



The Relationship between Premenstrual (Syndrome) Disorders and Depression in Married and Single Women

Marzieh Mashal Pour Fard* , Masoumeh Besharati pour , Zahra Ebadi

Department of Psychology, Payame Noor University (PNU), Tehran. Iran

mmashalpoor@yahoo.com

(Received Jun 2016; Published September 2016)

ABSTRACT

The aims of the study were to examine the relationship between disorders (syndrome) premenstrual depression in married women and unmarried. A cross-sectional survey was conducted among married and single women. Participants included 200 married and single women. The data collection tools included demographic information questionnaire, daily symptom severity questionnaire, and a provisional diagnosis of premenstrual syndrome questionnaire and beck depression scale. The data analyzed by independent t test, Pearson correlation coefficients in SPSS. Twenty hundreds of the subjects (women and girls) met the criteria for PMD but the impairment of girls was severe. The symptom intensity and frequency of the subjects (women and girls) were different for PMDD. In these two groups, Psychiatric problems, including depression and anxiety, were high. In total, almost all of adolescents reported suffering from distressing premenstrual symptoms, and girls were severe in their symptom severity and characteristics in comparison with married women.

Keywords: Premenstrual (syndrome) Disorders, Depression, Married and single Women

DOI:10.14331/ijfpss.2016.330062

INTRODUCTION

Women are about twice as likely as men to suffer from depression. This two-to-one difference persists across racial, ethnic, and economic divides. In fact, this gender difference in rates of depression is found in most countries around the world. There are a number of theories that attempt to explain the higher incidence of depression in women. Many factors have been implicated; including biological, psychological, and social factors. Hormonal fluctuations during the menstrual cycle can cause the familiar symptoms of premenstrual syndrome (PMS), such as bloating, irritability, fatigue, and emotional reactivity. For many women, PMS is mild. But for some women, symptoms are severe enough to disrupt their

lives and a diagnosis of premenstrual dysphoric disorder (PMDD) is made (Sajjad, Shakil, & Khan, 2013). Premenstrual syndrome (PMS) is one of the most common difficulties in women at their reproductive age (Freeman, Sammel, Lin, Rickels, & Sondheimer, 2011). PMS is known as the recurrent mood and physical symptoms which is a cluster of psychological and somatic symptoms that are limited to the late luteal phase of the menstrual cycle. (Ford, Lethaby, Roberts, & Mol, 2009; Seedhom, Mohammed, & Mahfouz, 2013). This syndrome is more common among women and is more common among the Women associated with depression or mood disorders (Organization, 2010). The onset of menstruation signifies hallmark of every female pubertal

development (Lee, Chen, Lee, & Jagmohni, 2006). During menses, some women will experience physical, psychological, and emotional symptoms called premenstrual syndrome. These include irritability, tension, dysphoria, anxiety, insomnia, headache, fatigues, mood swings, increasing emotional sensitivity, and change in libido, abdominal cramps, constipation and tenderness in the breasts (Yaacob et al., 2012). A severe form of PMS has been classified as premenstrual dysphoric disorder (PMDD) according to the diagnostic and statistical manual of mental disorders, fifth edition (DSM-5) (Kupfer, Kuhl, & Regier, 2013). The prevalence of premenstrual dysphoric disorder (PMDD), a severe form of PMS accompanied by affective symptoms, is likely equal to or higher than in adults. The diagnosis of a PMDD requires a medical and psychological history and physical examination but it is the daily prospective charting of bothersome symptoms for two menstrual cycles that will clearly determine if the symptoms are related to a PMDD or to another underlying medical or psychiatric diagnosis. The number and type of symptoms are less important than the timing (Rapkin & Mikacich, 2013). we could not find any study about premenstrual syndrome in married and unmarried women but there is pervasive related study in different areas, for example the comorbidity of premenstrual syndrome (PMS) or premenstrual dysphoric disorder (PMDD) and bipolar disorder (BD), results showed, patients with PMS or PMDD also have an increased risk of having BD-I.

In addition, bipolar women susceptible to hormonal changes exhibit more severe symptoms, more frequent relapses and a worse therapeutic response (Cirillo, Passos, Bevilacqua, López, & Nardi, 2012). investigate the presence of premenstrual syndrome (PMS), primary dysmenorrhea (PD) and depression among women with fibromyalgia (FM) and healthy females and to determine possible factors related with PMS and PD in FM. There is an increased frequency of premenstrual syndrome and dysmenorrhea in FM patients. The patients with high symptom severity scores and high depression scores among the FM patients are at risk of PMS and PD (Terzi, Terzi, & Kale, 2015). In another study, a significant difference was seen in mean emotional, behavioral and physical premenstrual symptom severity in the intervention group before and after the intervention. However, this difference was not statistically significant in the control group. The results of this study showed that Valerian root extract may reduce emotional, physical, and behavioral symptoms of premenstrual syndrome (Moghadam, Rezaei, Gholami, Kheirkhah, & Haghani, 2016). Given that many causes in the etiology of these disorders, but there is no definitive cure and let people take a lot of time spent

in the doldrums, why this research is aimed Trying to assess depression in women and girls. We assume that the rates of depression in women are less and different experienced depression than the girls because they handle family matters and children.

METHODOLOGY

In this study, according to the research objectives, descriptive and analytical methods used. Population included all married and single women. Sampling In this study, 100 patients (50 single and 50 married women) have been randomly selected and participated in the study. The data collection tool, to gather the required information inventory (BDI) and self-PMS is used. The reliability of the data collection tool: To assess the reliability of the questionnaire data entry software SPSS version 19 imported and used Cronbach's alpha test. The Cronbach's alpha coefficient obtained if the number is greater than 0.76, indicating the reliability of the questionnaire. The reliability of the questionnaire, 0.85 achieved a number that confirms reliability. The Beck Depression Inventory (BDI) is a 21-item; self-report rating inventory that measures characteristic attitudes and symptoms of depression (A. Beck, Ward, Mendelson, Mock, & Erbaugh, 1962). Internal consistency for the BDI ranges from 0.73 to 0.92 with a mean of 0.86. The BDI demonstrates high internal consistency, with alpha coefficients of 0.86 and 0.81 for psychiatric and non-psychiatric populations respectively (Beck, Steer, & Carbin, 1988). Evaluating the symptoms of premenstrual syndrome Bakhshani, Mousavi, and Khodabandeh (2009) is known as a valid questionnaire. The subjects of their symptoms on a 4-point Likert scale (not at all, mild, moderate, moderately high and very high) graded according to their severity. Answers to each of the respective scores of 0, 1, 2, 3, 4 belong. It was decided to meet again in the present study, Cronbach's alpha reliability was calculated and the amount of 0.88 were obtained.

FINDINGS

As can be seen in Table 1, average of depressive disorder in married women and single is equal 15.79 and its standard deviation is 15.9. The mean depression in married women is 12.79 and the standard deviation is 6.88. Also the average depressive disorder in single woman is 18.79 and the standard deviation is 8.79. These results indicate that the average depression in single women is more than married women.

Table 1. Descriptive information of depressive disorder in sample groups

Variable	Group	F	Mean	D.S	Min	Max
Depression	Married	100	12.79	6.88	3	30
	Single	100	18.79	8.13	4	38
	Total	200	15.79	15.09	3	38

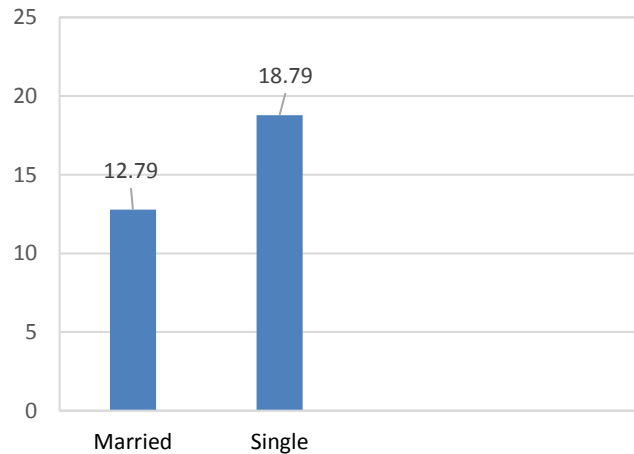


Fig 1. Depressive disorder in sample groups

The results in Table 2 show the Average premenstrual disorders in sample groups is 16.50 and standard deviation is 11.70 .Also in married women is 11.82 and the standard deviation is equal 7.10. And premenstrual disorders in single

women is 21.18 and the standard deviation is 13.43. These results suggest that the average premenstrual disorders in single women is more than married women.

Table 2: Premenstrual disorder in married and single women

Variable	Group	F	Mean	S.D	Min	Max
Premenstrual disorder	Married	100		7.10	4	32
	Single	100	21.18	13.43	3	57
	Total	200	16.50	11.71	3	57

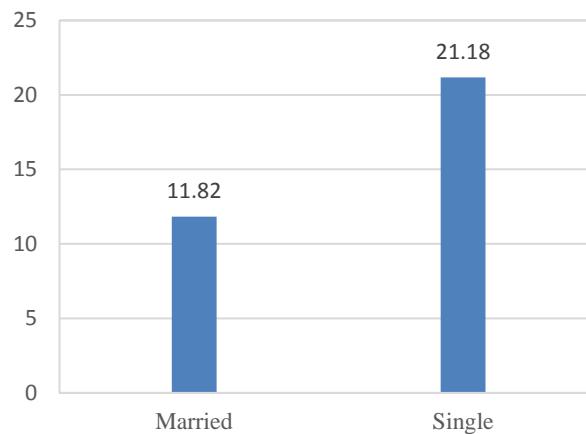


Fig 2. Premenstrual disorder in married and single women

In addition the analysis of First hypothesis show the correlation between premenstrual disorders and depression among married and single is 0.544. Therefore this correlation is significant at level of $p < 0.05$. In the other word this result suggest there is a significant relationship between

premenstrual disorders and depression in married and single women. It means that premenstrual disorders increase the score of married women and single women is associated with increased depression scores. The results show in Table 3.

Table 3. Correlation between premenstrual disorders and depression in sample groups

Premenstrual Disorder	F	Correlation Coefficient	Sig
	200	0.544	0.001

Analysis of Second hypothesis illustrated that the correlation between premenstrual disorders and depression among married is equal 0.369. Thus this correlation is significant at the level of $p < 0.05$.

These results suggest there is a significant relationship between premenstrual disorders and depression in married and women. The findings show in Table 4.

Table 4. Correlation between premenstrual disorders and depression among married women

Premenstrual Disorder	F	Correlation Coefficient	Sig
	200	0.369	0.001

The analysis of Third hypothesis show the correlation between premenstrual disorders and depression among married is equal 0.524. Therefore is significant at level of 0.05.

These results suggest there is a significant relationship between premenstrual disorders and depression in single women. The findings show in Table 5.

Table 5. Correlation between premenstrual disorders and depression among single women

Premenstrual disorder	F	Correlation Coefficient	Sig
	200	0.524	0.001

The Fourth Hypothesis analysis by independent T test. The results show, the average of depression have significant

different between married and single women at level of 0.001. The findings show in Table 6.

Table 6. Comparison means of depressive disorder between married and single women

Variable	Group	F	Mean	S.D	Df	D.A	T	Sig
Depressive Disorder	Married	100	12.79	6.88	198	6	-5.63	0.001
	Single	100	18.79	8.13				

The analysis of Fifth hypothesis show, the average of premenstrual disorders is different between married and single

women at 0.001. Thus the differences is meaningful. The findings show in Table 7.

Table 7. Comparison means of premenstrual disorders between married and single women

Variable	Group	F	Mean	S.D	Df	D.A	T	Sig
Premenstrual Disorders	Married	100	11.82	7.10	198	9.36	-6.16	0.001
	Single	100	21.18	13.43				

CONCLUSION AND DISCUSSION

In the present study, PMS and depression were statistically higher in the single women compared to the married group. In FM single patients, symptom severity scores were statistically significantly higher PMS compared to married group. In the present study, PMS was established in 16.5% of the FM patients. In the literature, 15–20 % of the menstruating women were reported to have PMS (Lete et al., 2011). The results suggest that premenstrual disorders and depression in married and single women have significant relationship differences, the rise premenstrual disorders of the single women is associated with increased depression scores. The finding of this study has been consistent with the results of a study by Moghadam et al. (2016) in were conducted to investigate the effect of Valerian root extract on the intensity of PMS symptoms. A significant difference was seen in mean

emotional, behavioral and physical premenstrual symptom severity in the intervention group before and after the intervention (Moghadam et al., 2016). Average premenstrual disorders differences between married and single women is meaningful. Results showed that there are differences between the average premenstrual disorders of married and single women. It means that PMD in the single women was sever than the married group this finding is consistent with Jamali S ; Karimi F (2013), were compared the role of age and marital of premenstrual syndrome in married and single women. This cross-sectional study is done on 230 married women. There was a significant difference between the two single groups of (15-18 and 21-28 years) and a group of married women 31-38 years) in symptoms of premenstrual syndrome. The average difference in the age group 18-15 years and women 38-31 years with 28-21 girls 28-21 year-old girls and women 31-38 years old is significant. The differences were significant. The

incidence and type of physical and psychological symptoms of premenstrual syndrome were different in each group. Girls 28-21 years old with an average of 87.29 had the most symptoms of premenstrual syndrome. Many studies have proved our data and showed that the severity of symptoms was worse in single compared with married. So our study is line with (Moghadam et al., 2016; Payne et al., 2007; Tadakawa, Takeda, Monma, Koga, & Yaegashi, 2016). As mentioned, this syndrome

occurs as physical and psychological symptoms and disrupts girls and women compatibility. Therefore due to the importance of the subject, the researchers suggest the survey of other effective variables on this syndrome. These variables include age, education, socioeconomic status, place of residence and stress and more. The exact cause of this syndrome has not been correctly diagnosed, but due to its impact on the health and social costs, treatment is necessary.

REFERENCES

- Bakhshani, N. M., Mousavi, M. N., & Khodabandeh, G. (2009). Prevalence and severity of premenstrual symptoms among Iranian female university students. *J Pak Med Assoc*, 59(4), 205-208.
- Beck, A., Ward, C., Mendelson, M., Mock, J., & Erbaugh, J. (1962). Reliability of psychiatric diagnoses. A study of clinical judgements and ratings. *Am J Psychiatry*, 19, 351-356.
- Beck, A. T., Steer, R. A., & Carbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical psychology review*, 8(1), 77-100.
- Cirillo, P. C., Passos, R. B. F., Bevilacqua, M. C. d. N., López, J. R. R. A., & Nardi, A. E. (2012). Bipolar disorder and Premenstrual Syndrome or Premenstrual Dysphoric Disorder comorbidity: a systematic review. *Revista brasileira de psiquiatria*, 34(4), 467-479.
- Ford, O., Lethaby, A., Roberts, H., & Mol, B. W. J. (2009). Progesterone for premenstrual syndrome. *The Cochrane Library*.
- Freeman, E. W., Sammel, M. D., Lin, H., Rickels, K., & Sondheim, S. J. (2011). Clinical subtypes of premenstrual syndrome and responses to sertraline treatment. *Obstetrics and gynecology*, 118(6), 1293.
- Jamali S ; Karimi F. (2013). Comparison premenstrual syndrome in women, single and married Ayyanghrb city. *Journal of Kermanshah University of Medical Sciences*, 18(10).
- Kupfer, D. J., Kuhl, E. A., & Regier, D. A. (2013). DSM-5 the future arrived. *Jama*, 309(16), 1691-1692.
- Lee, L., Chen, P., Lee, K., & Jagmohani, K. (2006). Menstruation among adolescent girls in Malaysia: a cross-sectional Malaysian school survey. *Malaysian Family Physician*, 1(2 & 3), 1.
- Lete, I., Dueñas, J. L., Serrano, I., Doval, J. L., Martínez-Salmeán, J., Coll, C., . . . Arbat, A. (2011). Attitudes of Spanish women toward premenstrual symptoms, premenstrual syndrome and premenstrual dysphoric disorder: results of a nationwide survey. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 159(1), 115-118.
- Moghadam, Z. B., Rezaei, E., Gholami, R. S., Kheirkhah, M., & Haghani, H. (2016). The effect of Valerian root extract on the severity of pre menstrual syndrome symptoms. *Journal of Traditional and Complementary Medicine*.
- Organization, W. H. (2010). *World health statistics 2010*: World Health Organization.
- Payne, J. L., Roy, P. S., Murphy-Eberenz, K., Weismann, M. M., Swartz, K. L., McInnis, M. G., . . . Miller, E. B. (2007). Reproductive cycle-associated mood symptoms in women with major depression and bipolar disorder. *Journal of affective disorders*, 99(1), 221-229.
- Rapkin, A. J., & Mikacich, J. A. (2013). Premenstrual dysphoric disorder and severe premenstrual syndrome in adolescents. *Pediatric Drugs*, 15(3), 191-202.
- Sajjad, Z. B., Shakil, N., & Khan, Y. (2013). Study on frequency of Depression and factors affecting mood in women Of age 18-66 years residing in Karachi using Patient Health Questionnaire-9.
- Seedhom, A. E., Mohammed, E. S., & Mahfouz, E. M. (2013). Life style factors associated with premenstrual syndrome among El-Minia University Students, Egypt. *ISRN Public Health*, 2013.
- Tadakawa, M., Takeda, T., Monma, Y., Koga, S., & Yaegashi, N. (2016). The prevalence and risk factors of school absenteeism due to premenstrual disorders in Japanese high school students—a school-based cross-sectional study. *BioPsychoSocial medicine*, 10(1), 1.
- Terzi, R., Terzi, H., & Kale, A. (2015). Evaluating the relation of premenstrual syndrome and primary dysmenorrhea in women diagnosed with fibromyalgia. *Revista brasileira de reumatologia*, 55(4), 334-339.
- Yaacob, N., Nasir, N. M., Jalil, S. N., Ahmad, R., Rahim, N. A. R. A., Yusof, A. N. M., & Ghani, N. A. A. (2012). Parents or Caregiver's Perception on Menstrual Care in Individuals with Down Syndrome. *Procedia-Social and Behavioral Sciences*, 36, 128-136.