23.1 % were irregular menstruation cycle.

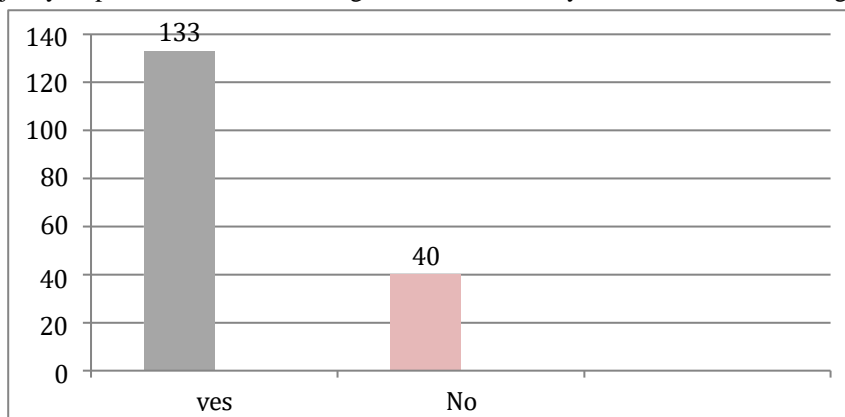


Figure 2: Distribution of respondents according to their painful menstrual period?

Above figure shows that among 173 respondents 133 respondents agreed that in menstrual period is painful and 40 respondents are disagreed.

Table 3: What are the most common symptoms during the menstrual cycle?

Responses	Frequency	Percent
Breast tenderness	21	12.1
Physical discomfort	94	54.3
Stress	39	22.5
Headache	4	2.3
Diarrhea	4	2.3
Dizziness	11	6.4
Total	173	100.0

Above table shows that most common symptoms during the menstrual cycle is physical discomfort (54.3%), then stress 22.5% and diarrhea and headache are less common symptoms (2.3%)

Table 4: How long does the bleeding during menstrual cycle it last?

Responses	Frequency	Percent
1-2 days	14	8.1
3-4 days	74	42.8
5 and more days	85	49.1
Total	173	100.0

Above table shows that 49.1% respondents were 5 and more days bleeding during menstrual cycle it last one month.

Table 5: Distribution of respondents according to the level of knowledge and practices

Responses	Frequency	Percentage
Level of knowledge		
Good Knowledge	124	71.7
Poor Knowledge	49	28.3

In accordance with the grading scale devised majority 71.7% of the participants were found to have good knowledge and 28.3% to have poor knowledge on Dysmenorrhea.

Table 6: Distribution of respondents according to level of practices

Responses	Frequency (n)	Percentage %
Level of practices		
Good Practices	112	64.7
Bad practices	61	35.3

Above table shows that 64.7% of the respondents had good practice about dysmenorrhea as remaining 35.3% had poor practices about dysmenorrhea.

Table7: Correlation between level of knowledge and socio demographic information

Characteristics	Level of Knowledge	
	Good	Poor
Year of study		
1 st year	39	41
2 nd year	85	8
Mother Education status		
Primary	29	11
Secondary	48	21

University	47	17
Nationality		
India	95	40
Pakistan	22	6
Bangladesh	7	3
Mother Occupation		
Housewife	34	15
Employee	85	39

A total of 173 medical students from 1st and 2nd year where as 2nd year medical students(85) good knowledge about Dysmenorrhea compare to then 1st year medical students (39). Respondents mother who are study in secondary and university education they were good knowledge about Dysmenorrhea where as p value is 0.013. Where as majority

of the students (95)were from India good knowledge about Dysmenorrhea and 22 were from Pakistan students good knowledge about Dysmenorrhea where p value is 0.036..Respondents mother who is employee they're good knowledge about Dysmenorrhea where p value is 0.008.

Table 8: Correlation between level of practices and socio demographic information

Characteristics	Level of practices	
	Good	Poor
Age of respondents		
17-19	42	23
20-22	64	32
23-25	6	6
Year of Study		
1 st year	53	27
2 nd year	59	34
Mother educational status		
Primary	25	15
Secondary	46	23
University	41	23
Type of family		
Joint family	39	21
Single Family	72	40

DISCUSSION

Similar to a study conduct among students at Abdeigaber Mohammad and Tale secondary school of Mania city ,where 40.3% respondents mother were secondary education, the majority of respondents mother level of secondary education is 69% in this study. (7)

In our study maximum 55.5% of the respondents belongs to age of 20-22 years where as similar study Index Medical college of Madhya Pradesh. India 57% of respondents belongs to age of 20-22 years .(8)

In this study 76.9% students had a regular menstruation cycle where as study done in Ethiopia shows that 47.19% students had a regular menstruation cycle. (9)

Knowledge related

In this study, majority 74% of students agreed that Dysmenorrhea is painful menstruation where as another study done in urban school in Srilanka also had the similar finding that is 85%, another study done in Banikarim's (2000) studies is 85% of students agreed that Dysmenorrhea is painful

menstruation. (10)(11)

Similar to a study conduct in suburban district of Tehran, Where 75.7 %respondents agree pain during menstruation it's normal similarly this study 80.9% respondents were agree this statement.

A study done in Banikarim’s 64.6% respondents were agreed that It is better for women experience painful periods to avoid sex similarly in this study 52% students were agreed.

In this study, majority of students 57.4% were agreed that when the lining of uterus is shed then menstruation pain occur, similar study done in Mongos that is 56.4% respondents agree that lining of uterus is shed then menstruation pain occur.

Similar to a study done in Haramaya University students, Eastern Ethiopia that is 43.82% students experienced first menstruation cycle is 12- 14 years age, In this study 67.7% respondents accept that first menstruation cycle start in 12-14 years age group. In this study 74% of students experience pain during menstruation cycle other similar study done in

Gondor University of Western Ethiopia that's is 81.4% experience pain during menstruation period.

In our study 78% students thought women cannot get pregnant during their period where as a study done Adolescent Girls in Suburban Districts of Tehran that's 80.7% students thought women cannot pregnant during their menstruation. (12)(13)

Practice related

In this study, majority of students agreed that Dysmenorrhea is painful menstruation where as another study done in urban school in srilanka that is 85%, another study done in Banikarim's (2000) and Mongo's (2006) studies is 85% and 45-95%, respondents agreed that Dysmenorrhea is painful menstruation. (14)

Similar to a study conduct in suburban district of Tehran, Where 75.7 %respondents agree pain during menstruation it's normal similarly this study 80.9% respondents were agree this statement.

A study done in Banikarim's 64.6% respondents were agreed that It is better for women experience painful periods to avoid sex similarly in this study 52% students were agreed. In this study, majority of students 57.4% were agreed that when the lining of uterus is shed then menstruation pain occur, similar study done in Mongo s that is 56.4%.

In our study 78% students thought women cannot get pregnant during their period where as a study done Adolescent Girls in Suburban Districts of Tehran that's (80.7%) In the present study ,the majority of students (49.1%) have moderate pain during their menstruation period , another study done in Srilanka where as majority of students (59%) experienced moderate pain during their menstruation .

In this study 32.4% participants experience menstruation pain for till two day where as another study done in Nigeria 57.7% percipient experience menstruation pain for 3 to 4 days, According to a study conducted in Urban school in Srilanka ,the most common symptom was physical discomfort (84%), similarly in this study most common symptom physical discomfort(54.3%) experience their menstruation period.

A study done in Italy,95%respondents experience pain during their menstruation period for 5 and more then 5 days where as in this study 49.1% respondents experience pain 5 and more then 5 days.(15)(16)(17)(18)

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