



Prevalence Pattern and Predictors of Premenstrual Syndrome and Premenstrual Dysphoric Disorder among Urban Women

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ABSTRACT

Background: Premenstrual syndrome (PMS), which affects women in their reproductive years and lasts 7 to 14 days before the start of menstruation before subsiding, is linked to behavioural, psychological, and physical changes.

Objectives: to determine the prevalence, pattern and functional impairment of PMS and PMDD among urban women.

Method and materials: A cross-sectional study was conducted at the outpatient clinic in Dubai. The study involved the participation of 532 women. The study utilized PSST to evaluate the participants' prevalence, pattern, and functional impairment of premenstrual symptoms.

Results: In the two cycles prior, more than 90% of women reported experiencing at least one premenstrual symptom. The most prevalent symptom was weariness (93%), followed by anger (92%), and the most severe impairment was in the ability to be productive at work (79%) than in social activities (77%). 50% of women had PMDs, with 38% having moderate to severe PMS and 12% having PMDD.

Conclusion: The high prevalence rate emphasizes the importance of accurately diagnosing and reporting PMDs so that prompt & appropriate treatment can be given to lessen the functional impairments and discomfort.

Keywords: *syndrome, urban women, dysphoric syndrome, premenstrual*

INTRODUCTION

Premenstrual syndrome (PMS), which affects women in their reproductive years and lasts 7 to 14 days before the start of menstruation before subsiding, is linked to physical, psychological, and behavioural changes. (1) Premenstrual Dysphoric Disorder (PMDD) is a diagnosis attributed to cases where mental symptoms are predominant, highly severe, and accompanied by impairment. This disorder can be considered a severe subtype of Premenstrual Syndrome (PMS). The condition's impact on the affected

individuals' quality of life and social interactions may be compromised. (2) The symptoms associated with premenstrual syndrome (PMS) exhibit variations from a definite diagnosis. Even though PMS has a negative impact on the quality of life and social functioning of individuals, it is frequently not perceived as distressing or incapacitating. Premenstrual symptoms' severity is generally considered mild to moderate, and they may not consistently manifest or significantly impair daily functioning.

Premenstrual syndrome (PMS) is commonly acknowledged to be a more severe condition characterized by a distinct set of symptoms that occur with some regularity and have a significant impact on a woman's quality of life. (3) As per epidemiological investigations, a significant proportion of women within the reproductive age bracket, precisely 80%, have reported premenstrual symptoms. Despite its prevalence among women of reproductive age, the severity of pain experienced by individuals varies. Approximately 80% of women experience mild distress, while 20-40% report moderate distress, and 10% report a level of distress that has a detrimental effect on their overall quality of life. (4) PMDD is the name for such a severe form of distress. Due to its adverse effects on relationships with friends, family, and coworkers, impaired social life activities, and household obligations, PMS impacts women, families, and societies. (5) The increasing prevalence of anxiety and depressive disorders among women with PMS has been linked to a substantial public health issue, which could indirectly cost the economy through absenteeism from work, frequent hospitalizations, and suicides. The study aims to determine the prevalence of premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) and those conditions' patterns and negative effects among urban women.

METHODOLOGY

Study design

This study was a cross-sectional study.

Study location

This study was conducted at outpatient clinic in Dubai.

Study duration

This study was from January 2021 to July 2022.

Sample size

A total of 940 women participants were selected for the study. One hundred and ten women were excluded from the study due to being under the age of 18. Among the remaining 830 women, a total of 532 women provided their consent to participate in the study.

Data collection procedure

The investigation employed PSST to assess the occurrence, configuration, and significant impairment of premenstrual symptoms within the cohort. The PSST questionnaire comprises 19 items, of which 14 pertain to premenstrual symptoms, while the remaining five items are dedicated to assessing functional impairments. The items or questions were evaluated using a 4-point Likert scale. This phenomenon was consistently observed during most menstrual cycles over the past year and subsided within a few days after the onset of menstruation. The diagnostic criteria for premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) are demarcated clearly and distinctly.

Statistical analysis

The statistical software package SPSS 21.0 was utilized for data analysis. The collected data were subjected to tabulation, analysis, and presentation through descriptive statistics, specifically in the form of frequency percentages. The Chi-square test was employed to compare categorical variables. A statistically significant value was determined to be $p < 0.05$.

RESULT

TABLE 1: shows the prevalence of PMD and PMDD

Sr	Symptoms	Prevalence
1	Mild symptoms	260(58.8)
2	Moderate- severe	205(38.5)
3	PMDD	67(12.5)

TABLE 2: shows the frequency of premenstrual symptoms

Symptoms	Mild (%)	Moderate (%)	Severe (%)
Anger	219(84.2)	82(81)	39(86.6)
Anxiety	183(70.4)	65(64)	35(77)
Increased sensitivity to rejection	150(57.7)	68(67)	44(97)
Depressed mood	138(53.1)	56(55)	39(86)
Decreased interest in work activities	201(77.3)	65(64)	33(73)
Decreased interest in social activities	177(68.1)	40(39.6)	38(84)
Fatigue	230(88.5)	200(97.5)	63(94.0)
Insomnia	105(40.4)	121(59)	53(79.1)
Overeating	174(66.9)	180(87.8)	65(97)
Hypersomnia	158(60.8)	165(80.4)	55(82.1)
Feeling overwhelmed	138(53.1)	171(83.4)	66(98.5)
Physical symptoms	199(76.6)	60(59.4)	40(88.8)
Difficulty in concentration	70(34)	198(96.5)	57(85.1)

TABLE 3: shows the frequency of functional impairment

Functional impairment domain	Mild symptoms %	Moderate %	Severe %	p-value
Work productivity	164(63.1)	193(94.1)	62(92.5)	<0.001
Relationship with coworkers	134(51.5)	182(88.8)	63(94.0)	<0.001
Relationship with family	124(47.7)	195(95.1)	66(98.4)	<0.001
Social activities	154(59.2)	191(93.2)	67(100)	<0.001
Home Responsibilities	165(63.5)	167(81.7)	60(98.6)	<0.001

DISCUSSION

PMDD prevalence rates have been found to vary across different research studies and countries. The investigation findings indicate that the prevalence of moderate to severe premenstrual syndrome (PMS) was 38%, whereas premenstrual dysphoric disorder (PMDD) was observed in 12% of the women. This indicates that a significant proportion of the study cohort experienced significant symptoms. This indicates that PMD is significantly elevated. The findings of our study were consistent with a prior investigation in urban women, which documented a 34% incidence rate of premenstrual syndrome and a 19% prevalence rate of premenstrual dysphoric disorder. (6) In a separate investigation, moderate-to-severe Premenstrual Syndrome was determined to be 15.13%, while the incidence of Premenstrual Dysphoric Disorder was found to be 5.04%. The

observed results disparities could be attributed to variations in the assessment instruments utilized and the subjective nature of the experiential evaluations. A research investigation has documented that the occurrence rate of PMS and PMDD was 14.3% and 3.7%, correspondingly. (7) The raised prevalence observed in our study could be ascribed to the increased consciousness of symptoms among the population cohort. As per the Premenstrual Symptoms Screening Tool (PSST), a significant proportion of female, amounting to over 90%, reported the occurrence of at least one premenstrual symptom in the preceding two menstrual cycles. The findings of the study indicated that a significant percentage of women participants displayed diverse indications of psychological discomfort. 92.1% of the respondents exhibited anger or irritability, whereas 82.1% disclosed encountering anxiety or tension. Furthermore, a significant % of women

participants, precisely 74.6%, reported experiencing tearfulness or heightened sensitivity to rejection, while 75.6% reported experiencing depressed mood or hopelessness. Furthermore, a significant proportion of women participants indicated a reduction of interest in work activities (86.7%) and social activities (81%) and difficulty in concentration (84%). The study participants reported additional symptoms such as fatigue (92.7%), overeating (78.8%), insomnia (52.4%), hypersomnia (71.1%), feeling overwhelmed (70.5%) and physical manifestations (85.3%). The results of our study suggest that within the cohort of women classified as experiencing Mild Premenstrual Syndrome, fatigue was the most commonly cited symptom, exhibiting a prevalence rate of 88.5%. This was followed by anger/irritability, reported by 84.2% of participants, and decreased interest in work activities, reported by 77.3% of participants. This study aligns with previous research that has identified fatigue as the predominant symptom in the less severe form of premenstrual syndrome (PMS). (8)

The present investigation revealed that among women experiencing moderate to severe premenstrual syndrome, the most prevalent symptom was anger/irritability (99.5%), followed by (97.6%) fatigue, (96.6%) difficulty concentrating, and physical symptoms (96.6%). These findings are consistent with a prior study. Nonetheless, in alternative research, prevalent indications observed in women with moderate to severe premenstrual syndrome (PMS) were a diminished mood and reduced motivation towards occupational activities. The observed disparities in these results could be attributed to variances in the subjective perception of symptoms. The present investigation revealed that within the PMDD classification, the most prevalent symptoms were anger (100%) and depressed mood (100%). These were followed by (98.5%) difficulty concentrating and (98.5%) feeling overwhelmed consistent with prior research. (9)

According to previous research studies, anxiety and tension are the most prevalent PMDD symptoms. The study revealed that functional impairment was evident across all domains. Notably, work efficiency or productivity was the most prevalent functional impairment among women, with a percentage of 78.8%. The classification of premenstrual syndrome did not

influence the findings. Home responsibilities were the most prevalent functional impairment in the No/Mild premenstrual syndrome category, affecting 63.5% of individuals. Following this, 63.1% of women reported a drop in work productivity or efficiency, and 59.2% reported limitations in their ability to engage in social activities. The relationship with family was discovered to be the most common functional impairment in the moderate and severe premenstrual syndrome category, with a proportion of 95.1%. This was followed by a drop in productivity and work efficiency (94.1%) and a decline in social activities (93.2%). The PMDD classification exhibited a high prevalence of functional impairment in social life activities (100%), with relationships with family (98.5%) and relationships with coworkers (94%) following closely behind. This finding is consistent with previous research. (10)

CONCLUSION

The incidence of PMDs was 50%, indicating a statistically significant high occurrence rate. Impairments across multiple domains of life were observed in nearly 75% of the women population. Additionally, it is imperative to raise public awareness regarding identifying symptoms and prompt reporting to healthcare professionals. The timely and accurate diagnosis of a condition provides a crucial opportunity for effective treatment, resulting in decreased functional limitations and psychological distress.

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