

**AWARENESS & PERCEPTION ABOUT PREMENSTRUAL SYNDROME & PREMENSTRUAL DYSTROPHIC DISORDER AMONG URBAN AND RURAL POPULATION OF EITHER GENDER**

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**ABSTRACT**

In this cross-sectional study total number of participants are 253. This study was conducted among Urban and Rural residents in the state of Maharashtra, India. Among the participants male= 36.36% & female= 63.64%. Age of 18-25 years = 83.23%, 26-35 years = 6.83%, 36-45 years = 8.07%, 46-50 years = 1.86%. Rural population = 12.4% & Urban population = 87.6%. Around 78.9% were about Premenstrual Syndrome & Premenstrual Dystrophic disorders. The age of menarche of <12 years population = 4.96% 12-15 years = 75.17%. To manage the symptoms 77.6% reported rest & relaxation. Among the male participants their perception about mood swing = 60.9%.

**KEYWORDS:** Premenstrual Syndrome, Premenstrual dystrophic disorder, Urban & Rural population.

**INTRODUCTION**

Premenstrual symptoms (PMS) is a set of distressing bodily & psychological signs & symptoms.<sup>[1]</sup> It begins a few days earlier than menstruation and ends a few days after. For centuries and still the social history of PMS and phenomena is entangled with the social history of gender relations.<sup>[2]</sup> Premenstrual dysphoric disorder (PMDD) is a complex & disabling condition affecting women of reproductive age.<sup>[3]</sup> PMDD is a very distressing disorder. It is generally neglected & undifferentiated from PMS.<sup>[4]</sup> Currently there is no consensus on the cause of PMDD. Biological, genetic, environmental, psychological & social factors all seem to play a very important role.

**MATERIALS AND METHODS**

This cross-sectional study was conducted in Maharashtra, India. It was conducted by administering a pre-tested & pre-validated questionnaire via Google forms to the participants aged 18 years & above of either gender who are staying in Maharashtra, India. Informed consent was taken on the Google forms prior to it. The data were adapted to Microsoft Excel spreadsheet (Microsoft Corporation, Redmond, WA, USA) for statistical calculations.

**RESULTS AND DISCUSSION**

Our study had 253 number of participants out of which 36.36% were males and 63.64% were females (Fig. 1).

Their ages ranged from 18 years to 50 years. Their level of education was from matriculation up to post graduation. Urban residents comprised 87.6% of the total participants and rural residents were 12.4%. Unmarried participants were 84.5% & married 15.5% (Table 1).

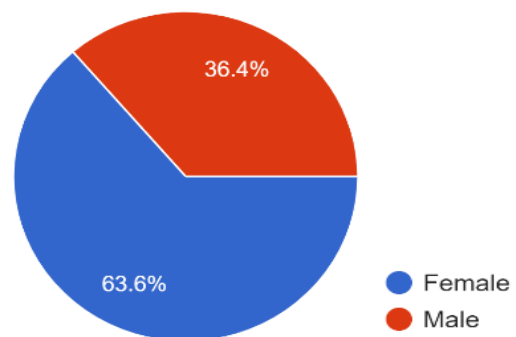


Fig. 1: Gender distribution of participants.

**Table 1: Socio-demographic details.**

<b>Socio-demographic details (N=253)</b>	<b>Percentage (out of N)</b>
<b>Gender</b>	
Male	36.36%
Female	63.63%
<b>Age</b>	
16-25 years	28.57%
26-35 years	4.96%
36-45 years	6.83%
46-50 years	3.1%
<b>Level of- Education</b>	
Matriculation	2.37%
Undergraduate	70.75%
Graduate	15.03%
Postgraduate	11.85%
<b>Occupation</b>	
School	0.8%
College	81.98%
Homemaker	8.07%
Service	6.71%
Business	1.22%
Other	1.22%
<b>Place of Residence</b>	
Rural	12.4%
Urban	87.6%
<b>Religion</b>	
Hindu	83.4%
Muslim	5.7%
Christian	1.91%
Sikh	0.63%
Jain	3.1%
Buddhist	4.4%
Other	0%
<b>Marital Status</b>	
Unmarried	84.5%
Married	15.5%
Divorced	0%
<b>If married, children</b>	
Yes	82.9%
No	17.1%
<b>Are you aware of PMS or PMDD?</b>	
Yes	78.9%
No	21.1%
<b>Age of menarche (N=161)</b>	
<12 years	4.96%
12-15 years	75.15%
>15 years	19.87%
<b>Regular use of medications, if any (N=161)</b>	
No	94.4%
Yes	5.6%

Their awareness level about PMS & PMDD is 79.9%. They reported different symptoms as per the

questionnaire (Table 2). Disturbed sleep reported mild 32.9%, moderate 8.75% and severe 1.83%. As per Ravi Gupta and others<sup>[5]</sup>, possible PMDD sufferers have problems with their night sleep. Jessica M and others<sup>[6]</sup> reported that both mood and sleep fluctuations most women experience across the monthly menstrual cycle. In the present study, anger/ frustration, anxiety and mood swings were reported by the participants. As per Havva YS and others<sup>[7]</sup>, anger is among the most common symptoms in the pre menstrual period. Dr. Hamid and others<sup>[8]</sup> reported the psychological issues linked to menstrual frequency. Ruby Boven et al<sup>[9]</sup> reported that women with complaints of PM shame were more irritable and in depressed moods. Tierney K et al<sup>[10]</sup> also reported about mood swings. Kelechi M Nwome<sup>[11]</sup> reported that PMS is characterized by a combination of emotional, physical, psychological and mood disturbances. PMDD is a severe condition of PMS. Globally, PMS occurs in 30-40 % of women of reproductive age. In the present study, participants reported altered appetite from mild, moderate to severe. Yukie M et al<sup>[12]</sup> reported that premenstrual symptoms in younger generations may be associated with bad eating habits. In the present study, many symptoms interfere with daily routine (70.2%), academics (49.1%), household chores (31.1%), family time(20.5%), social life (30.4%) as reported by the participants (Fig. 2) (Table 3).

As per Geeta S et al<sup>[13]</sup>, the most common somatic symptom was body pain and most affective symptom was irritability. Students were absent in classes and avoided joining social functions. Nasim Naemi<sup>[14]</sup> reported most common mood symptom and somatic symptom to be fatigue and lethargy and abdominal pain respectively. The participants of the study reported altered sexual desire mild (21.11%), moderate (11.78%) and severe (3.1%). K Nowosielski<sup>[15]</sup> reported that the presence of PMS is a risk factor for sexual dissatisfaction.

Table 2: Symptoms experienced by Women.

Symptoms (N=161)	Mild (%)	Moderate (%)	Severe (%)
Disturbed Sleep	32.9%	8.75%	1.9%
Unexplained Sadness/ excessive crying	31%	18.01%	11.18%
Restlessness/ Irritability	42.85%	24.84%	12.42%
Anger/ Frustration	42.23%	21.74%	16.77%
Anxiety	37.26%	16.14%	11.8%
Mood Swings	35.4%	29.81%	17.39%
Altered sexual desire	21.11%	11.80%	3.1%)
Reduced Mental Efficiency	39.13%	18.01%	11.8%
Headache/ Nausea/ Dizziness	34.16%	13.04%	6.25%
Weight gain	26.08%	18.63%	6.83%
Acne/Pimples	23.60%	30.43%	11.18%
Abdominal Cramps/ Backache	26.08%	35.40%	25.46%
Laziness/ Fatiguability	31.05%	29.19%	15.52%
Breast Tenderness	24.22%	14.9%	5.59%
Palpitations/ Sweating	27.32%	7.45%	0%
Burning/Itching/Discharge from Vagina	31.05%	14.9%	4.34%
Altered Bowel Habit	26.08%	11.80%	6.21%
Altered Appetite	32.91%	14.90%	6.83%

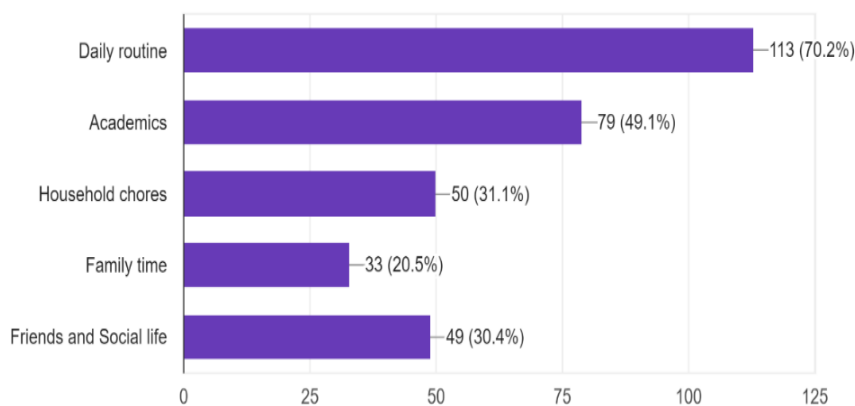


Fig. 2: Symptoms affecting day-to-day activities.

Table 3: Symptoms interfering with day-to-day activities.

<b>Do the symptoms interfere with any of the following? (N=161)</b>	<b>% of N</b>
Daily routine	70.2%
Academics	49.1%
Household chores	31.1%
Family time	20.5%
Social life	30.4%
<b>Do you consult a Medical professional for severe symptoms? (N=86)</b>	<b>% of N</b>
Yes	41.93%
No	58.07%

The majority of participants (77%) reported that the behavioral actions that help to manage them are rest and relaxation, listening to music (46%), hot water fomentation (23.6%), walking exercise or yoga (16.1%). Maryam Z S and others<sup>[16]</sup> found in their study that music therapy

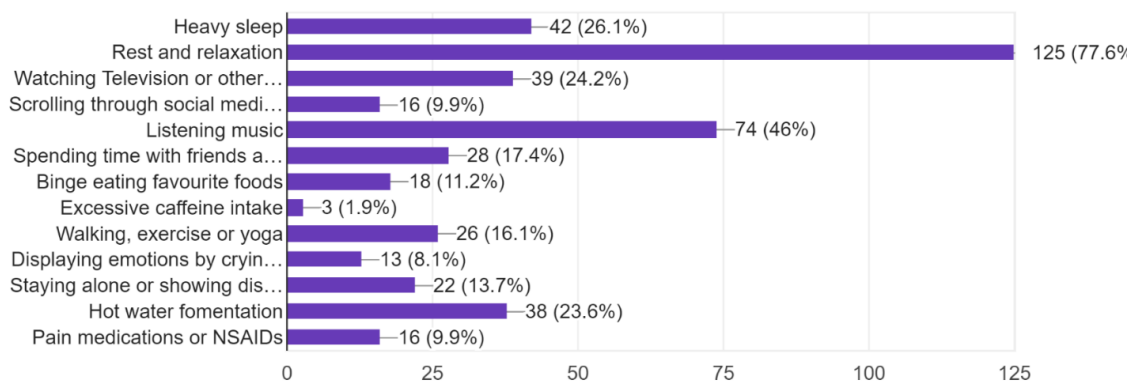
had a significant effect on reducing anxiety and depression. As per Veena Jasvja et al<sup>[17]</sup> and Javad K et al<sup>[18]</sup>, physical effects of stress are alleviated by relaxation of body which in turn relaxes the mind. As per R.Nithyanisha et al<sup>[19]</sup> and Su-Ying Tsai<sup>[20]</sup>, aerobic

exercise and relaxation training had considerable effects with patients suffering from PMS. Yoga reduces the risk of menstrual pain (Table 4). In the present study, perception of men about PMS was: mood swings

(60.9%), anger (51%), anxiety (38%), irritability (45.7%), emotional (35.9%) and loss of interest in activities (42.4%) (Table 5).

**Table 4: Measures taken to manage symptoms.**

Measures taken to manage symptoms (N=161)	% of N
Heavy sleep	26.1%
Rest and relaxation	77.6%
Watching Television or other video platforms	24.2%
Scrolling through social media platforms	9.9%
Listening music	46%
Spending time with friends and family	17.4%
Binge eating favourite foods	11.2%
Excessive caffeine intake	1.9%
Walking, exercise or yoga	16.1%
Displaying emotions by crying/aggression/shouting	8.1%
Staying alone or showing disinterest	13.7%
Hot water fomentation	23.6%
Pain medications or NSAIDs	9.9%



**Fig. 3: Measures taken to prevent symptoms.**

**Table 5: Symptoms noted by men in women.**

Symptoms noted by men in women during periods? (N=92)	Percentages (% of N)
Mood swings	60.9%
Anger or frustration	51.1%
Anxiety	38%
Restlessness or irritability	45.7%
Silence or remaining quiet	28.3%
Becoming overly emotional or sensitive	35.9%
Loss of interest in activities	42.4%
None	25%

## CONCLUSION

According to the studies, it can be concluded that PMS and PMDD mostly exist in today's modern countries according to the results of the present study and awareness of biological, psychological and social etiology of PMS and its disorders, it can be considered from a different point of view to reduce these negative experiences. Strategies should be drawn and

implemented for timely recognition and management of PMS and PMDD in women of reproducing age.

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