



Original Research Article

Assessment and Comparison of Premenstrual Symptoms among Unmarried and Married Women

K. Simarjeet¹, S. Poonam², S. Jyoti³

¹Nursing Tutor, Obstetric and Gynaecological Nursing Department, M.M. College of Nursing, Mullana.

²Principal, M.M. Institute of Nursing, Mullana.

³Dean & Principal, M.M. College of Nursing, Mullana, Ambala, Haryana, India.

Corresponding Author: K.Simarjeet

Received: 27/02/2015

Revised: 29/04/2015

Accepted: 05/05/2015

ABSTRACT

Premenstrual syndrome (PMS) is recurrent variable somatic, psychological and emotional symptoms that develop during the 7-14 days before the onset of menses and are ameliorated by the onset of menstruation in women who are mainly aged 20-40 years. The objective of the study was to assess and compare the premenstrual symptoms among unmarried and married women. Non Experimental research approach with comparative survey research design was used. The sample size comprised of 163 women which includes 100 unmarried and 63 married women selected by purposive sampling techniques of selected institutes of M.M. University Mullana. Premenstrual symptoms checklist was used to collect data from unmarried and married women. The computed Mann Whitney U (30.14) and Z (3.101) value were found to be statistically significant at 0.05 level of significance. It can be inferred that there was significant difference in premenstrual symptoms among unmarried and married women.

Key words: premenstrual symptoms, unmarried women, married women

INTRODUCTION

Health is an essential factor for a happy contented life. Change makes life more beautiful and worth living if one knows how to adopt oneself and adjust to the challenges presented by the situation, He or she can face any challenge in life. The changes are more frequent in girls than boys, girl's mature earlier reach the period of rapid growth earlier than boys. ^[1]

Adolescents comprise 20% of the world's total population. Out of 1.2 billion females worldwide, about 85% live in developing countries. In India, there are 190

million adolescents comprising 21% of India's total population. ^[2]

In Sri Lanka among a sample of adolescents, individuals with PMS experienced 65.7%. A cross-sectional survey of 1295 rural adolescent girls aged 13-19 years in Malaysia showed that most participants (63.1%) identified themselves as having PMS. A prevalence of 61.4% was also found among 10-17 years old adolescent girls in Ankara, Turkey. Similarly, in a population-based study on 1395 women aged 15-45 years in Brazil found that the prevalence of self reported

PMS was 60.3%. As calculated approx 1 in 6 or 15.00% or 40.8 million people in USA. In India the rate of PMS is at higher level, 159,760,591 against 1,065,070,607 populations. [3]

The menstrual period is a natural phenomenon which occurs throughout the reproductive years of every woman. Most female experience some degree of pain and discomfort in their menstrual period. In modern time for many girls physical problem can arise in relation with menstruation such as dysmenorrhea, weight gain, headache, backache, breast tenderness, mood swings and depression etc. [4]

Premenstrual syndrome (PMS) is recurrent variable somatic, psychological and emotional symptoms that develop during the 7-14 days before the onset of menses and are ameliorated by the onset of menstruation in women who are mainly aged 20-40 years. Over 150 different symptoms have been linked to premenstrual syndrome (PMS) but the most common are bloating, breast pain, cyclical weight gain, fatigue, headaches, aggressiveness, depression, irritability and inability to concentrate. The symptoms in premenstrual syndrome (PMS) are thought to be due to variations in ovarian sex steroids and low circulating serotonin levels which differs from the high levels of prostaglandins seen in primary dysmenorrhea. [5] Sudden mood changes (52%), swelling or pain in breasts (43%), anger (31%), headache (30%), tiredness / lethargy (28 %), lower abdominal pain (18%), etc. are common reported menstrual problems. [6]

In a study 42% faced PMS regularly, while 58% occasionally. Of the 100 participants 68% suffered with backache, 64% leg cramps, 62% fatigue, breast tenderness and anger whereas 58% suffered with anxiety and generalized body ache. Of all the sufferers only 34% had received the treatment for PMS. Irrespective of the age

PMS was common problem faced by women. Since there are reports stating that the severity of PMS can hamper the daily routine and even lead to suicidal tendency, it is essential that awareness programs need to be conducted to address the importance of managing the issue by pharmacological and non-pharmacological methods. [7]

The common symptoms of PMS and PMDD include breast tenderness, bodyaches, headache, bloating, sleep disturbances, appetite change, poor concentration, decreased interest, social withdrawal, irritability, mood swings, anxiety/tension, depression, and feeling out of control. Of these, six symptoms identified as core symptoms suggesting that clinical diagnosis of PMS can be developed around a core symptom group. The identified core symptoms are: anxiety/tension, mood swings, aches, appetite/food cravings, cramps, and decreased interest in activities. However, although it has been estimated that a high proportion of women in reproductive age (up to 90%) experience some degree of premenstrual symptoms, the diagnosis of PMS or PMDD is assigned to those women whose lives are significantly affected by moderate to severe symptoms. Premenstrual syndrome (PMS), any of various symptoms experienced by women of child bearing age in the day's immediately preceding menstruation. It is most common in women in their twenties and thirties. Some 70%-90% of menstruating is having PMS on a cyclical basis. [8]

PMS is estimated to affect up to 75% of women during their child bearing years. It occurs more often in women:

- Between their late 20s and early 40s
- Who have at least one child
- With a family history of a major depression
- With a history of postpartum depression or an affective mood disorder [4]

MATERIALS AND METHODS

Non Experimental research approach with comparative survey research design was used. The sample size comprised of 163 women which includes 100 unmarried and 63 married women having regular menstrual cycle and were in the age group of 18 -30 years of selected institutes of M.M. University Mullana and selected by purposive sampling techniques. Unmarried and married women with gynecological disorders and undergoing treatment were excluded. Premenstrual symptoms checklist was used to collect data from unmarried and married women regarding the presence of premenstrual symptoms before the onset of menstruation. It comprised of 15 items to gather data regarding presence of premenstrual symptoms which included mood swings, fatigue, loss of appetite, breast heaviness, poor concentration, joint pain, irritability, weight gain, acne, anxiety and depression. Content validity of the tools was established by submitted to nine experts. Nine experts included seven experts from Obstetric and gynecological nursing and two from medical surgical nursing. The reliability of premenstrual symptom checklist was found to be 0.89 checked by test and retest method.

Ethical approval was obtained from the Institutional Ethical Committee for conducting the research study. The purpose for carrying out research project was explained to the study subjects and assurance for confidentiality was given. Written informed consent was taken from each subject after explaining the purpose of research project. The data collection for the final study was done in the month of September and October. IN FIRST PHASE, the screening of the sample was done by asking questions to know the women who were suffering from premenstrual symptoms. Personal variables and was filled

up by unmarried and married women to collect baseline data and to know expected due date of menstruation. IN SECOND PHASE, Two days prior to the expected due date of menstruation, researcher approached the study subjects to explore the onset of premenstrual symptoms.

RESULTS

Demographic characteristics

Data shows nearly half (47%) of unmarried were in the age group of 18- 21 years whereas less than half (42.86%) of married women were in the age group of 21- 24 years. Most of the unmarried (77%) and married women (74.60%) were students. Majority of unmarried (61%) and married women (68.25%) belonged to Hindu religion. Most of unmarried (71%) and married women (66.66%) were vegetarian. More than half (56%) of unmarried and majority of married women (65.08%) belonged to urban area. The computed Chi - square was not found to be statistically significant with occupation, religion, dietary habits and native place at 0.05 level of significance, so group was homogeneous on the basis of occupation, religion, dietary habits and native place whereas the computed Chi-square was found to be statistically significant with age at 0.05 level of significance, so group was heterogeneous on the basis of age.

Menstrual Characteristics

Data shows less than half (43%) of unmarried women attained their menarche at the age of 14-15 years whereas for married women (41.27%) it was 12-13 years. Majority of unmarried (61%) and married women (66.67%) were having no family history of dysmenorrhea. Half (51%) of unmarried and more than half (58.74%) of married women were reported to have pain for one day. The computed Chi-square value (15.60) of duration of pain was found to be statistically significant at 0.05 level of

significance. So, it is inferred that among married women pain was less than 1 day whereas unmarried reported to have pain more than 3 days. Therefore, there was significant difference in the duration of pain

between unmarried and married women. Majority (62%) of unmarried women were having continuous pain whereas more than half (54%) of married women were having intermittent pain.

TABLE 1: Frequency and Percentage, Rank, U value and Z value of Unmarried and Married Women in terms of Premenstrual Symptoms

Presence of premenstrual symptoms of dysmenorrhea		N-163						U Value	Z value
		unmarried women n=100		Rank	married women n=63		Rank		
		f	%		F	%			
1.1	Mood swings	59	59	4	26	41.27	5	30.14	3.10
1.2	Irritability	75	75	1	46	73.01	1		
1.3	Fatigue	69	69	2	41	65.07	2		
1.4	Headache	30	30	11	21	33.33	7		
1.5	Breast heaviness or tenderness	45	45	6	29	46.03	4		
1.6	Constipation	24	24	14	16	25.40	10		
1.7	Abdominal cramps	61	61	3	32	50.79	3		
1.8	Acne	39	39	9	20	31.75	8		
1.9	Joint pain	33	33	10	18	28.57	9		
1.10	Loss of appetite	40	40	8	21	33.33	7		
1.11	Poor concentration	49	49	5	25	39.68	6		
1.12	Weight gain	25	25	13	20	31.75	8		
1.13	Anxiety	44	44	7	29	46.03	4		
1.14	Depression	26	26	12	10	15.87	11		
1.15	Any other, if yes then specify								
	Restlessness	02	40		02	33.33			
	Weakness	01	20		00	00			
	Pain in legs	01	20		00	00			
	Increase	01	20		02	33.33			
	appetite	00	00		01	16.67			
	Diarrhea	00	00		01	16.67			

Z (14) = 0.42

*significant

Data presented in Table 1 shows that most of notable symptoms among unmarried and married women were irritability (73%) and (73.01%) followed by fatigue (69%) and (65.07%) and abdominal cramps (61%) and (50.79%) respectively. However, least reported symptoms among unmarried women were depression (26%) followed by weight gain (25%) and constipation (24%) whereas for married women, it was joint pain (28.57%), constipation (25.40%) and depression (15.87%). However, numbers of premenstrual symptoms were reported more by unmarried women.

The Mann Whitney U Test was applied to compare both groups in terms of premenstrual symptoms, computed U (30.14) and Z (3.101) values were found to be statistically significant at 0.05 level of significance. So, it can be inferred that there

was significant difference in premenstrual symptoms among unmarried and married women.

DISCUSSION

The present study findings indicated that presence of premenstrual symptoms were more in unmarried women than married women and most notable premenstrual symptoms were irritability, fatigue and abdominal cramps. The study findings were consistent with the findings of the study conducted by Gumanga SK, Kwame Aryee [7] showed that over 150 different symptoms have been linked to premenstrual syndrome (PMS) but the most common were bloating, breast pain, cyclical weight gain, fatigue, headaches, aggressiveness, depression, irritability and inability to concentrate whereas a similar

study conducted by K. Navdeep, Thakur Ramesh ^[9] revealed that 197(78.2%) subject having lower abdomen pain, 164 (66.1%) back ache, 160 (64.5%) irritability, 147 (59.21%) fluctuation of mood, 129 (52.01%) lower efficiency of work performance , 126 (50.8%) restlessness , 113 (45.6%) pain in thighs, 106 (42.7%) distraction from work, 105 (42.3%) breast tenderness, 104 (41.9%) difficulty in concentration, 104 (42.7%) body ache, The study findings were consistent with the findings of the study conducted by Shruti Brahmhatt, B. M. Sattigeri, Heena Shah, Ashok Kumar, Devang Parikh ^[10] showed that out of 100 participants 68% suffered with backache, 64% leg cramps, 62% fatigue, breast tenderness and anger whereas 58% suffered with anxiety and generalized body ache.

The present study findings showed that less than half (43%) of unmarried women attained their menarche at the age of 14-15 years whereas for married women (41.27%) it was 12-13 years. The study findings were consistent with the findings of the study conducted by Fikru Wakjira Tolossa and Mebratu Legesse Bekele ^[11] showed that 111 (64.2%) started menstruation at the age of 13-15 years followed by the age of <13 years (39(22.5%)). The usual menstrual cycle of the participants was 28 days (100(57.8%)) and menstrual duration was 4-5 days (56.2%).

CONCLUSION

Most of notable symptoms among unmarried and married women were irritability (73%) and (73.01%) followed by fatigue (69%) and (65.07%) and abdominal cramps (61%) and (50.79%) respectively. Numbers of premenstrual symptoms were reported more by unmarried women. The computed Mann Whitney U (30.14) and Z (3.101) value of premenstrual symptoms were found to be statistically significant at

0.05 level of significance. So, it can be concluded that there was significant difference in premenstrual symptoms among unmarried and married women.

Recommendations

The researcher further recommended that the study can be replicated on larger sample to validate the findings and make generalizations, to assess the impact of premenstrual symptoms on quality of life among females and experimental study may be conducted to evaluate the effectiveness of alternative and complementary therapies for premenstrual symptoms.

Implications

The finding of the study can be implemented to teach the nursing students regarding causes, sign and symptoms and treatment modalities of premenstrual symptoms to enhance the knowledge and skills to manage the client who are suffering from premenstrual symptoms, develop health education material like informational booklet, pamphlets and video on home remedies, exercises, yoga, meditation etc. for females which will give an awareness regarding premenstrual symptoms. The community health nurse should be involved in increasing the awareness among adolescents and mothers regarding onset of menarche, premenstrual symptoms, menstrual hygiene through the use of various awareness programmes and by providing health education.

ACKNOWLEDGEMENT

We express our appreciations to the respected officials of the institutes of M.M. University Mullana, who cooperated with us for executing this research. The authors thank all the staffs and students that participated in this study.

REFERENCES

1. Aggarwal K. Dysmenorrhea in adolescent girls in rural area of Delhi [Internet].1999[Updated 2008 July-Sept 08; cited 2008 Nov 10]; Available

from:

<http://www.medind.nic.in/ibl/to8/i1/b/to8i1p39.pdf>

2. K. Malleshappa, Shivaram Krishna, Nandini C. Knowledge and attitude about reproductive health among rural adolescent girls in Kuppam mandal: An intervention study. *Biomedical Research*. 2011. 22 (3): 22-26
3. Manal Ahmad Al-Batanony, Sultan Fahad AL-Nohair. Prevalence of Premenstrual Syndrome and Its Impact on Quality of Life among University Medical Students, Al Qassim University, KSA. *Public Health Research*. 2014. 4(1): 1-6
4. Poureslami M, Osati- AF. Assessing knowledge, Attitudes and Behavior of Adolescent Girls in Suburban Districts of Tehran about Dysmenorrhea and Menstrual Hygiene [Internet] 2002 [Updated 2008 May; cited 2008 Nov 12]. Available from: URL:<http://www.bridgew.edu/soAS/Jiw s/June02/DysmTehran.pdf>
5. Dhingra R, Kumar A. Knowledge and Practices Related to Menstruation among Tribal (Gujjar) Adolescent girls. *Ethno-Med* 2009. 3(1): 43-48.
6. Rafia Bano, Eyad AlShammari, Hanouf Khalid Salm Aldeabani. Study of the Prevalence and Severity of Dysmenorrhea among the University Students of Hail City. *International Journal of Health Sciences and Research (IJHSR)*. 2013.3(10): 15-22
7. Gumanga S K1 & Kwame-Aryee R. Prevalence and Severity of Dysmenorrhea Among Some Adolescent Girls In A Secondary School In Accra, Ghana. *Postgraduate Medical Journal of Ghana*. September 2012. 1(1):6-12
8. Rapkin AJ, Mikacich JA: Premenstrual syndrome in adolescents: diagnosis and treatment. *Pediatr Endocrinol Rev* 2006.3(1): 132-137.
9. K. Navdeep, Thakur Ramesh. A descriptive study to assess the premenstrual syndrome and coping behaviour among nursing students. *Nursing and Midwifery Research Journal*. January 2009.5(1):19-23
10. Shruti Brahmhatt, B. M. Sattigeri, Heena Shah, Ashok Kumar, Devang Parikh. A Prospective survey study on premenstrual syndrome in young and middle aged women with an emphasis on its management. *International journal of research in medical sciences*. 2013; 1(2):69-72
11. Fikru Wakjira Tolossa and Mebratu Legesse Bekele. Prevalence, impacts and medical managements of premenstrual syndrome among female students: cross-sectional study in college of health sciences. *BMC Women's Health* 2014, 14: 52-60.

How to cite this article: Simarjeet K, Poonam S, Jyoti S. Assessment and comparison of premenstrual symptoms among unmarried and married women. *Int J Health Sci Res*. 2015; 5(6):384-389.
