CODEN (USA)-IJPRUR, e-ISSN: 2348-6465

Original article

Exploring the Prevalence and Awareness about Premenstrual Dysphoric Disorder (PMDD) among Pharmacy students – A Qualitative Study

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ARTICLE INFO:
Received: 21 June 2023
Accepted: 22 July 2023
Published: 31 August 2023

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ABSTRACT:

A Premenstrual dysphoric disorder is a common though underdiagnosed mental health problem among women of reproductive age, with the potential to disrupt the women's social, occupational, academic, and interpersonal environments. This study was therefore designed to investigate the opinion and view on awareness and management of Premenstrual Dysphoric Disorder (PMDD) among the pharmacy students. It was a simple, exploratory and comparative study conducted for a period of 3 months. 175 students from different pharmacy colleges participated in the study. Survey research design method was used for the study, which involved data collection through the responses to the predetermined questions by random convenience sampling method. A structured and validated questionnaire was used for data collection. The awareness of premenstrual dysphoric disorder in this study was found to be 76%. Most of the respondents believed that the symptoms associated with PMDD were affecting everyday life. The degree of dysmenorrheal symptoms like abdominal cramps, irritation, anxiety, headache, feeling of depression etc. were found to be significantly associated with premenstrual dysphoric disorder. Only 47.4% respondents agreed that medical attention is required for the symptoms linked to PMDD. The present study concluded that though the awareness level was high among the respondents, most of them do not consider it as any disorder. So it is of critical importance to accurately and timely detect PMDD that will help in preventing females from experiencing prolonged psychological distress.

Keywords: Premenstrual dysphoric disorder, Premenstrual Syndrome, Phenomenology.

1. INTRODUCTION

Premenstrual Syndrome (PMS) is a common clinical condition that affects many women during the reproductive period. According to epidemiological studies, up to 80% of women experience the nasty symptoms associated with premenstrual syndrome [1]. The global prevalence of premenstrual dysphoric disorder (PMDD) is approximately 3 - 9% [2]. Factors influencing estimates of prevalence include diagnostic criteria or tools used, and socio-demographic and subculture differences in diverse countries such as India that affect the expressiveness of symptoms [3]. In India, more than a quarter (27.7%) of the female population falls into the age group of 15-25 years. The global literature indicates that women are highly likely to develop depression and anxiety disorder [4, 5].

In premenstrual dysphoric disorder (PMDD), DSM-5 requires the presence of a total of 5 symptoms and at least 1 emotional symptom (uneven mood, severe hypersensitivity, severe depressive mood, or severe anxiety) and other symptoms including somatic symptoms. Certain time criteria for symptoms must also be met [6]. Symptoms can occur at any time between menarche and menopause. Premenstrual syndrome impairs the quality of life by causing significant discomfort or interfering with work, school, or normal social activities [7].

The etiology and pathophysiology of premenstrual symptoms are complex and are thought to be caused by an underlying genetic predisposition to increased susceptibility to changes in gonadal hormones that interact with specific neurotransmitters and neurohormones [8]. Community-based studies of women with PMS and clinical studies of women with PMDD have consistently shown that women with premenstrual symptoms are more likely to have comorbidities with other psychiatric disorders [9, 10]. There is a lack of Gender-specific research related to Mental illness. Most studies in India focus more on Postpartum Depression. PMDD is still an area that is explored rarely in the Indian context [11].

This study aimed to identify the understanding related to general awareness and management of PMDD among pharmacy students.

2. METHODOLOGY

Study Design and Data Collection: It was a simple, exploratory and comparative study conducted for a period of 3 months. 175 students from different pharmacy colleges participated in the study. Survey research design method was used for the study that involved the collection of data from the selected sample through their responses to the predetermined questions. So a structured and validated questionnaire was used for collection of data which was issued to the subjects, made them aware about the topic and sufficient time was given to them to answer the questionnaire [12, 13]. All data were anonymously collected and stored under the privacy rules.

Statistical Analysis: The collected data was entered in Microsoft Excel. Student t-test was used to determine the presence or absence of statistically significant difference in the responses of the study population. Data were analyzed using descriptive statistics for the tables of frequency and its associate percentage was calculated. Verbal consent was obtained from each subject during data collection. The confidentiality of the data obtained was assured.

3. RESULTS

A total of 175 students from different pharmacy colleges participated in the survey and responded to the pre-structured questionnaire, out of which 127 were females and 48 were males.

Age of respondents

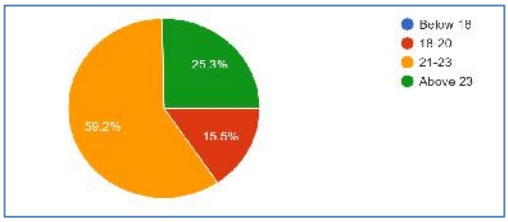


Fig 1: Age of the respondents

The majority of subjects of this study (Figure no.1) were in the age group of 21 – 23 years (59.2%), followed by the age group above 23 years (25.3%) while 15.5% were between 18 – 20 years of age.

Physical, mental, and/or emotional disturbances before menses

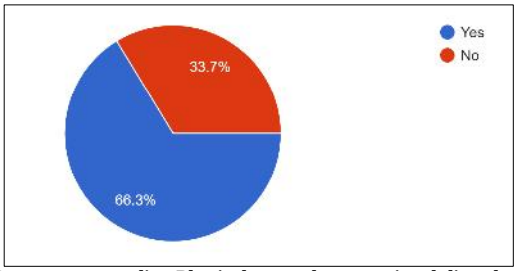


Fig 2: Responses regarding Physical, mental, or emotional disturbances before menses

The study showed (Figure no.2) that 66.3% respondents or their close ones agreed that they experienced physical, mental, and/or emotional disturbances before menses, while 33.7% did not experience any such disturbances.

Phenomenology

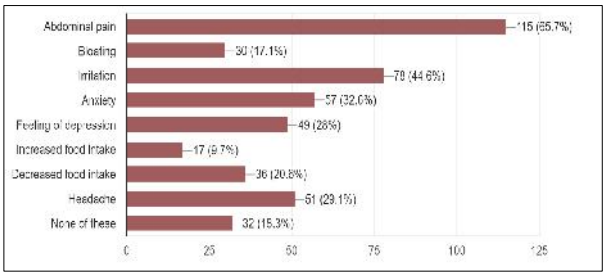


Fig 3: Responses regarding various symptoms observed

The study revealed (Figure no.3) that among the various symptoms, abdominal cramps (65.7%), irritation (44.6%), anxiety (32.6%), headache (29.1%), feeling of depression (28%) and decreased food intake (20.6%) were the most commonly reported followed by bloating (17.1%) and increased food intake (9.7 %). However (18.3 %) reported experiencing none of these symptoms.

Pattern or repeatability in the above-reported symptoms

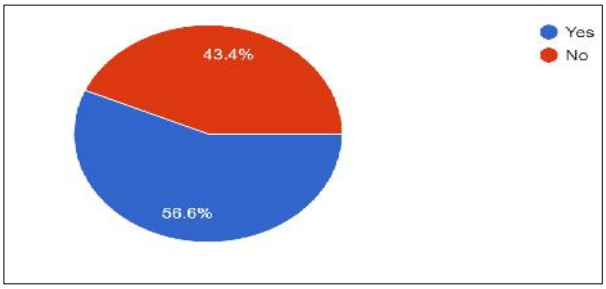


Fig 4: Particular Pattern or repeatability of symptoms observed

56.6 % of respondents reported experiencing some pattern or repeatability in the symptoms as mentioned in figure no.4 and 43.4% did not observed any pattern or repeatability in the symptoms.

Symptoms requiring medical attention

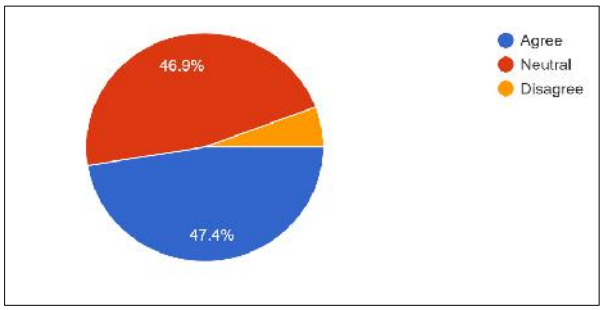


Fig 5: Symptoms requiring medical attention

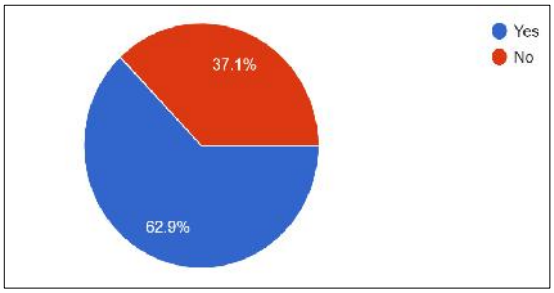


Fig 6: Opinion on Symptoms affecting everyday life

47.4% of respondents (Figure 5) agreed to their opinion that medical attention is required for the symptoms linked to PMDD, while 5.7% disagreed indicating a lack of awareness among the participants in the context of the disease. As large as 46.9% respondents were neutral in their response about requiring any medical attention to the symptoms.

Opinion on Symptoms affecting everyday life

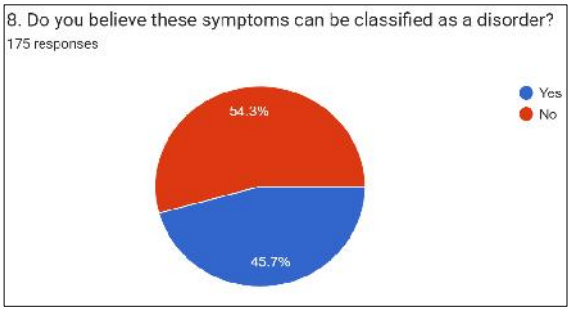


Fig 7: Opinion about considering it as a Disorder

The figure 6 showed that 62.9% of the respondents believed that the symptoms associated with PMDD were affecting everyday life, while 37.1% do not feel the same.

Symptoms classified as a Disorder

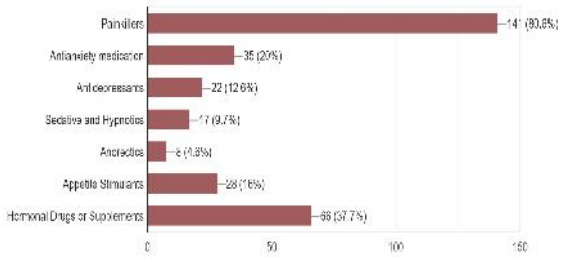


Fig 8: Medication Management of PMDD

From the figure no. 7 it was observed that 54.3% do not consider classifying these symptoms as disorders, however, 45.7% consider it as a disorder. One of the possible reasons for the majority responding 'no' could be the lack of knowledge about the condition.

Medications available for management of PMDD

The figure 8 represents responses regarding medications for the management of PMDD symptoms that includes painkillers (80.6%), hormonal drugs or supplements (37.7%), anti-anxiety medication (20%), appetite stimulants (16%), antidepressants (12.6%), sedative and hypnotics (9.7%) and anorectics (4.6%). The majority opted for painkillers, maybe because they are easily available OTC medications and hormonal drugs or supplements are commonly prescribed medications to treat menstrual-related complications.

Awareness about PMS/PMDD

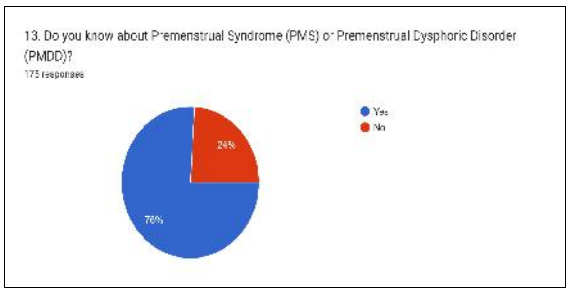
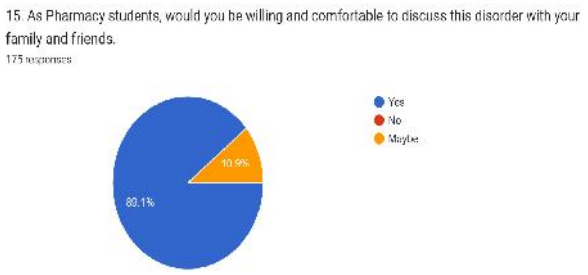


Fig 9: Awareness about PMDD

The study revealed (Figure 9) that 76% respondents were well aware about PMDD whereas 24% were not aware about PMS/PMDD. The response in the figure (Figure 9) indicates that there is a need for better awareness among the people because although majority participants responded positively, the 24% were unaware about PMS/PMDD. This indicates that many women who suffer the symptoms either don't speak about it or are not allowed to speak may be due to family/surrounding traditions.



Responses regarding Information provided about PMS/PMDD during school time

Fig 10: Awareness about PMDD during school life

Figure 10 shows that 59.4% respondents agreed that sufficient education or discussion was provided in school life to understand this disorder; however, 40.6% said that they were not aware about it during their school life. There are a few different ways that school teachers could step up to meet their responsibility for knowledge. Efforts to increase PMDD awareness in schools could be taken by educating the students as well as teachers about issues like PMDD. Teachers should also be taught about symptoms associated

with PMDD to look out for potential problems faced by female students.

Responses regarding willingness to discuss about PMS/PMDD with family & friends

The study showed that (Figure 11) 89.1% was positive about discussing this disorder with family and friends, while only 10% were not sure about discussing it with their family and friend. It is important to provide education regarding menstruation at an early age because when adolescents know what is normal and expected with their changing bodies, they are empowered to be an active participants in their healthcare and feel more confident communicating with their parents, caregivers, or healthcare providers when they have a health-related concern.

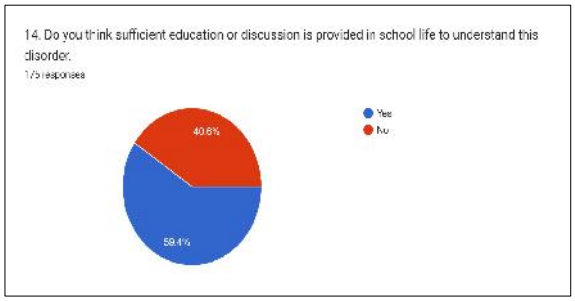


Fig 11: Willingness to discuss about PMS/PMDD

4. DISCUSSIONS

The aim of present study was to evaluate the opinion, awareness and prevalence of PMS/PMDD among the pharmacy college students, using a standardized scale. The study shows that though the awareness level about PMDD was high (76%) in the respondents, but it was surprising to know that 54% respondents did not consider it as a Disorder and did not think it requires any medical attention since most of them were believing it as a natural process.

The study findings suggest that PMDD possibly starts early in adolescence and continues during the later reproductive age group. Accordingly, the awareness and prevalence rate suggests that there is an urgent need to improve the knowledge and awareness of PMDD in the general public especially adolescent girls, so that interventions can be initiated early in life, to reduce or prevent the stressful impact of PMDD on various aspects of life.

The present study also suggests that the prevalence of PMS/PMDD was found higher among patients with depression, anxiety and those experiencing stress. Previous studies had also reported a higher prevalence of PMS/PMDD in patients with depression. [13]

The assessment about the awareness of PMDD in the present study was based on a self-rated questionnaire, and the respondents were not evaluated by any trained person. The present study also did not focus on the risk or predisposing factors associated with development of PMDD. So it is necessary that future studies should include young girls, living in the community, and evaluate them using a structured diagnostic interview to get more proper and precise responses and will in term help in increasing the awareness and management.

5. CONCLUSION

The present study concluded that though the awareness level was high among the respondents, most of them do not consider it as any disorder and therefore did not think it requires any medical attention since most of them believed it as a natural process. Most of them experienced the common symptoms like abdominal cramps, irritation, anxiety, headache, feeling of depression etc. which was seemed to be managed by use of some OTC medications like painkillers, hormonal drugs or supplements, anti-anxiety medication, appetite stimulants, antidepressants and sometimes sedatives. So it is very important that healthcare professionals like pharmacy students should be able to accurately distinguish the difference between PMDD and severe psychiatric disorders to make ensure that women with such conditions receive appropriate and timely support. Institutions and organization are therefore required to include the need for a greater understanding and awareness about PMDD within medical communities by providing training for PMDD assessment

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ACKNOWLEDGEMENT: None

CONFLICT OF INTEREST: The authors declare no conflict of interest, financial or otherwise.

SOURCE OF FUNDING: None.

AVAILABILITY OF DATA AND MATERIALS: Not applicable.

CONSENT FOR PUBLICATION: Not applicable.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE: Not applicable