

The Relationship between the Intensity of Premenstrual Syndrome Symptoms and Marital Satisfaction among the Couples of Kerman City**Faramarz Shaahmadi (phd)**

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Introduction: Premenstrual syndrome as a periodic event that social adjustment and interpersonal relationships can be difficult. Regarding the prevalence of premenstrual syndrome and the harmful effect of severity of symptoms on marital satisfaction, The aim of this study was to determine the relationship between severity of symptoms of premenstrual syndrome and marital satisfaction among couples in Kerman city in 2016.

Methods: This cross-sectional study that randomized 240 young couples who referred to health centers in Kerman were selected in the second 6 months of 2016. The instrument used a standard questionnaire screening premenstrual symptoms, a standard questionnaire Index Of Marital Satisfaction for the satisfaction of couples. The investigators have assured that all information obtained will remain confidential Data were analyzed by SPSS 20 software using independent t-test, one-way ANOVA, correlation coefficient and frequency distribution tables.

Results: The mean age of men and women respectively was equal to 35.5 ± 8.2 to 32.4 ± 7.6 . The mean and standard deviation of marital satisfaction score of women and men were (114.97 ± 23.27) and (125.25 ± 26.17) respectively There was a significant relationship between the satisfaction of men and women in relation to premenstrual syndrome ($p=0/001$). Pearson correlation showed an inverse relationship between the symptoms of premenstrual syndrome and couples' satisfaction. ($r=-0.138$, $P=0.002$).

Conclusion: With increasing severity of premenstrual syndrome in women, marital satisfaction decreases among couples.. so it is recommendate that women and men receive the necessary knowledge about to control the symptoms of premenstrual syndrome.

Keywords: Marital Relationship, couples ·premenstrual syndrome

Introduction

Premenstrual syndrome (PMS) was known firstly as the medical disorder and premenstrual stress in 1391 [1]. This syndrome includes a set of physical, emotional and mental symptoms and about 80-90% of women in reproductive age and before the menstruation experience their symptoms informing them of its imminence [2]. Among 20% to 40% of cases, people with physical or mental disability or 5% of percent of people suffer severe distress [3], and a wider range of physical and behavioural symptoms have been attributed to the premenstrual syndrome [4]. This syndrome is from among the most prevalent diseases across the world [5]. This disease currently affects millions of women in the world and has led to disorder in quality of life, social relations in family, and performance of daily life activities [6]. In some cases, symptoms become severe to the extent to which the women daily life is affected and they need to find a serious treatment; this is called premenstrual dysphoric disorder (PMDD) [7].

150 symptoms have been totally identified as the symptoms of this syndrome including two clinical symptoms: mental symptoms include faint, fatigue, irritability, bad-tempered and depression and physical symptoms include flatulence, backache, breast sensitivity and etc. in view of the intensity of symptoms, a wide range of diseases from mild to severe states are created which disturbs the person's daily activities [8]. These symptoms affect the social relations of couples upon the mild to severe state. Mood disorders affect the person's feeling of himself/herself, the world in which he/she lives and those who are connected to him/her in such a way that problems such as anxiety and stress are created in mild state and which can be resolved by using the stress reduction procedures, but in severe state, depression, aggression and anger can be seen which themselves are the reason for most quarrels and divorces. As a result, the marital satisfaction is decreased. The rate of suicide is high among these people [7].

Various studies have been conducted concerning the impact of premenstrual syndrome on the couples' lives and marital satisfaction so that

Brown and Zimmer investigated the consequences of premenstrual syndrome in couples' lives and upon the syndrome intensity, themes such as the increased conflicts, decreased family solidarity (divorce) and decreased communication in family were extracted. 76% of male respondents of this study complained their wives' premenstrual syndrome complications and marital satisfaction was low among them [9]. In his study, Rees also showed that research on PMS is important from two aspects. Firstly, PMS not only make disturbance for female but also for other family members and leads to marital dissatisfaction. Secondly, it results in self-destruction, harmful behaviours and mental illness among the people. In this study, anxiety, irritability and depression were reported in 65% of female with PMS [10]. Results of a poll have shown a high rate of this syndrome prevalence, so that in numerous studies, this syndrome was reported in 60% to 97% of married females (13-11). With regards to the studies in couples' lives, the relations in premenstrual stage including the conversation between the couples are decreased and this is highly dependent on the intensity of symptoms [14]. Generally speaking, men do not have enough knowledge about the impact of syndromes in women. Even when they do not support the women, they do not know what to do and how support [15]. In the study by Tamjidi et al on the females with 15-49 age in Tehran City, prevalence of this syndrome is estimated 64.4% [16]. Since aggression, depression, divorce and self-destruction behaviours are raised in the severe state and in accordance with previous studies, these inappropriate behaviours reduces the marital satisfaction; hence couples' relations help to reveal the structural frameworks in which the couples' relations are created. In most communities, investigating the couples' relations plays a critical role in evaluating the general family relationships [17]. Marital relationships are from among the factors of families advancement in achieving the life objectives [18]. Relationship between wife and husband has been taken into account as the longest kind of relation. Marital relationship is a process during which wife and

husband exchange the feelings and thoughts verbally or non-verbally. Marital satisfaction means the objective feelings of happiness, pleasure, satisfaction and joy experienced by couples from all dimensions of life like couples' relationships, economic status and children [19]. Winch, by quoting from Schumacher, believes that marital satisfaction is the compliance between the existing status and the expected one. Based on this definition, marital satisfaction exists when the existing status in marital relationships is consistent with the expected status [20]. It seems that from among the indices related to the marital satisfaction, there are personal adjustment, training the marital and sexual issues, level of income, education and marriage age [21]. The issue of relationship in marital issues is so important that over 90% of couples with symptoms of premenstrual syndrome with moderate to severe intensity, have discussed the disability in establishing communication as an important matter in their relationships [21]. The increasing number of troubled couples, losing the families balance, disturbance in couples relationships and ascending trend of divorce statistics during the recent year in Iran have made all sociology and psychology experts concerned [22]. Based on this and in view of the high prevalence of premenstrual syndrome and destructive impact of symptoms in life of married females as well as the high importance of marital satisfaction, this study was conducted aiming at investigating the relationship between the intensity of premenstrual syndrome symptoms and marital satisfaction among the couples in Kerman City.

method

This study is descriptive – analytical of cross-sectional type which was conducted on 240 couples referring to the health centres of Kerman City from October 2015 – March 2016. Samples were selected by random stratified sampling method by which Kerman City was divided into 4 categories of north, south, east and west and then all health centres and health bases located in category were listed numbering totally 29 healthcare centres and in the second stage, on healthcare centre or base was selected randomly from each region and finally 4 healthcare centres or bases were chosen. Then one of the female researchers attend the aforementioned centres in morning shift and by

reviewing the file of under study families, she selected the married non-pregnant women who have passed 5 years of their marriages and aged less than 45 years to reach the sample size of 240 persons. Another female researcher attended in these centres and by cooperation of healthcare centre employees (preferably midwife) and telephone contact with these people, she elaborated the research objectives and interviewed them concerning the existence of PMS symptoms. Then, if the women had PMS symptoms, they were chosen for participating in the study. The criteria for exiting the study included the lack of PMS manifestations and unwillingness to take part in the study. The sample size was calculated as 240 couples by considering the confidence level 95% and $P = 50\%$ and estimation error of 6% (23, 24).

$$n = \frac{Z^2 P(1-P)}{d^2}$$

After obtaining the consent of people under study, Premenstrual Symptoms Screening Tool, Index of Marital Satisfaction and questionnaire related to the demographic characteristics were initially completed by them in self-reporting form at the healthcare centre. Demographic characteristics included age, marriage term, number of children, education and employment status. Premenstrual symptoms screening tool consists of 19 questions including two parts. First part with 14 questions is about the mood, physical and behavioural symptoms and the second one measures the impact of these symptoms on people's lives and included 5 questions. This questionnaire was designed by the McMaster University of Canada [25] and its Persian version was standardized by Siahbazi et al [26] in Iran population. Its face and content validity was also confirmed. Cronbach's alpha index higher than 0.7 indicates its acceptable internal stability. To diagnose the moderate or severe PMS, three aforementioned conditions should be met: first condition, among the options 1 to 4, one option should be moderate or severe. Second condition, among options 1 to 14, one case should be moderate or severe and third condition, on impact of symptom on life (last 5 options) one moderate or severe option should exist. To diagnose the PMS, three other conditions should exist simultaneously. First condition, among the options 1 – 4, one case should be severe. Second condition, among the options 1 – 14, at least 4 case should be moderate or severe. Third condition on impact of symptom on life (last 5 options), one severe option should exist. Then, marital satisfaction index was delivered to each female to be completed by her husband and they were asked to hand over the filled index to the healthcare centre. Marital satisfaction index is 25-item tool designed by Hudson for measuring the amount, intensity or importance of wife problem with the

marital relationship. Cut-off point of marital satisfaction index is 30 ± 5 where the score lower than it indicate lack of a considerable clinical problem in this area, while the scores higher than 30 show a considerable clinical problem. The mean Cronbach's alpha for marital satisfaction index is 96% indicating its high internal consistency. Marital satisfaction index with correlation coefficient 96% has an appropriate reliability in retest method [27, 28]. Participants were ensured that all information will be kept confidential. To ensure the confidentiality of all participant information, no name and family name were mentioned in the data collection tools. In case of willingness, results were delivered to the participants. Data were analysed by SPSS 20. One-way analysis of

Results

The average of male and female participants were 35.5 ± 8.2 and 32.4 ± 7.6 years, respectively and duration of the couples' joint lives was 8.3 ± 7.5 years. 80% of subjects had at least 2 children. 67% of couples had academic education and 60% of males and 42% of females were employed (table 1).

Findings showed that there is a significant relationship between the level of education and marital satisfaction among the couples so that as the level of education increases, marital satisfaction also increases ($P = 0.05$) (table 2).

variance (ANOVA) tests were used for measuring the relationships between education, number of children and intensity of premenstrual syndrome symptoms and marital satisfaction; T-test was used for investigating the relationship between the job and marital satisfaction and Pearson correlation test for investigating the relationship between the couples' marital satisfaction and variables of PMS symptoms intensity as well as the marriage duration.

Results of Shapiro – Wilk test showed that the data distribution is normal; hence the parametric test were used for analysing the data.

Investigating the amount of correlation among the research variables based on the intensity PMS symptoms indicated that there is a significant relationship between the components of PMS intensity and females satisfaction in level of $P = 0.01$ and males satisfaction in level of $P = 0.05$ (Table 3).

Findings also showed that there is a positive significant relationship between the couples' marital satisfaction and their wives, but there is a negative significant relationship between PMS symptoms intensity and males' and females' marital satisfaction (table 4).

Table 1: Frequency distribution of demographic information of couples participating in the study as per their gender

Group	Variable	Females		Males	
		Quantity	Percentage	Quantity	Percentage
Education	Illiterate	2	0.8	3	1.3
	Middle school degree	20	8.3	23	6
	Diploma	56	23.4	53	22.1
	Associate degree	60	25	44	18.3
	BA/NSc	102	42.5	117	48.8
Occupation	Employed	-	-	146	60.8
	Free	-	-	65	27.1
	Labour	-	-	24	10
	Unemployed	-	-	5	2.1
	Working	102	42.5	-	-
	Housekeeper	138	57.5	-	-
Group	Variable	Quantity	Percentage		
Number of children	No child	50	20.8		
	One child	62	25.8		
	Two children	80	33.3		
	Three children and more	48	20.1		

Table 2. Mean and SD of couples' marital satisfaction as per the demographic variables

Group	Variable	Males		Females	
		Mean	SD	Mean	SD
Education	Middle school degree and lower	115.5	25.12	108.04	26.49
	Diploma	122.98	25.99	116.57	23.69
	Associate degree	115.36	31.11	110.16	28.88
	BA/BSc	126.76	26.18	123	28.39
ANOVA		P = 0.05		P = 0.012	
Middle school degree and lower		114.09	24.47	104.91	20.72
Diploma		120.63	24.96	112.64	20.72
Associate degree		117.76	33.86	113.22	32.49
BA/BSc		128.37	23.68	125.65	24.87
ANOVA		P = 0.029		P = 0.001	
Males' occupation	Employed	125.09	25.21	120.79	26.898
	Free	120.55	29.01	114.97	26.86
	Labour	119.25	25.26	112.46	27.21
	Unemployed	90.60	52.20	83.40	44.51
ANOVA		P = 0.027		P = 0.011	
Females' occupation	Employed	122.99	26.89	119.54	27.19
	Housekeeper	122.50	27.65	116.17	28.21
Independent T-test		P = 0.958		P = 0.355	
Number of children	No child	129.04	25.19	125.12	25.35
	One child	121.31	26.41	115.60	29.48
	Two children	122.94	25.61	118.35	26.57
	Three children or more	116.90	32.14	111.13	28.78
ANOVA		P = 0.169		P = 0.083	

Table 3. Mean and SD of couples' marital satisfaction as per premenstrual syndrome symptoms

Variable	Group	Males' satisfaction		Females' satisfaction	
		Mean	SD	Mean	SD
Intensity of symptoms	Asymptomatic	134.21	10.01	127.28	14.22
	Mild	123.03	21.89	120.87	24.21
	Moderate	121.19	31.11	114.67	30.03
	Severe	122.58	41.68	97.06	40.49
ANOVA		P = 0.012		P = 0.002	

Table 4. Correlation between the couples' marital satisfaction and variables of PMS symptoms and marriage duration

Variable	Males' satisfaction		Females' satisfaction	
	r	P	r	P
Males' satisfaction	-	-	r = 0.798**	P = 0.001
Females' satisfaction	r = 0.798**	P = 0.001	-	-
Intensity of symptoms	r = -0.138*	P = 0.033	r = -0.203**	P = 0.002
Marriage duration	r = -0.090*	P = 0.173	r = -0.144*	P = 0.028

* Significance in level of 0.05

** Significance in level of 0.01

Discussion

Results showed that there was an inverse significant relationship between the premenstrual syndrome symptoms intensity and marital satisfaction. It means that as the premenstrual syndrome symptoms intensity is increased among the females, the couples' marital satisfaction is decreased and consequently with

decreased marital satisfaction of couples, it was also decreased among the males. But the difference in the mean scores of marital satisfaction among the females was twice the males'. This finding states that as the intensity of PMS symptoms is pushed from asymptomatic to moderate and severe, the marital satisfaction among the females would be decreased

twice the males. But, in mild cases, the score of marital satisfaction did not decrease significantly.

Findings of various studies were consistent with this study; i.e. in cases where the symptom intensity was high, the score of marital satisfaction decreased (23 – 29 – 30). Study by Marvan showed that the marital relationships had been decreased in premenstrual period, but among those whose premenstrual syndrome was more severe, the marital relationships and satisfaction were decreased considerably [31]. Findings of study by Riser showed that among female who experienced premenstrual syndrome, the marital relationships in menstruation follicular phase were natural, but couples faced problems with their relationships in luteal phase and the marital satisfaction had been decreased among the couples [32].

Results of present study revealed that there is an inverse significant relationship between the females' marital satisfaction and marriage duration, but there is no significant relationship between the males' marital satisfaction and marriage duration. As the years of marriage duration increases, the females' marital satisfaction is also increased. In his study, Rostami showed that as the more years pass from the marriage, the re more marital dissatisfaction would be occurred [33]. Results of study by Eliot revealed that the marriage duration affect the marital satisfaction in first marriage [34] of which the results were consistent with our study. Results of research by Aghapour indicated that the marriage duration has no impact on the marital satisfaction (2, 1). In other words, it can be argued that as the years of joint life are increased among the females, the common problems in pregnancy duration and women diseases are also raised and such problems would increase the intensity of PMS intensity. In accordance with the aforementioned study's results, as the intensity of this syndrome is increased, the martial satisfaction is decreased. Some existing differences in present study and Aghapour research can be due to the cultural differences and traditional opinions in Kerman City.

There was also a significant correlation between the males' and females' marital satisfaction in connection to the PMS syndrome intensity. Among the women with asymptomatic PMS, the marital satisfaction was high in couples, and the in the moderate kind of this syndrome in females, the marital satisfaction reached to its lowest level, but in severe symptoms kind, the marital satisfaction was decreased significantly, as consistent with the studies by Marvan [31], Morovvati [23] and Jose [25]. Study by Asali et al was not consistent with the aforementioned research [30] in such a way that marital satisfaction was not so different in moderate to severe kinds. The difference in dividing the PMS components was likely the reason for inconsistency in both studies. To compare the intensity of symptoms in studies, using the standard division is appropriate. Meanwhile, the interaction between the couples and training the males concerning the premenstrual syndrome symptoms increases the marital satisfaction. Morovvati et al considered training to

males in connection to PMS as an appropriate factor to enhance the marital satisfaction [23].

There was a significant relationship between the education and martial satisfaction among the couples, as consistent with study by Moradi et al [36] and Asali [29]. It can be stated that the couples with higher education have more ability to use the books, articles, etc.; hence, they look for more about the symptoms of PMS and also the couples with higher education are in higher social situation and have more fixed income, therefore they are more satisfied with marital life.

From among the limitations of this study, descriptive and cross-sectional aspects can be mentioned and the relationship between the variables like PMS symptoms and marital satisfaction cannot be interpreted in cause and effect form and we can only say that there is a correlation among the variables of present study and it is possible that a variable out of study ones explains the relationship between the variables. Use of different division for PMS components in studies is another limitation. In investigating the study variables, questionnaire method was used and due to inaccessibility and shortage of time and costs, other methods like interview was not used. Lack of interest and unwillingness to cooperate, especially in males, to complete the questionnaire increases the possibility of error and it is likely that they do not fill the questionnaire with enough accuracy and interest.

Conclusion

With regards to the findings, it can be concluded that as the intensity of premenstrual syndrome symptoms in increased among the females, their martial satisfaction is decreased. As a result of decreased martial satisfaction, the martial satisfaction among males is also decreased. Therefore, premenstrual syndrome affects the martial relationships. In view of the desirable satisfaction in families with higher education and with appropriate job, solutions should be found for promoting the couples literacy, and training (life skills, women illnesses and diseases, controlling the PMS) to all males and females before and after the marital life should be put on the agenda and effective ways should be presented to the couples to improve the PMS symptoms. Results of this study can be a ground for other studies in this area and also a planning for enhancing the marital satisfaction among the couples. It is hoped that findings of this study can show a wider horizon of couples problems as well as its related solution before the researchers' eyes.

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References

1. Coughlin, Patricia C. Premenstrual Syndrome: How Marital Satisfaction and Role Choice Affect Symptom Severity. *Social Work*, 1990; 35(4):351-355.
2. Poormohsen M, Zoonemat A, Taavoni S, Hosseini, AF. Effect of description of both calcium and vitamin D on premenstrual syndrome. *J Nurs Midwifery*. 2010;23(56):8-14. [in Persian].
3. Kiani Asiabar A, Haydari M, Mohammadi Tabar SH, Faghihzadeh S. Prevalence, signs, symptoms and predisposing factors of premenstrual syndromes in employed women. *Daneshvar Medicine*.2009;16(81):45-54. [in Persian]
4. Speroff, Leon, Fritz, Marc A. *Clinical gynecologic endocrinology and infertility*, Philadelphia. 2005,1318-1337.
5. Katz L, Amorim M, Coutinho I, Cavalcanti PA. Síndrome pré-menstrual: abordagem baseada em evidências. *Femina*. 2005;33(11):821-30.
6. Mahmudi Z, Shahpourian F, Bastani F, Parsai S, Hosseini F, The effect of adding carbohydrate diet in the form of food supplements on the severity of premenstrual syndrome, Improve the fourteenth year, *Journal of Kermanshah University of Medical Sciences*, 2010;14(1):10-19[Persian].
7. Amir FarahaniL , Haidari T, Naranji F, AsghariJafarabadi M, Shirazi V, Relationship between body mass index in female students with premenstrual syndrome, *Journal of Nursing and Midwifery*, 2011; 17(4):85-95[in Persian].
8. Brown, M. A., & Zimmer, P. A. Personal and family impact of premenstrual symptoms. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, ۱۹۸۶ .5, 31-38.
9. Rees L. "Psychosomatic Aspects Of the Premenstrual Syndrome". *Journal of Mental Science*, 1953,99. 62-73.
10. Silva CML, Gigante DP, Carret MLV, Fassa AG. Estudo populacional de síndrome pré-menstrual. *Revista de Saúde Pública*. 2006;40(1):47-56.
11. Campagne DM, Campagne G. The premenstrual syndrome revisited. *European Journal of obstetrics & Gynecology and Reproductive Biology*. 2007; 130(1):4-17.
12. Takeda T, Tasaka K, Sakata M, Murata Y. Prevalence of premenstrual syndrome and premenstrual dysphoric disorder in Japanese women. *Archives of Women's Mental Health*. 2006;9(4):209-12.
13. Dean BB, Borenstein JE, Knight K, Yonkers K. Evaluating the criteria used for identification of PMS. *Journal of Women's Health*. 2006;15(5):546-55.
14. Reilly J, Kremer J. A qualitative investigation of women's perceptions of premenstrual syndrome: implications for general practitioners. *British Journal of General Practice*. 1999;49(447):783-6.
15. Tamjidi A. A Survey on Prevalence and Severity of Premenstrual Syndrome among Women of 15-45 years, Tehran in 1995, dissertation, Shahid Beheshti University of Medical Sciences. [in Persian]
16. Eisanejad A, Ahmadi A, Etemadi A, The effectiveness of enriching relationships on improving the quality of marital relationships, *Journal of Behavioral Sciences*, 2010; 4(1): 9-16.
17. Navabinejad SH,malek A ,Effectiveness of certain combat-oriented thinking on improving marital relations, *Thought and Practice* 2010;4(16):570-746[in Persian].
18. Rostami A, Ghazinour M, Nygren L, Nojumi M, Richter J. Health-related quality of life, marital satisfaction, and social support in medical staff in Iran. *Applied Research in Quality Life*. 2013;8(3):385-402. [in Persian]
19. Schumacher, J. A., & Leonard, K. E. Husbands' and Wives' Marital Adjustment, Verbal Aggression, and Physical Aggression as Longitudinal Predictors of Physical Aggression in Early Marriage. *Journal of Consulting and Clinical Psychology*, 20۰۵; 73(1), 28-37.
20. Khosravi S, Neshad Doost H, Molavi H, Kalantari M. The effect of teaching communicative patterns of pluralistic family

- on life satisfaction of couples. Bimonthly Journal of Hormozgan University of Medical Sciences. 2011;15(1):4-8. [in Persian]
21. Razeghi N, Nikiju M, Kraskian Mujembari A, Zohrabi Masihi A. Relationship between Big Five Personality Factors and Marital Satisfaction. *Evolutionary Psychology: Iranian Psychologists*; 2011; 7(27):269-277. [in Persian]
 22. Morowati Sharifabad MA, Karimiankakoi Z, Bokaie M, Fallahzadeh H, Mirrezaii S. Frequency of Marital Dissatisfaction in Couples With Wives Who Suffer From Premenstrual Syndrome in The City of Yazd. *HEALTH SYSTEM RESEARCH* .2014;10(2); 315-325. [in Persian]
 23. Ghaffari M, Rezaei A. Investigating the relationship between marital satisfaction and quality of life with obsessive-compulsive tendency The life of married students at Payame Noor University. *Journal of Islamic Azad University*. 2013; 23(2):140-7. [in Persian]
 24. McMaster University. *Archives Womens Mental Health. Premenstrual Symptoms Screening Tool (PSST)*. 2003; 6:203-209.
 25. Siahbazi S, Hariri F, Montazeri A, Moghadam Banaem L. Standardization of premenstrual symptoms screening questionnaire PSST: translation and psychometric Iranian species. *Journal Payesh*. 2011;10:421-7. [in Persian]
 26. Hosseini sedeh M, A Fa. Relationship between marital satisfaction and duration of marriage among scholars. *Imam Khomeini Educational and Research Institute (RA) Ravanshenasi-va-Din*. 2011;3(4):127-45. [in Persian].
 27. Mashhadi Farahani M, Afrooz G, H A. Group Therapy Transactional Analysis marital satisfaction. *Thought and Behavior in Clinical Psychology*. 2010;4(15):51-8. [in Persian]
 28. Assali R, Jalal Marvi , Ansari , Lashkardost H. premenstrual syndrome on marital relations. *Journal of North Khorasan University* 2015;7(2): 465-473 .[in Persian]
 29. Delara M, Ghofranipour F, Azad Fallah P, Tavafian SS, Kazemnejad A, Decision Making Process and Related Factors in Adolescents with Premenstrual Syndrome. *Quarterly Journal of Sabzevar University of Medical Sciences*,2012 ;19(1):59-68[Persian].
 30. Marván ML, MartínezMillán ML, Marital communication and premenstrual symptoms. *Acta Psiquiatrica y Psicologica de America Latina*. 1995;41(1):24-8.
 31. Ryser R, Feinauer, Premenstrual syndrome and the marital relationship, *The American Journal of Family Therapy*,1992;20(2):179-190.
 32. Morowatisharifabad A, Zareipour MA, Movahed A, Shaahmadi F, Karimiyan Kakolaki3 ,Mahboubeh Ameri Z et al. The relationship between marital satisfaction ndmen,s awareness and practice towards PMS among couples in Kerman, *Journal of Health in the Field*. 2017;5(1): 13-23[in Persian]
 33. Aqapour E, Mazaheri B, Avazeh A. The relationship between marital satisfaction Qur'anicinj unction Case study: families residing in the city of Marand. *Journal of Quran and Medicine* 2010;1(3):77-81. [in Persian]
 34. Jose O, Alfons V. Do demographics affect marital satisfaction? *Journal of Sex & Marital Therapy*. 2007;33(1):73-85
 35. Agha Yousefi A, Moradi K, Safra N. The relationship between marital satisfaction with physical problems during pregnancy and its related factors in pregnant women of Khorramabad. *Journal of Lorestan University of Medical Sciences*. 2011: 13 (1). 123-131. [in Persian]