

Full Length Research Paper

Study of premenstrual syndrome (PMS) on quality of life at a University Hospital of Sindh

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The objective of this study is to observe the magnitude and impact of premenstrual syndrome on quality of life. Prospective, observational study was used in conducting the study. This study was carried out for the period of one year that is, from 30th June 2010 to 31st June 2011. There were 280 females age between 15 to 49 years, selected by convenient sampling who visited the Gyne/medicine OPD Liaquat University Hospital Hyderabad, during study period. The female, irrespective of parity with symptoms suggestive of premenstrual syndrome were included and those who were showing irregular menstrual cycle, other gynaecological and medical disorders such as thyroid disorders were excluded. Data was collected by filling a 29 variables shortened premenstrual Assessment form based on Moos Menstrual Distress Questionnaire after taking consent from the study participants. The severities of symptoms were assessed on both criteria. That is, ICD-10 (Tenth Revision of the international classification of disease) DSM-IV (Research diagnostic criteria for PMDD). A total of 280 women of young age were taken to see the frequency of premenstrual syndrome. The Mean \pm SD of women age was 27.5 ± 4.22 (15 to 49 years). The frequency of Premenstrual syndrome (PMS) was more in women between 25 to 35 years. The less frequency was observed on women of age between 14 to 24 years. The clinical presentation like irritability was seen in 63.6%, abdominal cramps 47.9%, moderate to severe headache 41.5%, decreased performance of work at college was seen in 30.7%. The frequency of anxiety was 25.4%, crying in 23.9%. The depression was commonly seen in 71.1%. Premenstrual syndrome (PMS) is still a common problem and should be diagnosed on standard criteria, proper treatment enhances the quality of life.

Key words: Premenstrual syndrome, impact, frequency, quality of life.

INTRODUCTION

Premenstrual syndrome (PMS) refers to distressing physical, psychological and behavioral symptoms not caused by organic disease, which regularly occur during the same phase of menstrual cycle and significantly regress or disappears during the remainder of the cycle. Premenstrual dysphoric disorder (PMDD) is the extreme predominantly psychological end of the Premenstrual syndrome estimated to occur in 3.9% of women. According to the American College of Obstetrics and Gynaecology (ACOG) guidelines, premenstrual syndrome (PMS) includes one or more effective or somatic symptoms that negatively impact women's function and lifestyle, occur during the five days prior to menses, and are present in each of three previous menstrual cycles (American College of Obstetricians and

Gynaecologist, 2000). Derman et al. (2004) conducted a study in Turkey that showed 61.4% of adolescent girls met diagnostic and statistical manual (DSM-IV) criteria for premenstrual syndrome (PMS). Among women samples, up to 85% have reported one or more premenstrual symptoms (Steiner and Born, 2000). Dean et al. (2006) concluded that regardless of the criteria used, PMS prevalence ranges from 19 to 30% (Dean et al., 2006). Pre-existing conditions such as migraine, mastalgia (Cronje et al., 2003), depression (West et al., 2004), backache, acne and asthma can be worsened cyclically. There is often exacerbation of pre-existing psychiatric or psychological problems (ACOG Practice Bulletin, 2000). It is estimated that up to 1.5 million women in the UK experience such severe symptoms that their quality of life and interpersonal relationships are greatly affected. About 35% of these women seek medical help (Raja et al., 1992). if affects around 85% of women to some extent, at some time in their life; about 10% of women

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Table 1. Demographic details (n = 280).

Parameters	n(%)
Age in years (Mean \pm SD), Range	27.5 + 4.22 (15 – 49)
Age in groups:	
14 – 24	
25 – 34	24(8.5%)
> 35	177(63.2%)
	79(28.2%)
Marital status:	
Married	
Unmarried	190(67.8%)
	90(32.14%)
Educational status:	
Educated	
-25 Primary	
-26 Matric or above	110(39.2%)
-27 College or university	115(41.0%)
Uneducated	40(14.2%)
	15(5.3%)

suffer marked life-disruption in their mid-20s to mid-40s (Chau and Chang, 1999).

Oversensitivity to environmental stimuli, anger, easy crying and gastrointestinal upset, hot flushes, palpitations and dizziness occur in 15 to 20% of patients (Wyatt et al., 2003). Up to 85% of menstruating women report having one or more premenstrual symptoms and 2 to 10% reporting disabling, incapacitating symptoms (Takeda et al., 2006).

The aim of this study was to find out the frequency of premenstrual of syndrome in our setup so efforts can be taken to resolve their problem by counseling and management accordingly.

MATERIALS AND METHODS

This is an observational study, conducted at the OPDs of Gynaecology and Obstetrics and Medicine, in LUMHS Jamshoro / city blocks of Hyderabad, Sindh.

The duration of the study was from June 2010 to July 2011. The Total 280 females aged 15 to 49, who had menstrual-related psychological or physical complaints been included in the study.

Exclusion criterion was presence of co morbid general medical and psychiatric conditions, irregular menstrual cycles, the ones who did not consent for interview and previous Gynaecological cancer.

All the cases were interviewed and examined duly by consultants of Gynaecology and Obstetrics and Medicine.

The Moos Menstrual Distress Questionnaire include in written Performa

The questionnaire consisted of two sections. The first part included socio-demographic questions as age, marital status and residency condition that is, living with parents or alone. The second part included 23 self-reported items assessing frequency and severity of PMS. The participants were asked to identify symptoms they had experienced during two weeks preceding their menstruation (3 days, 4 to 6 days or 7 to 14 days before menstruation) in the past three months. The respondents were further asked to rate the severity of the symptoms on a 5 points scale: 0 = not at all, 1 = mild, 2 = moderate, 4 = severe, and 5 = extremely severe.

ICD – 10 (Tenth Revision of the International Classification of Disease)

DSM – V (Research Diagnostic Criteria for PMDD).

Data analysis

The data were evaluated in statistical package for social sciences (SPSS) version 16.0. The qualitative data such as marital status; education status, symptoms, menstrual cycle, menstrual flow and dysmenorrhea were presented in percentage where as quantitative data were shown by mean and standard deviation. As this study was descriptive, no any statistical test was applied for any comparison.

Table 2. Presentation of symptoms (n = 280).

Symptoms	n(%)
Cramps	134(47.9%)
Backache	47(16.8%)
Headache	116(41.4%)
Anxiety	71(25.4%)
Lowered work or college Performance	86(30.7%)
Irritability	178(63.6%)
Depression	199(71.1%)
Crying	67(23.9%)
Swelling	35(12.5%)
Painful breasts	58(20.7%)

RESULTS

Total 280 women of young age were taken to see the frequency of premenstrual syndrome. The Mean \pm SD of women age was 27.5 ± 4.22 (15 to 49 years). The frequency of PMS was more in women between 25 to 35 years. The less frequency was observed on women of age between 14 to 24 years, probably social trends of avoiding taking your girls to the hospital for the medical advice.

There were 190 (67.8%) married while 90 (32.14%) were unmarried. The majority of women seeking help were educated (Table 1).

In our study, irritability seen in 178 (63.6%) and abdominal cramps in 134 (47.9%) women. 116 (41.4%) complained moderate to severe headache about 7 to 10 days before menstruation. Decreased performance of work or college was seen of 86 (30.7%) educated women. The frequency of anxiety was in 71 (25.5%) women, crying in 67 (23.9%) women. The depression was the commonly seen in 199 (71.1%). Only 47 (16.8%) women had developed backache a week before menstruation. 58 (20.7%) had painful breasts in their premenstrual phase (Table 2).

DISCUSSION

Premenstrual syndrome influence a significant proportion of women, with a small proportion suffering severe effects which affects economic as well as personal aspects of life. This study was designed to determine the frequency of premenstrual syndrome (PMS) in women of reproductive age 15-49 years and to assess the impact of premenstrual syndrome on the quality of life. Data from our country focusing on this issue is scarce, however internationally many studies have published on this topic. The present study showed frequency of premenstrual syndrome is 81.25%. This figure is quite higher. A study at Khyber Teaching Hospital Peshawar shows

53% of the young college girls experience premenstrual syndrome (American Psychiatry Association, 1994). Another study from Pakistan done by Dr Sher Shah showed prevalence of premenstrual syndrome was 33% the difference could be due to because this study was community based (Samia et al., 2005). Two studies from France and China also reported lower incidence of 35% (Shershah et al., 1991).

This study showed frequency of lowered work or college performance in 86 (30.7%) educated women as compared to 7.4 reported by safety et al from France (Zhao et al., 1998). Other study by Rizk, et al. (2006) from UAE regarding impact of premenstrual syndrome on quality of life, the prevalence of PMS was 45.2% (Serfaty and Magneron, 1997).

Premenstrual syndrome had a moderate but significant negative impact ($P < 0.001$) on the quality of life of affected girls, particularly school performance social interactions, life style and emotional well being (Rizk et al., 2006).

Borenstein and colleagues (Dean et al., 2006) analyzed women age 18 to 45 years in southern California in a cross section cohort study. The women with PMS had significant mental and physical symptoms. In addition women with PMS reported decreased productivity at physical symptoms. In addition women with PMS reported decreased productive at work, greater interference with hobbies and a greater number of work days missed for health related reasons (each $P < 0.001$) compared with the control group women with PMS also made more frequent visits to ambulatory care providers and were more likely to accrue on excess of \$500 in visit costs over 2 years (Babyak and Blumenthal, 2000).

In Hylan et al's (1999) study 8 to 16% of symptomatic women had missed worked in the preceding year because of premenstrual syndrome and 5 to 8% of those who had ever missed work had been absent for more than 14 days on the past year (Kessel, 2000).

In our study the frequency of headache 392 (78.4%), fatigue 446 (89.2%) painful breast 380 (76.0%). The

findings are in agreement with a study conducted by Casper (2008), which showed the frequency of fatigue in 90% of women and breast tenderness and headache are occurring in more than 50% of cases (Casper, 2008).

In the study results showed that frequency of irritability 178 (63.8%), depression 199 (71.9%), Anxiety 71 (25.4%). Casper (2008) have demonstrate mood swings in more than 80% other frequent behavioral complaints include irritability, tension depressed mood in 70% women (Casper, 2008).

A study done by Yasmin Farooqui in the University of Panjab shows frequency of physical 54.78% Psychological 43.97% and social symptoms 4.29% (Farooqi, 2002).

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