A Comparative Study of Premenstrual Syndrome among Married and Unmarried Women

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

Premenstrual syndrome is characterized by a wide range of psychological, physical, and physiological symptoms. The study's goal was to evaluate and contrast premenstrual symptoms in married and unmarried women. The sample size was 300 women, including 150 unmarried and 150 married women selected by age group at SreeBalaji Medical College and Hospital's Obstetrics and Gynecology Out Patient Department. Data was collected from unmarried and married women using a premenstrual symptoms checklist. At the 0.05 level of significance, the value was confirmed to be statistically significant. There was a considerable difference in premenstrual symptoms between unmarried and married women, it can be deduced.

Keywords: Premenstrual syndrome; age; married.

1. INTRODUCTION

The International Statistical Classification of Diseases and Related Health Problems 10th Revision (WHO, 1992) defines premenstrual syndrome (PMS) as the occurrence of one painful premenstrual symptom among numerous symptoms [1]. While PMS negatively affects one's quality of life and social functioning, the presence of merely PMS symptoms is rarely seen as upsetting or debilitating; thus, the presence of PMS symptoms differs from a categorical diagnosis of PMS [2]. Premenstrual symptoms are mild to moderate in intensity, are

not particularly debilitating, and do not necessarily occur on a regular basis, whereas premenstrual syndrome is more severe, involves a specific subset of symptoms, occurs on a regular basis, and has a significant impact on a woman's life.

Every woman's menstrual period is a natural occurrence that occurs throughout her reproductive years. During their menstrual period, the majority of women suffer some level of pain and discomfort. Many girls today experience medical problems related to menstruation, such as dysmenorrhea, weight gain, headaches, backaches, breast soreness, mood swings, and depression [3,4].

According to the research, a large number of women suffer with PMS to varying degrees, and premenstrual difficulties can interfere with a woman's ability to perform at home, at work, or in her interactions with others. There are only a few studies among Indian women of all ages that we are aware of. It's critical to look into the prevalence, severity, and most common symptoms of PMS in different populations in order to improve the quality of life, health, and well-being of reproductive-age women and the current study adds to that knowledge.

2. MATERIALS AND METHODOLOGY

This study was conducted in 300 women (150 married and 150 unmarried) of reproductive age group attending the Obstetrics and Gynaecology Out Patient Department, SreeBalaji Medical College and Hospital, Chrompet, Chennai-44 in collaboration with the Department of psychiatry, SreeBalaji Medical and Hospital, Chrompet, Chennai-44.

2.1 Study Design

Cross-Sectional Comparative Study.

2.2 Inclusion Criteria

1. Both married and UIU:J.arried women.
2. Age 18 to 35 years.
3. Having regular menstrual period for the last 6 months.
4. Women willing to participate in this study.

2.3 Exclusion Criteria

1. Women who are currently pregnant or lactating.

2. History of any chronic illness, diabetes, hypertension and heart disease.
3. Current depression /anxiety.
4. Women who are currently using a honnonal method of contraception.
5. Women with history of psychiatric illness or any antipsychotic drugs.
6. Women with proven Fibroadenosis of breast.
7. Women with endometriosis or pelvic inflammatory disease.

The purpose of the study was explained to the women and an informed consent was obtained m their own language. A Comprehensive Semi Structured proforma was used to collect information about a wide variety of variables and presentation of the symptoms .It contained the following:

1. Demographic details
2. Clinical Assessment which included detaile d history taking and physical examination.
3. Premenstrual Tension Syndrome Assessm ent Scale Questionnaire.

All women with or without symptoms of premenstrual syndrome were included in the study.In these women,the following detailed history was obtained.

1. **General:** Demographic details including age of the women, address, Education, Occupation, Marital status, Type of family whether nuclear or extended and Socio Economic Status was calculated according to"Modified Kuppusamy Scale".
2. **Obstetric History:** [In case of married women] includes the number of children.
3. **Gynaecological History:** Menstrual history-Age at menarche, Lastmenstrual period, Regularity,association of pain,history of passing clots, history of premenstrual syndrome.
4. **Marital History:** [Inmarried women]Married how long; consanguinity, any marital problems including social and occupationaldistress,physicaldistress,finan cialdistress,emotionaldistressandconflictwit hhusband/inlaws.
5. **Past Medical History:** History of diabetes mellitus, hypertension,mumps, measles, epilepsy/head injury, any drug intake, substance abuse, chemotherapy or radiotherapy ,any previous psychiatric disturbances and history of previous surgeries.

6. **Personal History:** Diet, sleep pattern, bladder and bowel habits, any history of smoking oralcoholintake,any early traumatic childhood experience, parentral deprivation during childhood.
7. **Family History:** Any Medical /Psychological illnesses in the family members.
8. **General Examination:** Height, Weight, Body mass index, Vitals,Cardiovascular System, Respiratory System, Central Nervous System,Thyroid and Breasts, Per abdomen, Local Examination and Bimanual Examination in casesof married women.

The results thus achieved have been statistically analyzed and presented.

3. RESULTS

This tabulation gives the age category of the cases. In total here were 5 cases in the married group and 24 cases in the unmarried group under the age 20. There were 49 cases in the married group and81 cases in the unmarried group between the age group 21 - 25. There were 53 cases in the married group and 42 cases in the unmarried group between the age 26 - 30. There were 43 cases in the married group and3 cases in the unmarried group abovetheage30to35 (Table 1).

This tabulation gives the Body Mass Index (BMI) classification of the cases. In total there were 5 cases in the married group and 8cases in the unmarried group in BMI under 18 (Underweight). There were 55 cases in the married group and 52 cases i.n the unmarried group in the BMI classification 18.5 - 24.99 (Normal weight). There were 71 cases in the married group and 74cases in the unmarried group in the BMI classification 25 - 29.99 (Over weight). There were 19 cases in the married group and 16 cases in the unmarried group in the BMI classification above 30 (Obese) (Table 2).

This tabulation gives the occupational classification of the cases. In total there were 57 cases in both the groups as working. There were 62 cases who were housewives in the married group and 11 cases in the unmarried group were idle at home. There were 31cases in the married group and 82 cases in the unmarried group were students (Table 3).

Table 1. Distribution of subjects according to age

Age (inyears)	Noof married cases	Noof unmarried cases
18-20	5	24
21-25	49	81
26-30	53	42
31-35	43	3
Total	150	150

Table 2. Distribution of subjects according to BMI

	Married		Unmarried	
BMI	No of cases	%	No of cases	%
<18.5	5	3	8	5
18.5-24.99	55	37	52	35
25-29.99	71	47	74	49
>30	19	13	16	11
Total	150	100	150	100

Table 3. Distribution of subjects according to occupation

	Married		Unmarried	
OCCUPATION	No o fcases	%	No of cases	%
Working	57	38	57	38
Idle at Home/Housewives	62	41	11	08
Student	31	21	82	54
Total	150	100	150	100

Table 4. Distribution of subjects according to socioeconomic status

	Married		Unmarried	
SOCIO ECONOMICSTATUS	**No of cases**	**%**	**No of cases**	**%**
Upper Class	03	02	10	07
Upper Middle Class	56	37	11	07
Lower Middle Class	79	53	51	34
Upper Lower Class	07	04	59	39
Lower Class	05	04	19	13
Total	150	100	150	100

This tabulation gives the classification of the socio economic status of the cases. In total there were 3 cases in the married group and10 cases in the unmarried group in the upper class. There were 56 cases in the married group and 11 cases in the unmarried group in the upper middle class. There were 79 cases in the married group and 51cases in the unmarried group in the lower middle class. There were 7 cases in the married group and 59 cases in the unmarried group in the lower upper class. There were 5 cases in the married group and 19 cases in the unmarried group in the lower class (Table 4).

This table shows that Irritability is more severe in unmarried women compared to married women and the p value is 0.017(<0.05) hence statistically significant (Table 5).

This table shows that Tension is more severe in the unmarried group of women compared to the married group and the p value is 0.000(<0.05) hence statistically significant (Table 6).

This table shows that unmarried women have more severe forms of disturbances in their eating habits compared to married women. The p value is0.000(<0.05)hence statistically significant (Table 7).

This table shows that in married group, women in the age group of26-30 years have severe PMS while in the unmarried group, women in the age group of 21-25 years suffer severe PMS. However age as such does not show any significant association with the occurrence of PMS since p value is>0.05(0.654) (Table 8).

This table shows that women in over weight criteria ,both in married and unmarried group have severe PMS of about 36% and 54%respectivelyandthepvalueis <0.05(0.0216) , hence BMI has significant association with the occurrence of PMS (Table 9).

4. DISCUSSION

Our study demonstrates the prevalence and severity Premenstrual syndrome among married and unmarried women. p- value less than 0.05 are statistically significant. In a total of 300 women (150married and 150 unmarried) this study shows that there is significant association between marital status and severity of PMS. Unmarried women experience severe forms of PMS (53%) compared to married women (46%).Also the p value is <0.05 hence statistically significant. This could be due to changing lifestyle patterns and more stress related burdens met by theun married women nowa days. Also among married women, working group are affected very much by severe PMS (65%)compared to house wives(33%)and students(l %) and in the unmarried women both working and students are affected equally, 50% and 50%respectively.There exists statistical significance (pvalue <0.05) inrelationship to occupationan dseverity of PMS. This could be duet otheinc reased stress, responsibilities and work load burden in the working society compared to less stress in housewives and students. Also it might be due to carrier building, working women get married later and in tum this may be the real cause of increasing frequency in workingwomen as it has been reported that mentally unstable and unsatisfied women are more prone to cyclical ovarian hormone changes. Perhaps working class can report their symptoms well than the housewives and students who experience the same symptoms but are unable to report the properly [5-7].

This finding is supported by Mona A Abd El Hamid et al's study of PMS in 113 female employees, which found a statistically significant difference in physical symptoms (nausea and vomiting) between single and married participants, with a p value (0.050) for the single female participants [8]. Dinnerstein, 46, who conducted a study on the influence of

premenstrual symptoms on everyday activities and discovered that married women reported, increased symptoms of premenstrual syndrome, disagreed with this conclusion. These findings contradict those of Ghanbari, who observed no statistically significant difference between his investigated sample group in terms of marital status and syndrome symptoms. Also disagreed with Bakhshani et al., who claimed that there was no significant difference in symptoms of premenstrual syndrome between married and unmarried women in his study group [9].

Table 5. Comparison of irritability between married and unmarried

Irritability	Married	%	Unmarried	%
No Disturbance	39	26	15	10
Doubtful	64	43	11	07
Mild	20	13	16	11
Moderate	22	,-15	59	39
Severe	05	\.1)5	49	33
Total	150	100	150	100

Table 6. Comparison of tension between married and unmarried

Tension	Married	%	Unmarried	%
No Disturbance	47	31	19	13
Doubtful	52	35	12	08
Mild	20	13	07	05
Moderate	21	14	72	48
Severe	10	07	40	26
Total	150	100	150	100

Table 7. Comparison of eating habits between married and unmarried

Eating habits	Married	%	Unmarried	%
No Disturbance	64	43	29	19
Mild	54	36	73	49
Severe	32	21	48	32
Total	150	100	150	100

Table 8. Comparison of age and total score between married and unmarried

Age (inyears)	Married			Unmarried		
	Mild n (%)	Moderate n (%)	Severe n (%)	Mild n (%)	Moderate n(%)	Severe n (%)
18-20	1(5%)	2(3%)	02(3%)	5(38%)	18(32%)	1(2%)
21-25	07(37%)	20(33%)	22 f (¾)	08(62%)	23(40%)	50(63%)
26-30	04(21%)	22(35%)	27(39%)	0	16(28%)	26(31%)
31-35	07(37%)	18(29%)	18(26%)	0	0	3(4%)
Total	19(13%)	62(41%)	69(46%)	13(9%)	57(38%)	80(53%)

Table 9. Comparison of BMI and total score between married and unmarried

BMI	Married			Unmarried		
	Mild n (%)	Moderaten (%)	Severe n (%)	Mild n (%)	Moderate n (%)	Severe n (%)
<18.5	3(16%)	2(3%)	0	2(16%)	2(3%)	4(5%)
18.5 -24.99	07(37%)	23(37%)	20(;- %)	0	24(42%)	28(35%)
25-29.99	09(47%)	37(60%)	25(36%)	5(38%)	26(46%)	43(54%)
>30	0	0	24(34%)	6(46%)	5(9%)	5(6%)
Total	19(13%)	62(41%)	69(46%)	13(9%)	57(38%)	80(53%)

Results of the study by ZahidaHaq et al in 100 Karachi women aged between 20 to 40 yearsboth working women and housewives were included have shown that PMS is more commonly found in single - unmarried, divorced, separated women and widows. Women between 26-35 years of age are more prone to develop PMS in both groups under study. The same fact is in agreement with the findings of previous workers [10].

This study shows that there is no significant association between SES and PMS and the p value is >0.05. 50% of the unmarried women who experienced severe PMS were in the upper lower class, while the majority of the married women who had severe PMS (58%) belonged to lower middle class . This result is disagreed by the study conducted among adolescents in both rural and urban areas of West Bengal which states that Significant association was observed between significance (p value <0.05) in relationship of these symptoms to the unmarried group of women. Whereas impairment in efficiency/fatigue (26%) and Depression (26%) takes the top place in married women followed by lowered Motor-coordination/Physical activity (19%) and disturbances in Sexual drive (13%). The p value is <0.05 for all these symptoms, hence statistically significant. Majority of the women in both the groups experienced more than one symptom.

5. CONCLUSION

Irritability, Socioeconomic Status, Tension, Eating Habit, and Occupation were the most common symptoms among single and married women, respectively. Unmarried women reported a higher number of premenstrual symptoms. PMS is an essential health issue that has to be explored in depth because of the associated distress and stigma connected with the menstrual cycle.

CONSENT AND ETHICAL APPROVAL

As per international standard or university standard guideline patients consent and ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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