

Pre Menstrual Syndrome and Stress Management

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Abstract: *The objective of this study is to know Premenstrual Syndrome among study subject. This study was carried out for the period of 11 months, that is from 1st July 2013 to 31st May 2014. There were 120 females age between 18 to 26 years, at Babasaheb Bhim Rao Ambedkar University Lucknow. and Premenstrual syndrome were recorded through interview and filling of self-administered questionnaire after taking verbal informed consent, and later analyzed on SPSS 20.1 for descriptive statistics. This study shows overall PMS, majority of subjects had total score ≤ 26 , 116 (96.7%) thus indicating mild PMS. Only 4 (3.3%) had scores in range of 26-25 and thus indicates moderate PMS. And most frequent tools used of as stress methods, living alone and walking 70 (58.3%) among study participants. Premenstrual Syndrome is a common problem, have an adverse impact of management of PMS.*

Keywords: Premenstrual Syndrome, impact, Frequency, Stress management

1. Introduction

Premenstrual syndrome (PMS) is a common disorder of young and middle-aged women characterized by cyclic occurrence in the luteal phase of the menstrual cycle of a combination of distressing physical, psychological and behavioural changes of sufficient severity to result in deterioration of inter-personal relationships and / or interference with normal activities; which remit upon onset or immediately after menstruation. (Antai A.B. et al 2004) There is no single precise definition of the PMS, but it is generally accepted that Premenstrual syndrome can be broadly defined as any constellation of psychological and physical symptoms that recur regularly in the luteal phase of the menstrual cycle, remit for at least 1 week in the follicular phase and cause distress and functional impairment. Premenstrual syndrome (PMS) is a collection of emotional symptoms, with or without physical symptoms, related to a woman's menstrual cycle. While most women of child-bearing age (up to 85%) report having experienced physical symptoms related to normal ovulatory function, such as bloating or breast tenderness, medical definitions of PMS are limited to a consistent pattern of emotional and physical symptoms occurring only during the luteal phase of the menstrual cycle that are of "sufficient severity to interfere with some aspects of life" Premenstrual syndrome (PMS) is a cyclic recurrence of distressing somatic and affective symptoms in the luteal phase of menstrual cycle and in the few days (1-3 days) of the next follicular phase. If the mental symptoms predominate, are very severe, and are associated with impairment, then the patient is classified as having premenstrual dysphoric disorder (PMDD) which may be viewed as a severe subtype of PMS. Premenstrual syndrome (PMS) can be defined as a recurrent disorder that occurs every month in the luteal phase of the menstrual cycle, and remits with the onset of menstruation. PMS is characterized by a complex set of symptoms which include physical, psychological and behavioural changes of varying severity; PMS has been reported in 40-95% of menstruating women. For most of these women (Antai A.B. et al 2004). The severity of premenstrual symptoms varies widely from person to person. When premenstrual dysphoric

disorder (PMDD), symptoms become severe they can interfere with daily life and cause severe disability. According to research, severe symptoms can affect work, school performance, and lead to problems/ conflicts in interpersonal relationship. It has been found that mild to moderate symptoms can be relieved by various lifestyle changes. However, severe symptoms often require more aggressive treatment that requires pharmacological intervention in addition to non-pharmacological treatments. (Myint Thu et al 2006). In 1987, the American Psychiatric Association (APA) concluded that severe PMS is actually a psychiatric disorder and introduced a new subset of PMS entitled "late luteal phase dysphoric disorder" (LLPDD). According to the APA's definition, the essential feature of LLPDD is a pattern of clinically significant emotional and behavioral symptoms that repeatedly occur during the luteal phase of the menstrual cycle PMS is one of the most common disorders of women of reproductive age. Numerous epidemiologic surveys have shown PMS to consistently affect between 25% and 50% of women in this age group. (L. Joseph et al 1991).

1.1 Objective

To know premenstrual syndrome and degree of severity of the symptoms.

2. Material & Methods

This study was an ex-post facto research design and conducted at Babasaheb Bhim Rao Ambedkar University Lucknow. From 1st July 2013 to 31st May 2014. A sample of 120 girls aged 18 to 26 who had menstrual-related psychological or physical complaints been included in the study. Premenstrual syndromes were recorded through interview and filling of self-administered questionnaire which included demographic data, and premenstrual symptoms and the degree of severity of the symptoms they experienced. Premenstrual symptoms were divided into 5 subgroups: PMS-A for behaviour change, PMS- B indicating water and salt Retention, PMS- C manifestations of craving, and PMS-D characterizing depression and other

PMS symptoms. Each symptoms was scored as 1,2 & 3 depending on severity of the symptoms and the score in each sub group were added. after taking verbal informed consent. The questionnaire consisted of two sections. The first part included demographic questions as age, residency, height and weight. The second part included 28 items and 5 sub group assessing frequency and severity of PMS. The questionnaire was given to each subject to indicate if her experience of abdominal is mild, moderate and severe or totally absent. And analyzed on SPSS 20.1 for descriptive statistics. Frequency and percentage. And mean was analysed for age, BMI and age of menarche.

3. Results

Out of the 800 student in Lucknow college of Babasaheb Bhim Rao Ambedkar University Lucknow .And selected only 120 students the study who responds of the students. The demographic variables like the mean age, mean weight, mean height and the mean BMI of the student are show in Table 1

Table 1: Demographic variables of the students

	Statistic
Mean Age ±SD (Range)in year	13.7±1.104 (18-26)
Mean Weight± SD(Range)in kg	51.47±8.03 (38-72)
Mean Height ±SD (Range) in cm	149.84±6.37 (135-162)
Mean BMI± SD(Range) in kg/m ²	23.04±4.13 (15.82-35.71)

Table 2 Show the difference in the severity of each subgroup of premenstrual syndrome and there frequency. Discuss the most common premenstrual syndrome in subject, Overall, majority of subjects had total score ≤26, thus indicating no or mild PMS. Only 4 (3.3%) had scores in the range of 26-52 and thus indicated moderate PMS. anxiety and mood disorder, a total of 104 (86.7%) subjects had scores in no/mild category and remaining 16 (13.3%) had scores in moderate category ie, dimension of A. physical symptoms, all the 120 (100%) subjects had scores in the range of no/mild i.e. Dimension of C. For dimension D, (depressive disorders), a total of 117 (97.5%) subjects had scores in mild category and remaining 3 (2.5%) were in moderate category. For dimension H, i.e., physical signs, a total of 108 (90%) had scores in no/mild category, 9 (7.5%) in moderate category and 3 (2.5%) in severe category. For other symptoms, 116 (96.7%) had scores in no/mild category, 3 (2.5%) in moderate category and 1 (0.8%) in severe category.

Table 2: Shows the most common symptoms of premenstrual syndrome frequency

Subgroup (Premenstrual syndrome)	Mild PMS*		Moderate PMS*		Severe PMS*	
	No.	%	No.	%	No.	%
PMS A*	104	86.7	16	13.3	-	-
PMS C*	120	100	-	-	-	-
PMS D*	117	97.5	3	2.5	-	-
PMS H*	108	90.0	9	7.5	3	2.5
Other symptoms	116	96.7	3	2.5	1	0.8
Over all	116	96.7	4	3.3	-	-

- PMS: Pre- menstrual syndrome
- PMS A: Anxiety
- PMS C: Craving
- PMS D: Depression
- PMS H: Hyper hydration

Table 3 Show Overall, PMS scores ranged from 0 to 57 with a mean value of 7.73±7.86. For subgroup A, C, D and H the scores ranged from 0 to 7, 0 to 5, 0 to 11 and 0 to 18 respectively. Mean scores for PMS A, C, D and H were 2.89±1.53, 0.58±1.69, 0.72±1.69 and 2.03±3.43 respectively. For other symptoms, the scores ranged from 0 to 19 with a mean value of 1.52±2.77.

Table 3: PMS Scores of different subgroup and overall Premenstrual syndrome

Dimension	Score	Mean± SD
PMS A*	0-7	2.89± 1.53
PMS C*	0-5	0.58± 1.69
PMS D*	0-11	0.72± 1.69
PMS H*	0-18	2.03± 3.43
Other symptoms	0-9	1.52± 2.77
Overall	0-57	7.73± 7.86

And Table 4 Show overall the subjects experienced cramps during first two days of period. Majority (n=70; 58.3%) experienced mild cramps, 19 (15.8%) experienced moderate cramps and 31 (25.8%) experienced severe cramps. Overall mean score for cramps was 1.81±0.82. With respect to backache, almost half (n=57; 47.5%) did not report backache, 28 (23.3%) reported mild backache, 19 (15.8%) reported moderate backache and 16 (13.3%) reported severe backache. Mean score for backache was 0.95±1.08.(see Figure 1)

Table 4: Show the Severity scores for menstrual cramps and backache during first two days of period

Variable	No		Mild		Moderate		Severe		Mean score±
	No.	%	No.	%	No.	%	No.	%	
Cramps	0	0	70	58.3	19	15.8	31	25.8	1.68±0.86
Backache	57	47.5	28	23.3	19	15.8	16	13.3	1.81±0.82

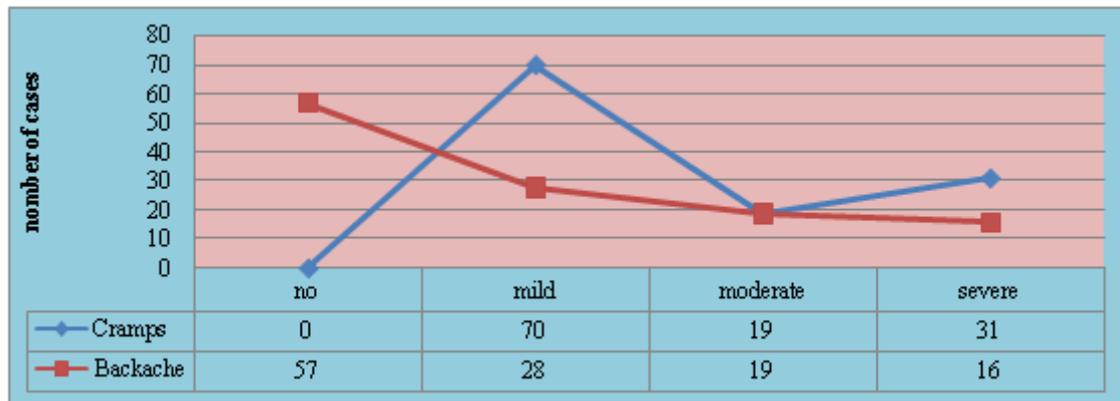


Figure 1

4. Discussion

The result from the questionnaire indicated that PMS is very common among females at collage going students. This study was designed to determine the frequency and impact of premenstrual syndrome, reproductive age 18-26 years. Data from BBAU Lucknow focusing on this issue is scarce, however worldwide many studies are published on this topic. The present study showed frequency of premenstrual syndrome was 5.8% lower than previously published research. The present study showed frequency of all respondent (120) Anxiety, Cravings, Hyper hydration, and Depression problem is mild problem, (86.7%, 100%, 97.5%, 90.0%) and also majority of physical problem is mild (58.3% no=70) , 31 (25.8%) experienced sever cramps. overall mean score for cramps was 1.68 ± 0.86 and, almost half ($n=57, 47.5\%$) did not report backache .16(13.3%) reported sever backache. Mean score for backache was 1.81 ± 0.82 . According to **P. Brohi (2011)** this study show very high frequency (81.25%) among women of reproductive age . the mean SD of woman age was $26.830 + 6.32$ in this study 372 woman were married while 128 were unmarried. Weight gain occurred in 440 women, while out of 500 women 444 had lowered work or college performance. Backache, Swelling and Fatigue were the most common symptoms occur in 446 (89.2%) women significant difference of weight gain, lower work or college performance, cramps, skin disorders, fatigue, mood swings, depression and tension were found in premenstrual and menstrual phases amongst study partisans. In significant difference among crying takes naps, headache, anxiety, backache, painful breast, swelling and irritability was found in PMS.1 According to the **Ziba Taghizadeh et all (2008)** results of the daily record of the severity of PMS problems scale, the severity of PMS in most of the participants (62.22%) was moderate (score=33%-66%), in 8.89% was mild (score<33%), and in 28.89% was sever (score>66%). The mean of scores in all the components of SF-36 in the PMS group was significantly lower than the healthy group. The results of the Kruskal- Wallis Test showed no statistically meaningful difference in the score of quality of life items except in the mental health and vitality according to various severities of PMS.2. Author Study **Nisar N. et all (2008)** PMS was diagnosed in 89 (51%) girls and PMDD in 10 (5.8%) girls according to ICD-10 and DSM-IV criteria respectively. Among PMS groups, mild PMS was found in 53 (59.5%) girls. Frequency of moderate and severe PMS

was 26 (29.2%) and 10 (11.2%) respectively. Mean age was $21.2 + 1.9$ years; mean age of menarche was $13.2 + 1.1$ years. Dysmenorrhea was prevalent with 79 (79.8%), 17 (17.2%) reported mild pain, while 36 (36.4%) and 27 (27.27%) reported moderate to severe dysmenorrhea respectively. Fifty-eight (58.6%) reported positive family history of premenstrual syndrome

On univariate analysis, PMS was significantly more frequent in girls with family history of PMS ($p < 0.001$) and dysmenorrhea ($p=0.003$). There was no significant relationship with present age, age at menarche and number of years with premenstrual symptoms. **Udezi. A.W (2004)** according to this study respondents reported experiencing lower abdominal pain, pimples/puffy face, tender/painfully engorged breast and depression/tension respectively. Of these, 61 (36%) had severe abdominal pain, 68 (39.7%) moderate, 42 (24.5%) mild, while 29 (11.7%) had no abdominal discomfort. Most of those who reported severe lower abdominal pain have depression/tension (85.7%). Less than half of those who reported mild, moderate and no lower abdominal discomfort have depression/tension (42.6-48.3%). Pimples/puffy face (73.5%) and tender/painfully engorged breast (70.5%) were the most prevalent symptoms in those reporting moderate and mild abdominal discomfort respectively. (**Antai A.B. et all 2004**).

Our results are comparable to the study done by **Ramya S, et all 2014**. These study are found a highly significant improvement in the severity of each subgroup of premenstrual symptoms (PMS-A,C,H,D & Other) and total PMS as such in study.

5. Conclusion

It can be concluded that coping methods for PMS symptoms are not frequently implemented. These results show that women, who are highly affected by PMS, must be more educated in terms of dealing with these symptoms. As a result of these studies, it is determined that the symptoms of PMS can be lowered significantly when college going student about them (**O.Sibel et all 2006**).

6. Recommendations

The following steps are recommended for women suffering from PMS symptoms:

- Assessing girls in relation to their PMS symptoms.
- Guiding girls who show severe symptoms of PMS.
- And suggesting women make journal entries regarding their menstrual cycles.

Consequently, these steps will improve recognition of the symptoms and aid assessment of causes contributing to their increase. In order to lower PMS incidences and to improve the women's quality of life, more attention must be paid to this subject and necessary precautions can be suggested.

References

- [1] Myint thu et al, and Diaz E, 'Premenstrual Syndrome among Female University Students in Thailand, Faculty of Nursing Science, Assumption University Bangkok, Thailand, AU J.T.(2006) 9(3): 158-162.
- [2] Nisar N. et al 'Frequency, Intensity and Impact of Premenstrual Syndrome in Medical Students' Journal of the College of Physicians and Surgeons Pakistan 2008, Vol. 18 (8): 481-484
- [3] Brohi Z .P. B. et al "Frequency and Impact of premenstrual syndrome on quality of life" Pak J Med Sci 2011 Vol. 27 No. 2
- [4] Antal A. B, et al "Premenstrual Syndrome: Prevalence In Students Of The University Of Calabar, Nigeria" African Journal of Biomedical Research, Vol. 7 (2004); 45 -50 ISSN 1119 – 5096 © Ibadan Biomedical Communications Group.
- [5] L. Joseph et al Premenstrual syndrome A Natural Approach to Management Applied Nutrition Science Reports (1999).
- [6] O.Sibel et al Premenstrual syndrome and management behaviors in Turkey. Australian Journal of Advanced Nursing volume 28 Number 3.
- [7] Ziba Taghizadeh et al, The effect of Premenstrual Syndrome on Quality of Life in Adolescent girls. Iranian J Psychiatry 3:3, Summer (2008).
- [8] Ramya S et al effect of educational program on premenstrual syndrome in adolescent school girls. International Journal of Reproduction, Contraception, Obstetrics and Gynecology (2014).
- [9] http://en.wikipedia.org/wiki/Premenstrual_syndrome(5-12-2014)