

A Study of Prevalence, Severity and Knowledge About Premenstrual Disorder in Female Medical Students at GMERS Medical College and Hospital Junagadh

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Abstract:

Background: Premenstrual disorders (PMDs), including Premenstrual Syndrome (PMS) and Premenstrual Dysphoric Disorder (PMDD), are common conditions affecting women of reproductive age. These disorders are characterized by physical, emotional, behavioral, and psychological symptoms occurring during the luteal phase of the menstrual cycle and may significantly impair academic performance, social interactions, and quality of life.

Objectives: To determine the prevalence and severity of premenstrual symptoms and to assess knowledge regarding Premenstrual Disorder among female medical students.

Methods: A cross-sectional study was conducted among 235 female medical students at GMERS Medical College and Hospital, Junagadh. Data were collected using a structured questionnaire that included demographic and menstrual characteristics, a Premenstrual Symptoms Screening Tool (PSST) for assessment of symptom severity, and a knowledge questionnaire regarding PMD. Data were analyzed using SPSS software version 26.0. Descriptive statistics were used to summarize the findings.

Results: The majority of participants were aged 20 years (29.8%), belonged to nuclear families (71.5%), and attained menarche between 13–17 years of age (96.6%). Regular menstrual cycles were reported by 82.1% of participants, while dysmenorrhea was present in 58.7%. Mild-to-moderate premenstrual symptoms were highly prevalent. Anger/irritability was reported as mild by 47.2% and moderate by 35.3% of participants. Fatigue/lack of energy was reported as moderate by 37.4%, while decreased mood/hopelessness was reported as mild by 45.5% and moderate by 34.9%. Severe symptoms were relatively uncommon. Knowledge assessment revealed that 52.3% of participants had average knowledge, 40.9% had good knowledge, and 6.8% had poor knowledge regarding PMD.

Conclusion: Premenstrual symptoms and dysmenorrhea were highly prevalent among female medical students, with emotional and physical symptoms being the most commonly reported manifestations. Although the majority demonstrated average to good knowledge regarding PMD, enhanced awareness, early screening, and supportive interventions are necessary to improve menstrual health and quality of life.

Keywords: Dysmenorrhea, Medical Students, Menstrual Health, Premenstrual Syndrome, Premenstrual Dysphoric Disorder.

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Introduction

Menstruation is a normal physiological process that reflects the functional integrity of the female reproductive system and plays a crucial role in women's health throughout the reproductive years. Although menstruation is a natural biological

phenomenon, it is frequently associated with a variety of physical, emotional, cognitive, and behavioral symptoms that may influence the quality of life of women [1]. Among the menstrual-related conditions experienced by women, premenstrual

disorders represent a significant yet often underrecognized public health concern. These disorders encompass a spectrum of symptoms that occur cyclically during the luteal phase of the menstrual cycle and resolve shortly after the onset of menstruation. The recurrent nature of these symptoms can substantially affect daily functioning, interpersonal relationships, academic performance, and psychological well-being.[2]

Premenstrual disorders include Premenstrual Syndrome (PMS) and the more severe form known as Premenstrual Dysphoric Disorder (PMDD). PMS is characterized by the presence of recurring physical, emotional, and behavioral symptoms that appear before menstruation and disappear with the commencement of menstrual flow.[3] Common physical manifestations include breast tenderness, bloating, headaches, fatigue, and musculoskeletal discomfort, whereas psychological symptoms may involve irritability, mood swings, anxiety, sadness, and difficulty concentrating.[4] While many women experience mild symptoms, a subset develops severe manifestations that interfere significantly with social, occupational, educational, and personal activities.

Premenstrual Dysphoric Disorder is considered a severe and disabling form of premenstrual disorder. It is distinguished by prominent affective symptoms such as marked irritability, emotional lability, depressed mood, and anxiety, accompanied by other physical and behavioral manifestations.[5] Diagnostic criteria outlined by psychiatric classification systems emphasize the cyclical occurrence of symptoms and the resulting impairment in functioning. PMDD has gained increasing attention because of its association with reduced quality of life, diminished productivity, impaired social interactions, and increased psychological distress.[6]

The exact etiology of premenstrual disorders remains incompletely understood despite extensive research. Current evidence suggests that these conditions result from complex interactions among hormonal, neurochemical, genetic, and psychosocial factors. Fluctuations in ovarian hormones during the menstrual cycle are believed to influence neurotransmitter systems, particularly serotonin and gamma-aminobutyric acid (GABA), which regulate mood, cognition, and emotional responses.[7] Women affected by premenstrual disorders may exhibit an increased sensitivity to normal hormonal changes rather than abnormal hormone levels themselves. Emerging evidence also indicates a possible genetic predisposition that contributes to individual susceptibility.

Several biological and environmental risk factors have been associated with the development and severity of premenstrual disorders. These include

stress, obesity, lack of physical activity, sleep disturbances, dietary habits, and underlying psychological conditions.[8] Additionally, adverse childhood experiences, emotional trauma, physical abuse, and other stressful life events have been reported to increase vulnerability to severe premenstrual symptoms. The multifactorial nature of these disorders highlights the importance of considering both biological and psychosocial determinants in understanding their occurrence and impact [9].

Premenstrual disorders are increasingly recognized as important contributors to morbidity among adolescents and young adult women. Students, particularly those pursuing demanding academic programs, may be especially affected because menstrual-related symptoms can impair concentration, learning ability, attendance, and overall academic performance.[10] The burden of these conditions extends beyond physical discomfort and may influence emotional health, social interactions, and participation in routine activities. Despite their high prevalence, many women remain unaware of the nature of premenstrual disorders, often considering symptoms as a normal part of menstruation and therefore delaying recognition and management.[11]

Effective management of premenstrual disorders requires early identification and adequate awareness. Available treatment approaches include lifestyle modification, regular physical activity, dietary interventions, cognitive behavioral therapy, and pharmacological options such as selective serotonin reuptake inhibitors. Improved understanding of these disorders can facilitate timely diagnosis, appropriate intervention, and enhanced quality of life for affected women. Consequently, premenstrual disorders continue to represent an important area of women's health research due to their widespread occurrence, significant psychosocial burden, and potential impact on educational, occupational, and social functioning.

Methodology

Study Design: The study was conducted using a cross-sectional descriptive study design to assess the prevalence, severity, and knowledge regarding premenstrual disorders among female medical students.

Study Setting: The study was carried out at GMERS Medical College and Hospital, Junagadh, Gujarat, India.

Study Duration: The study was conducted over a period of two months following approval from the Institutional Ethics Committee.

Participants

Inclusion Criteria

- Female medical students enrolled at GMERS Medical College and Hospital, Junagadh.
- Students who had attained menarche and experienced regular menstrual cycles.
- Participants who were able to understand and respond to questionnaires in English.
- Students willing to participate voluntarily in the study.
- Participants who provided written informed consent.

Exclusion Criteria

- Nursing students, interns, healthcare workers, consultants, administrative staff, and security personnel.
- Female students with incomplete or missing responses in the questionnaire.
- Temporary visitors, observers, or external trainees not regularly enrolled in the institution.
- Participants who declined to provide informed consent.
- Students with known severe psychiatric illness impairing questionnaire completion.

Study Sampling: A convenience sampling method was employed for participant selection. All eligible female medical students present during the study period were approached and invited to participate. Information regarding the study objectives and procedures was provided before enrollment. Students who fulfilled the eligibility criteria and expressed willingness to participate were included consecutively until the required sample size was achieved. This sampling method facilitated easy access to the target population and ensured adequate representation of female medical students from different academic years.

Study Sample Size: The sample size was determined based on the expected prevalence of premenstrual disorders among female medical students, with a 95% confidence level and a margin of error of 5%. The initial calculation indicated that 384 participants would be required. However, because the total number of female medical students in the institution was limited to approximately 500, an adjustment for the finite study population was made. After applying this correction, the minimum required sample size was estimated to be 218 participants. To enhance the reliability of the findings and compensate for possible incomplete responses, a total of 235 female medical students were ultimately enrolled and included in the final analysis.

Study Parameters: The study evaluated a comprehensive set of parameters related to

demographic characteristics, menstrual history, premenstrual symptoms, and knowledge regarding premenstrual disorders. Demographic parameters included age, academic year of study, marital status, and place of residence. Menstrual parameters assessed were age at menarche, regularity of the menstrual cycle, duration of the menstrual cycle, duration of menstrual flow, and history of any menstrual disorders. Premenstrual disorder-related parameters included the presence of premenstrual symptoms, type of symptoms experienced, severity of symptoms, degree of functional impairment caused by these symptoms, and screening status for Premenstrual Syndrome (PMS) and Premenstrual Dysphoric Disorder (PMDD). In addition, knowledge-related parameters were evaluated to assess participants' awareness regarding premenstrual disorders, understanding of their symptoms, knowledge of risk factors and available treatment options, as well as sources from which information regarding these disorders had been obtained. These parameters were assessed using a structured questionnaire and a validated Premenstrual Symptoms Screening Tool (PSST).

Study Procedure: After obtaining ethical approval, eligible female medical students were approached and informed about the purpose of the study. Written informed consent was obtained from all participants before enrollment. A predesigned google form questionnaire consisting of demographic details, menstrual history, knowledge-related questions, and a validated Premenstrual Symptoms Screening Tool (PSST) was administered. Participants were instructed to complete the questionnaire independently and honestly. Adequate privacy was maintained during questionnaire completion. Completed forms were collected, reviewed for completeness, and coded using unique identification numbers to maintain confidentiality.

Study Data Collection: Data were collected using a structured data collection google form comprising demographic information, menstrual history details, a validated Premenstrual Symptoms Screening Tool, and a semi-structured questionnaire for assessment of knowledge regarding premenstrual disorders. All questionnaires were distributed in person and completed by participants during designated sessions. The collected forms were checked for completeness and consistency before being entered into a computerized database. Any incomplete questionnaires were excluded from analysis according to the predefined exclusion criteria.

Data Analysis: The collected data were entered into Microsoft Excel and subsequently analyzed using Statistical Package for Social Sciences (SPSS) software version 26.0. Descriptive statistics

were used to summarize demographic, menstrual, and knowledge-related characteristics. Continuous variables were expressed as mean $\pm$ standard deviation, while categorical variables were presented as frequencies and percentages. The prevalence of premenstrual disorders was calculated as a proportion of the total study population. Associations between demographic variables, menstrual characteristics, and premenstrual disorder status were assessed using the Chi-square test or Fisher's exact test as

appropriate. A p-value of less than 0.05 was considered statistically significant.

Ethical Considerations: Ethical approval for the study was obtained from the Institutional Ethics Committee of GMERS Medical College and Hospital, Junagadh, prior to commencement of the research. Participation in the study was entirely voluntary, and written informed consent was obtained from all participants.

Results

Table 1: Socio-Demographic Characteristics of Study Participants (N = 235)

Variable	Category	N	%
Age (Years)	17	6	2.6
	18	34	14.5
	19	64	27.2
	20	70	29.8
	21	41	17.4
	22	13	5.5
	23	7	3.0
Religion	Bodhisam	1	0.4
	Christian	1	0.4
	Farer	1	0.4
	Hindu	214	91.1
	Jain	5	2.1
	Muslim	13	5.5
Type of Family	Joint	67	28.5
	Nuclear	168	71.5

Table 1 presents the socio-demographic characteristics of the study participants. The majority of participants were aged 20 years (29.8%), followed by 19 years (27.2%) and 21 years (17.4%), indicating that most respondents belonged to the late adolescent and young adult age group. Participants aged 18 years constituted 14.5% of the study population, whereas smaller proportions were observed among those aged 22

years (5.5%), 23 years (3.0%), and 17 years (2.6%). With regard to religion, the vast majority of participants were Hindus (91.1%), followed by Muslims (5.5%) and Jains (2.1%), while Bodhisam, Christian, and Farer religions each accounted for only 0.4% of the sample. Regarding family structure, most participants belonged to nuclear families (71.5%), whereas 28.5% were from joint families.

Table 2: Distribution of Participants According to Age at Menarche

Age at Menarche		
	N	%
13-17	227	96.6%
18-21	8	3.4%

Most participants reported attaining menarche between 13–17 years of age (96.6%), while only 3.4% attained menarche between 18–21 years. The

findings suggest that the majority experienced menarche during early to mid-adolescence.

Table 3: Distribution of Participants According to Regularity of Menstrual Cycle

Regularity of cycle		
	N	%
Irregular	42	17.9%
Regular	193	82.1%

A majority of participants reported having regular menstrual cycles (82.1%), whereas 17.9% experienced irregular menstrual cycles. This

indicates that menstrual irregularity was present among a smaller subset of the study population.

Table 4: Distribution of Participants According to Menstrual Flow

Flow		
	N	%
Heavy	24	10.2%
Normal	211	89.8%

Most participants reported normal menstrual flow (89.8%), while 10.2% experienced heavy menstrual flow. The findings demonstrate that abnormal

menstrual flow was relatively less common among the participants.

Table 5: Distribution of Participants According to Duration of Menstrual Cycle

Duration of cycle		
	N	%
>5 days	53	22.6%
≤ 5 days	182	77.4%

The majority of participants reported a menstrual duration of ≤5 days (77.4%), whereas 22.6% experienced menstrual bleeding lasting more than 5

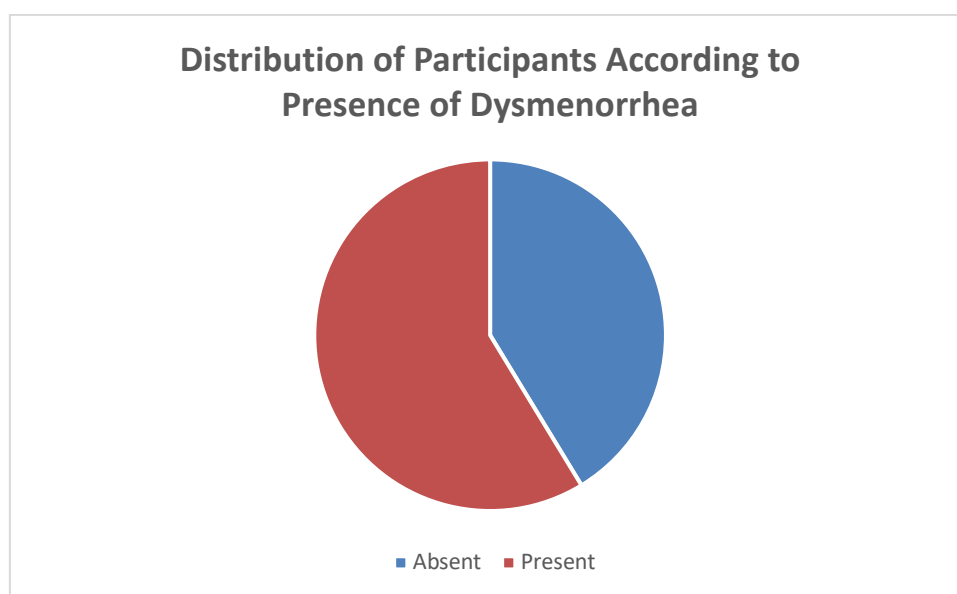
days. This indicates that shorter menstrual duration was more common in the study population.

Table 6: Distribution of Participants According to Presence of Dysmenorrhea

Dysmenorrhea		
	N	%
Absent	97	41.3%
Present	138	58.7%

More than half of the participants reported the presence of dysmenorrhea (58.7%), while 41.3% reported absence of dysmenorrhea. The findings

suggest that menstrual pain was a common symptom among the study participants.

**Figure 1: Distribution of Participants According to Presence of Dysmenorrhea****Table 7: Severity Distribution of Premenstrual Symptoms Among Participants**

Symptoms	Not at all n (%)	Mild n (%)	Moderate n (%)	Severe n (%)
Anger/irritability	26 (11.1%)	111 (47.2%)	83 (35.3%)	15 (6.4%)
Anxiety/tension	79 (33.6%)	91 (38.7%)	56 (23.8%)	9 (3.8%)
Tearful/Increased sensitivity to rejection	59 (25.1%)	89 (37.9%)	64 (27.2%)	23 (9.8%)
Decreased mood/hopelessness	32 (13.6%)	107 (45.5%)	82 (34.9%)	14 (6.0%)
Decreased interest in work activities	31 (13.2%)	103 (43.8%)	75 (31.9%)	26 (11.1%)
Decreased interest in home activities	57 (24.3%)	89 (37.9%)	72 (30.6%)	17 (7.2%)

Decreased interest in social activities	44 (18.7%)	89 (37.9%)	83 (35.3%)	19 (8.1%)
Difficulty concentrating	55 (23.4%)	99 (42.1%)	61 (26.0%)	20 (8.5%)
Fatigue/lack of energy	32 (13.6%)	93 (39.6%)	88 (37.4%)	22 (9.4%)
Overeating/food cravings	68 (28.9%)	81 (34.5%)	60 (25.5%)	26 (11.1%)
Insomnia	165 (70.2%)	40 (17.0%)	25 (10.6%)	5 (2.1%)
Hypersomnia (needing more sleep)	87 (37.0%)	87 (37.0%)	46 (19.6%)	15 (6.4%)
Feeling overwhelmed or out of control	98 (41.7%)	76 (32.3%)	47 (20.0%)	14 (6.0%)
Physical symptoms: breast tenderness, headaches, joint/muscle pain, bloating, weight gain	78 (33.2%)	85 (36.2%)	63 (26.8%)	9 (3.8%)

Mild symptom severity was most commonly reported across the majority of premenstrual symptoms. Anger/irritability (47.2%), decreased mood/hopelessness (45.5%), decreased interest in work activities (43.8%), and difficulty concentrating (42.1%) were predominantly reported as mild symptoms. Moderate severity was notably observed for fatigue/lack of energy (37.4%), anger/irritability (35.3%), and decreased interest in social activities (35.3%). Severe symptoms were comparatively less frequent, with

decreased interest in work activities and overeating/food cravings each reporting the highest severe prevalence (11.1%). Insomnia was predominantly absent among participants (70.2%), while physical symptoms such as breast tenderness, headaches, joint or muscle pain, bloating, and weight gain were mostly reported as mild (36.2%) or moderate (26.8%). Overall, the findings indicate that mild-to-moderate premenstrual symptoms were highly prevalent among the participants.

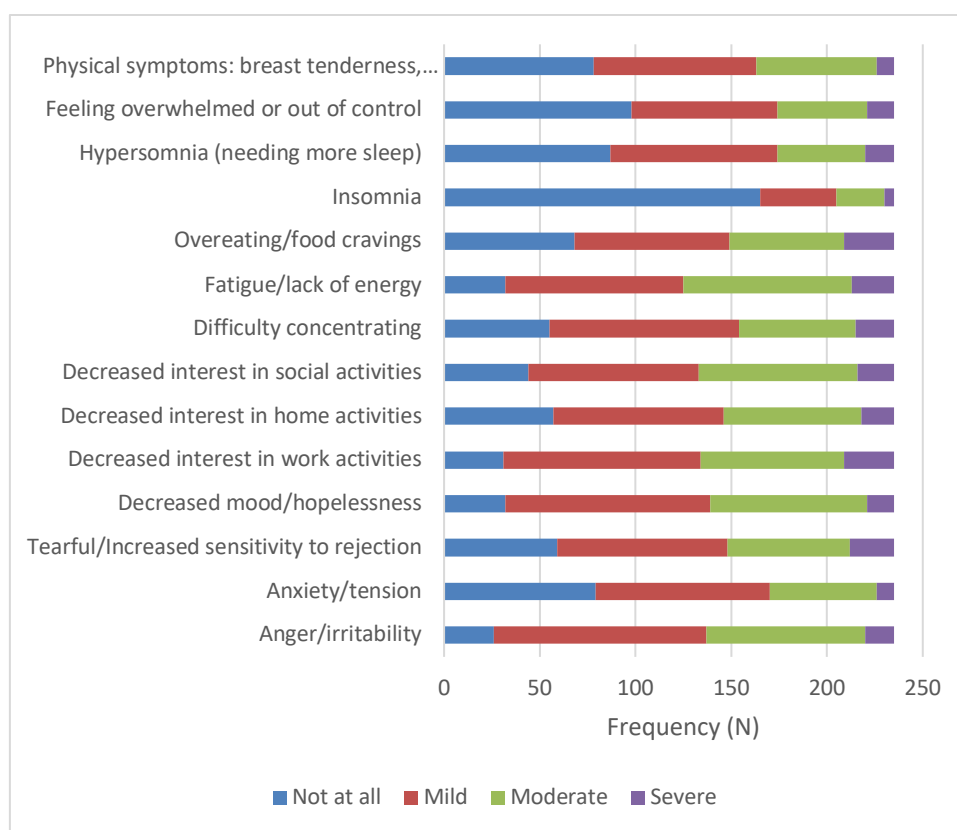


Figure 2: Severity-wise Distribution of Premenstrual Symptoms Among Participants

Table 8: Distribution of Participants According to PMD Knowledge Scores

PMD Knowledge Scores		
	N	%
Poor	16	6.8%
Average	123	52.3%
Good	96	40.9%

More than half of the participants demonstrated average knowledge regarding PMD (52.3%), while 40.9% had good knowledge scores. Only 6.8% of participants had poor knowledge scores. The

findings indicate that the majority of participants possessed average to good awareness regarding PMD.

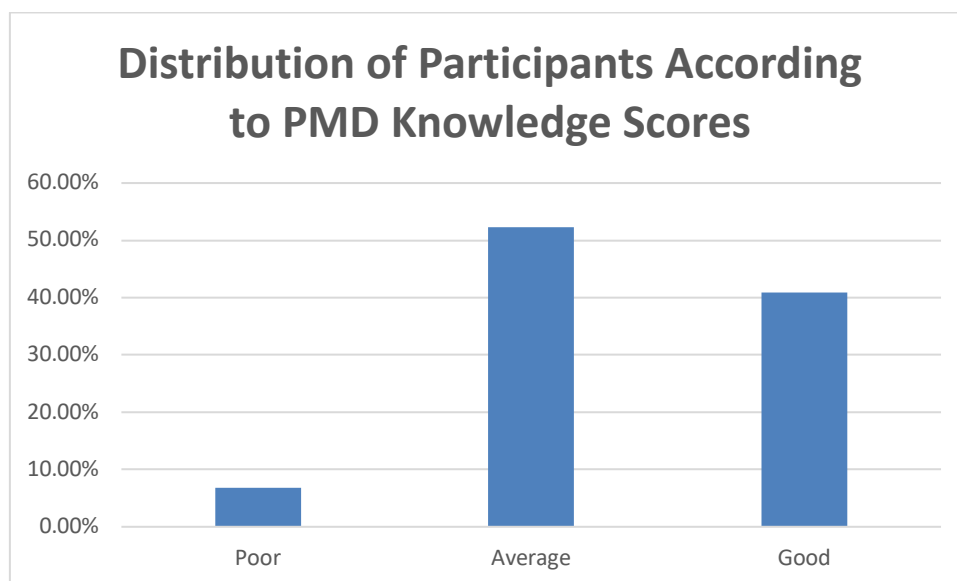


Figure 3: Distribution of Participants According to PMD Knowledge Scores

Discussion

The present study was conducted among 235 female medical students to evaluate menstrual characteristics, severity of premenstrual symptoms, and knowledge regarding Premenstrual Disorder (PMD). The study population predominantly consisted of young adults, with the highest proportion of participants aged 20 years (29.8%), followed by 19 years (27.2%) and 21 years (17.4%). This age distribution is comparable to the study conducted by Tolossa et al., where the age of participants ranged from 18 to 25 years with a mean age of 20.86 ± 1.91 years, and the study by Alkhamis et al., in which the dominant age group was 20–23 years.[12,13] The predominance of young adult females in the present study is expected, as premenstrual disorders are most commonly reported during late adolescence and early reproductive life when hormonal fluctuations are most pronounced.

The majority of participants in the current study belonged to the Hindu religion (91.1%), followed by Muslims (5.5%) and Jains (2.1%). Furthermore, 71.5% of students belonged to nuclear families, while 28.5% came from joint families. Although the previous studies included in the literature review did not specifically assess religion or family type distribution, family structure may influence psychological support, coping strategies, and stress management, which in turn may affect the severity and perception of premenstrual symptoms. Medical students are known to experience substantial academic stress, and the family environment may

play a role in mitigating or exacerbating symptom burden.

Assessment of menstrual characteristics revealed that 96.6% of participants attained menarche between 13 and 17 years of age, while only 3.4% attained menarche after 18 years. These findings are consistent with the normal age of menarche reported in most adolescent populations. Balaha et al. identified lower age at menarche as one of the significant predictors associated with PMS among Saudi medical students.[14] Similarly, Alkhamis et al. reported that older age at menarche was independently associated with a reduced risk of PMS.[13] The predominance of normal-age menarche in the present study may therefore partly explain the overall distribution of premenstrual symptoms observed among participants.

Menstrual cycle regularity was observed in 82.1% of participants, while 17.9% reported irregular cycles. Regular menstrual cycles have been reported to be associated with premenstrual symptom occurrence. Balaha et al. found menstrual regularity to be significantly associated with PMS development.[14] The high proportion of regular cycles in the present study suggests that the majority of participants had established ovulatory cycles, which may contribute to the manifestation of cyclical premenstrual symptoms. Regarding menstrual flow characteristics, 89.8% of participants reported normal menstrual flow and only 10.2% reported heavy flow. Similarly, 77.4% reported menstrual bleeding lasting five days or less, whereas 22.6% experienced bleeding lasting

more than five days. These findings indicate that although most participants had normal menstrual patterns, a substantial minority experienced menstrual abnormalities that could contribute to increased physical discomfort and symptom severity.

One of the most important findings of the present study was the high prevalence of dysmenorrhea. A total of 138 participants (58.7%) reported menstrual pain, while only 41.3% did not experience dysmenorrhea. This finding is consistent with the systematic review and meta-analysis conducted by Maity et al., which reported a pooled prevalence of dysmenorrhea of 72.7% among medical students worldwide.[15] Although the prevalence observed in the current study was somewhat lower than the pooled estimate reported by Maity et al., dysmenorrhea remained highly prevalent. Furthermore, Babour et al. [16] demonstrated a significant association between PMDD and severity of dysmenorrhea, emphasizing the close relationship between menstrual pain and severe premenstrual symptomatology. Similarly, Minichil et al. [17] reported that severe menstrual pain was strongly associated with PMDD, with an adjusted odds ratio of 2.82. These findings collectively suggest that dysmenorrhea may serve as an important clinical indicator for identifying individuals at increased risk of significant premenstrual disturbances.

The severity assessment of premenstrual symptoms revealed that mild and moderate symptoms predominated across almost all symptom domains. Anger and irritability emerged as one of the most common symptoms, with 47.2% reporting mild symptoms and 35.3% reporting moderate symptoms. Similarly, decreased mood or hopelessness was reported as mild by 45.5% and moderate by 34.9% of participants. Anxiety and tension were reported as mild by 38.7% and moderate by 23.8% of participants. These findings highlight the predominance of emotional and psychological symptoms among female medical students. Comparable observations were reported by Babour et al., [16] identified anxiety and tension as the most common symptom among participants diagnosed with PMDD.[5] Likewise, Alkhamis et al. [13] reported depressed mood and anger among the most frequently experienced symptoms of PMS. The consistency of these findings across different populations suggests that affective symptoms represent a central component of premenstrual disorders.

The present study also demonstrated considerable functional impairment associated with premenstrual symptoms. Decreased interest in work activities was reported as mild by 43.8%, moderate by 31.9%, and severe by 11.1% of participants. Similarly, decreased interest in social activities was

reported as mild by 37.9% and moderate by 35.3%. Difficulty concentrating was observed in a substantial proportion of students, with 42.1% reporting mild and 26.0% reporting moderate symptoms. These findings indicate that premenstrual symptoms may adversely affect academic productivity and social functioning. Balaha et al. reported that concentration in class was the most commonly affected activity, occurring in 48.3% of students with PMS, while limitations in daily activities increased significantly with symptom severity. Similarly, Tolossa et al. [12] reported that PMS was associated with frequent class absenteeism in 28.3%, examination absenteeism in 9.8%, reduced academic performance in 8.1%, and even withdrawal from learning activities in 1.7% of students. Babour et al. [16] further demonstrated significant impairment in social activities and home responsibilities among students with PMDD. These observations strongly support the findings of the present study regarding the negative impact of premenstrual symptoms on academic and social functioning.

Among physical symptoms, fatigue and lack of energy were highly prevalent, with 39.6% reporting mild symptoms and 37.4% reporting moderate symptoms. Physical complaints such as breast tenderness, headaches, bloating, joint pain, muscle pain, and weight gain were reported as mild by 36.2% and moderate by 26.8% of participants. Overeating and food cravings were also frequently reported, with 34.5% experiencing mild symptoms and 25.5% experiencing moderate symptoms. Alkhamis et al. [13] similarly reported abdominal cramps, back pain, weight gain, depressed mood, and anger as the most common symptoms among students with PMS. The predominance of fatigue and physical discomfort observed in the current study further emphasizes the multidimensional nature of premenstrual disorders, which involve both physical and psychological manifestations.

An important observation in the present study was that insomnia was absent among 70.2% of participants, making it one of the least frequently reported symptoms. In contrast, hypersomnia was more commonly reported, with 37.0% experiencing mild symptoms and 19.6% experiencing moderate symptoms. These findings suggest that alterations in sleep patterns among medical students may manifest more frequently as increased sleep requirement rather than sleep deprivation. Sleep disturbances remain clinically important because they may worsen fatigue, mood instability, and academic performance.

Knowledge assessment revealed encouraging findings regarding awareness of PMD. More than half of participants (52.3%) demonstrated average knowledge, while 40.9% possessed good knowledge regarding PMD. Only 6.8% had poor

knowledge scores. These findings are consistent with those reported by Babour et al., [16] found a noticeable level of awareness regarding PMD among medical students, particularly among female students and those in clinical years. In their study, 66% of female students correctly recognized PMDD as a mental disorder compared with only 27.3% of male students. Approximately 40% of students believed that PMDD required medical management. The relatively favorable knowledge levels observed in the current study may reflect the educational background of medical students; however, the predominance of average rather than excellent knowledge indicates that further educational initiatives remain necessary. The findings of the present study indicate that although most female medical students had normal menstrual characteristics and average-to-good knowledge regarding PMD, premenstrual symptoms and dysmenorrhea were highly prevalent. Emotional symptoms such as irritability, anxiety, depressed mood, fatigue, and reduced concentration were particularly common. The results closely align with previous studies conducted among medical students in Saudi Arabia, Ethiopia, and other regions, which consistently demonstrated a substantial burden of PMS and PMDD and their negative impact on academic performance and quality of life.[1–6] These findings emphasize the need for regular screening, increased awareness, counseling services, stress management programs, and timely interventions aimed at improving menstrual health and overall well-being among female medical students.

Conclusion

The present study demonstrated that premenstrual symptoms and dysmenorrhea were highly prevalent among female medical students. The majority of participants reported regular menstrual cycles and normal menstrual characteristics; however, more than half experienced dysmenorrhea and a substantial proportion reported mild-to-moderate emotional, behavioral, and physical premenstrual symptoms. Anger, irritability, fatigue, decreased mood, and reduced concentration were among the most commonly reported manifestations, indicating a considerable impact on daily activities and academic functioning. Although most participants possessed average to good knowledge regarding Premenstrual Disorder (PMD), gaps in awareness still existed. These findings highlight the need for increased educational initiatives, routine screening, counseling services, and appropriate support systems to facilitate early recognition and effective management of premenstrual disorders, thereby improving the overall health, well-being, and academic performance of female medical students.

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