

Prevalence the Premenstrual Syndrome (PMS) in Pakistani Women

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ABSTRACT

Objective: to determine the prevalence the premenstrual syndrome (PMS) in Pakistani women of child bearing age and the frequency of practices regarding premenstrual syndrome in Pakistani women of child bearing age.

Methodology: this cross sectional study included 250 cases, during 2013. A history was taken regarding their menstrual cycle and an interview was carried out. The answers to the questions on the interview were recorded on previously designed performa. The presence or absence of premenstrual syndrome was noted and the patients were also asked about details of symptoms of premenstrual syndrome and treatment related to it.

Results: During the study period, 250 women were included in study. Out of 250 women, 174 (69.6%) had one or more symptoms of premenstrual syndrome ($p < 0.0001$) 80% had awareness of symptoms regarding premenstrual syndrome and treatment relate to it. ($P < 0.05$).

Conclusion: The prevalence of premenstrual syndrome among women under study was high and clinically significant ($p < 0.0001$).

Keywords: Premenstrual syndrome, PMS, PMDD, Dysmorphic Disorder, DSM criteria IV, menstrual cycle

INTRODUCTION

PMS is defined by the American College of Obstetricians and Gynecologists (ACOG) as one emotional and one physical symptom experienced by women 5 days before menses and remitting within 4 days of the onset of menses, with no recurrence until the 13th day of the cycle in each of the previous 3 menstrual cycles.¹

Common symptoms of premenstrual syndrome include swollen breasts, aching joints, headaches, and bloating. Other symptoms include sleep difficulties, a change in appetite, a loss in interest in social situations, and irritability.² Some symptoms might be minor, moderate, or even severe, depending on their intensity. A woman's world and social life may be irreparably disrupted if PMS becomes incapacitating or incapacitatingly severe.¹

The most frequent symptoms of premenstrual syndrome (PMS) are bloating, breast tenderness, pains, headaches, aches, poor concentration, reduced interest, social withdrawal, irritability, mood swings, anxiety/tension, melancholy, and a sensation of being out of control. The intensity of the symptoms might range anywhere from mild to moderate to severe. A severe case of premenstrual syndrome (PMS) may be incapacitating and causes a disturbance in both the world and the social lives of women who suffer from the disease.¹

In a study of Pakistani medical students, participants ($n=172$) with mean age of 21.2 ± 1.9 years, eighty-nine (51%) girls met the criteria for PMS according to WHO's ICD -10, among them 53 (50.5%) had mild PMS, 26 (29.2%) had moderate and 10 (11.2%) had severe PMS.³ One study carried out in OMI hospital Karachi by Pal et al showed that majority 98.8% of women were unaware of Premenstrual syndrome and prevalence of PMS using ICD-10 classification came out of 79.9% (CI: 75.6-83.7) and using ACOG criteria, it was 12.7% (CI: 9.6-16.3).⁴

Studies have shown the impact on daily activities of life. In a study done by Dennerstein et al in Australia that showed seventy four percent of women were not affected or minimally affected in ADL, 17% had a clinically significant effect on ADL and 9% were severely affected in ADL.⁵

In a Turkish study prevalence of PMS to range between 5% and 76%. In same study 379 women, 79% experienced moderate to high levels of PMS symptoms. Major areas identified are 70% depressive effects, 65% anxiety, 72% fatigue, 73% irritation, 35% depressive thought, 98% pain, 86% appetite changes, 1% sleep changes, 60% bloating. The average scores of subscales were highest regarding appetite change, pain, fatigue and irritation.⁶

The PMS subscale in the aforementioned Turkish women's research revealed a variety of methods. PMS's negative mood swings subscale included 45 participants who used coping techniques. In this group, 28.9% prefer listening to music, 38.8% prefer weeping, and 33.3% prefer sleeping. Ninety-four percent of the 101 participants who attempted to cope with their weariness as measured by the fatigue subscale favoured sleeping and resting, whereas only 5.9 percent preferred showering. A total of 156 women participated in the research, everyone of whom had a different way of dealing with pain. Painkiller usage was favoured by 57.1 percent of those in this group compared to exercise, walking, and massages by a mere 9.6 percent of those in the group. A total of 88 participants chose dessert as a coping strategy to cope with their fluctuating appetites. More over half of the women in the study ingested milk and yoghurt to deal with their sleep problems, which is an unusually low percentage.⁶

The rationale of this study is that the prevalence of PMS reported in the literature shows controversial results. Similarly regarding the treatment, no standard treatment protocols have been developed for PMS. I want to study the prevalence of this condition in our population. This will help us to find the true magnitude of this underestimated condition and may also help to develop standard treatment protocol and know the common practice prevalent in one population.

METHODOLOGY

A total of 250 women reproductive age of 15 to 49 years attendants of pregnant patients with regular menstrual cycle (4-7/24-35 days) as determined by history and reporting at least one of each of following affective and somatic symptoms whereas those with previously diagnosed medical disorder e.g. endometriosis, hypothyroidism, diabetes mellitus, oral contraceptive pill use, as determined by history, previously diagnosed psychological disorder e.g. depression, anxiety as determined by history, peri-menstrual women as determined from history and gestational amenorrhea determined by history were excluded from the study. After informed consent, all women of childbearing age according to the inclusion criteria, presenting to outpatient department of Jinnah Hospital were included in the study and data was collected on structured proforma containing background information i.e. age, and average duration of last three cycles in days. Patients were interviewed by me regarding PMS symptoms. They were also enquired about their practices and coping behavior and patients were selected according to inclusion criteria. Mean with standard deviation was calculated for age.

Frequency and percentage was calculated for patients having PMS, practices .i.e. pain killer, walking or massage and use of yogurt or milk.

RESULTS

A total of 250 women meeting the inclusion criteria were selected from outpatient department. The mean age of the group was 24.88 + 4.33 years, the subjects were also distributed according to the mean duration of menstrual cycle. According to this study, 82 women (58.4%) had menstrual cycle for three days, 146 (32.8%) had menstruation for five days and 22 women (8.8 %) had menstrual cycle for 7 days. The mean duration of menstrual cycle was 4.52 + 0.87 days. When interviewed for presence or absence of premenstrual syndrome according to predefined proforma, it was seen that 174 patients (69.6%) had premenstrual syndrome while it was absent in 76 women (30.4%). This was clinically significant with $p > 0.0001$

Table 1: Distribution of cases by presence of premenstrual symptoms (n=250)

Premenstrual symptoms	No. of Women	%
Present	174	69.6
Absent	76	30.4
Total	250	100

DISCUSSION

Premenstrual syndrome affects a large percentage of women, however only a tiny percentage of these women have severe symptoms that have an impact on both their personal and professional lives. Women of reproductive age 15-49 years were recruited for this research to examine the prevalence and effect of premenstrual syndrome (PMS). There is a lack of data on this problem in our country, yet numerous research have been published throughout the world on the subject. Premenstrual syndrome was shown to be common in 69.6 percent of women in this investigation. This number is astronomical. ($p < 0.0001$). Premenstrual syndrome symptoms were reported by 80% of females, which is clinically significant. ($P < 0.01$)

According to the findings of a research conducted at the Khber Teaching Hospital in Peshawar, 53% of young women in college suffer premenstrual syndrome. Premenstrual syndrome was shown to have a prevalence of 33 percent in another research carried out in Pakistan and conducted by Dr. Sher Shah. The discrepancy between the two studies may be because the latter was a community-based investigation.⁷ Similar results were found by Noreen et al. in Pakistan, with a frequency of 66 percent.⁸ According to the findings of another research conducted by Claman and colleagues on the subject of the effects of premenstrual syndrome (PMS) on one's quality of life, the prevalence of PMS was found to be 45.2%.⁹ A modest but substantial negative effect ($P < 0.001$) was found that premenstrual syndrome had on the quality of life of girls who were afflicted by it. This was especially true for the girls' academic performance, social interactions, lifestyle, and emotional well-being.⁹

Within the scope of their cross section cohort research, Borenstein and colleagues¹⁰ investigated southern California women between the ages of 18 and 45. Significant mental and physical symptoms were present in the women who suffered from PMS. In addition, women who suffer from PMS report having less productivity at the onset of physical symptoms. In addition, women who experienced PMS reported a decrease in their productivity at work, a greater interference with their hobbies, and a greater number of work days missed due to health related reasons (all of which had a P value of less than 0.001) when compared with women in the control group. Women who experienced PMS also made more frequent visits to ambulatory care providers and were more likely to accrue on excess of \$500 in visit costs over the course of 2 years. This is in line with the findings of my research, which revealed a broad range of psychological and physical

symptoms associated with premenstrual syndrome. This finding is consistent with those findings.

In this study, the frequency of headache was 25%, that of painful breast was 44% and that of water retention was 53%. Similar findings found in study conducted by Casper, showing fatigue in 90% cases and headache and breast tenderness found in >50% of women.¹¹

The depression was found in 97 women (50%, $p > 0.05$), anger was present in 33 females (19%, $p < 0.05$), anxiety in 45 (26%, $p < 0.05$). Irritability was present in 103 females (59%, $p > 0.05$), confusion was present in 10 women (6%, $p < 0.05$), and 56 females (32 %) had lack in interest or social withdrawal in premenstrual period. This was statistically significant. $p < 0.05$. Similarly, Casper have demonstrate mood swings >80% and other common complaints include tension, irritability, in >70% of cases.¹¹

Similarly, a study by Yasmin Farooqui in the University of Punjab reveals 54.78% physical, 43.97% psychological and 4.29% social symptoms.¹² This is also important in the sense that it addresses Pakistani population like my study and hence the results are comparable regarding demographic data.

Regarding practices done by females for treatment of premenstrual syndrome, a wide variety of modalities are taken by the females with varied types of results. Similarly in my study, there were reports of having used pain killers for headache and breast pain, massage for back ache and for relaxation, milk and yogurt for general body aches and water retention.

CONCLUSION

Premenstrual syndrome is a commonly occurring problem amongst the women of reproductive age groups. It affects the females physically as well as psychologically and in turn affects their quality of life. With menstrual cycle as a taboo in most part of the underdeveloped countries like Pakistan, it is important to raise awareness amongst the women regarding symptoms of premenstrual syndrome and associated treatments available. Health awareness programs need to be initiated with the help of the Government on national and local levels. For this purpose, the paucity of local data makes a hindrance and hence more research is required in this field.

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