## **Original Article**

# Factors Related to Marital Satisfaction in Women with Major Depressive Disorder

Shahrokh Amiri, MD<sup>1, 2</sup>
Mohsen Khousheh, MD<sup>1</sup>
Fatemeh Ranjbar, MD<sup>1</sup>
Ali Fakhari, MD<sup>1</sup>
Arash Mohagheghi, MD<sup>1</sup>
Alireza Farnam, MD<sup>1</sup>
Salman Abdi, MSc2
Amineh Alizadeh, MSc1

1 Clinical Psychiatry Research Center, Tabriz University of Medical Science- Tabriz- Iran 2 Department of Psychiatry, Tabriz University of Medical Science- Tabriz- Iran

## Corresponding author:

Shahrokh Amiri, MD Associate professor of Child and Adolescent Psychiatry, Clinical Psychiatry Research Center, Department of Psychiatry, Razi Hospital, Elgoli Road, Tabriz, East Azerbaijan, Iran. Tel/Fax: +98+411+3804490.

Email: amirish@tbzmed.ac.ir

**Objective**: Major depressive disorder (MDD) is one of the most common psychiatric disorders which affects married couples frequently. The present study aims to explain the role of family processes, social support and demographic factors in marital satisfaction of women with Major Depressive Disorder (MDD).

**Method:** In this cross-sectional study, 188 women with MDD were randomly selected among the patients who visited Bozorgmehr Clinic of Tabriz University of Medical Sciences. The sample selection was carried out through structured psychiatric interviews based on DSM-TV-TR criteria. Data were collected using Index of Marital Satisfaction (IMS), Family Process Scale (FPS) and Norbeck Social Support Questionnaire (NSSQ). The Mann Whitney U, Multivariate and ANOVA tests were used to analyze the data.

**Results:** No relationship was observed between age, educational level, age difference of couples and number of children with family processes and marital satisfaction (p≥0.05). The patients with low educational level reported less social support (p≥0.05). Marital satisfaction and family coherence were lower when the husband had a psychiatric disorder (P≤0.01). The family processes (family coherence, problem-solving skills, communication skills and religious beliefs) and social support positively predicted marital satisfaction, while the husband's psychiatric disorders negatively predicted marital satisfaction.

**Conclusion:** The findings highlight the significance of family processes, social support and husband's psychiatric disorders in marital satisfaction of women with MDD.

**Keywords**: Family relation, Major Depressive Disorder, Social support, Women

Iran J Psychiatry 2012; 7:4:164-169

Major depressive disorder (MDD) is one of the most common psychiatric disorders with the long-life outbreak of 15% for men and 25% for women (1). MDD is considered the most common psychiatric disorder in Kashan, Iran with the prevalence rate of 8.2% (2). It is predictable that married couples are affected frequently as well as the relationship between the couples. Psychiatric problems usually affect marital satisfaction (3). It is reported that depression affects marital life much more than stress (4). As marital satisfaction decreases, a new scope of family and social problems arise (5, 6).

The outbreak of depression among women makes families vulnerable to various damages (7). Along with studies identifying the predictors of marital satisfaction among women with MDD to estimate the patients'

damage, it is crucial to study various approaches to clinical interferences(4).

Family theorists explain family coherence by such theories as Systemic theory, Exchange, Conflict, Structural/Functionalism and Symbolic theories. The conflict theory is among the most important theories dealing with family problems. According to this theory,

Incapability of family members, especially the wife and the husband, in handling family processes is among the most common types of dissatisfactions (8). Family processes are as follows: 1) religious beliefs;2) coherence and respect among family members;3) confrontation skills;4) decision-making and problemsolving skills;5) communication skills. These skills contribute to family organization and help family members to cope with different conditions (9).

Prior studies indicate a relationship between depression and family processes. Reports indicate that depressed people have difficulty in solving a problem/making a decision (10, 11), communication (12), religious beliefs (13), coherence and mutual respect among family members (14) and confrontation skill (15). On the other hand, according to the Marital Discord Model of Depression, depression is a result of the Marital Discord (16). This could be an indication of a strong connection between marital satisfaction and family processes. The significance of social support to help depressed patients increasingly gains importance, especially from the family. Social and family support is an effective help to encounter isolation and failure to

enjoy one's life (the two significant symptoms of depression). The social support is reported to have a critical role in decreasing the symptoms of depression (17). It also promotes marital satisfaction (18).

Considering the high rate of depression among women, along with the important role of women in family life and marital satisfaction, it is absolutely necessary to investigate and propose interference methods to solve the problems of women with MDD. However, it is critical to use the concepts and structures compatible with the dominant culture in the study population, bearing in mind that the theoretical basis of marital processes along with social support are rich enough to explain psychological interference. Fortunately, the family processes indices in the Family Process Scale (FPS) are compatible with Iranian culture (9). The current study is the first of its kind in Iran which takes into account the function of family processes and social support in predicting marital satisfaction. Moreover, the other concern of this study was finding out the relationship between the demographic characteristics of women with MDD with family processes, social support and their marital satisfaction.

### **Materials and Method**

#### Patients and Procedure

One hundred and eighty eight women who suffered from MDD were selected from outpatients who visited the Bozorghmehr Psychiatric Clinic of Tabriz University of Medical Sciences during 2011 - 2012 following a convenience method. The inclusion criteria were the diagnosis of MDD according to the criteria of DSM-IV-TR, age above 18 and being married. A written consent was obtained from all the participants. Uneducated patients, patients with additional psychiatric disorders(other than MDD) or a serious medical condition (epilepsy, cardio vascular disease, physical disabilities etc.) were excluded as well as those that submitted in complete questionnaires.

Patients were asked to complete the questionnaires within the first or second psychiatric visit. The demographic information including age, educational level, the spouse's age, and number of children were collected in the same interview. Any previously diagnosed psychiatric disorder in the husbands was evaluated through the psychiatric interview with the patients. Monthly income was estimated by a simple close ended question.

#### **Instruments**

Structured Clinical Interview for DSM-TV-TR (SCID-IV): SCID is based on DSM-TV-TR criteria and is a diagnostic interview to determine psychiatric disorders on Axis I and II. This is the most common and widely used diagnostic instrument in psychiatry. Previous studies have confirmed the validity and reliability of the Persian version of SCID-IV (19). The test has a fair to good diagnostic agreement with most of the diagnostic categories (kappa =0.55) (19).

Index of Marital Satisfaction (IMS): Index of Marital Satisfaction is a 25-item questionnaire used to measure the intensity/scope of the women or men with problems in their marital relationship. It is based on 7 point Lickert scale (7= All of the time and 1=none of the time). The individual's total score is considered as his/her marital satisfaction index .

IMS enjoys a high validity of 96% (20). The reliability of the Persian version of IMS was measured as 0.96 using the test-retest method (21).

Family Process Scale (FPS): Samani Family Process questionnaire has been developed in Iran (9) on the basis of family conflicts (8), family processes and family content theories which is compatible with the Iranian culture.

FPS includes 43 items designated to measure the following:1)factors of family processes (family adaptable to different capabilities and skills conditions);2)family contents (family potentialities such as income, physical and psychological health, and educational level);3) the social context of the family (the value and belief system of the family). According to the theoretical basis of this questionnaire, these three family factors can be measured by the means of five family performance factors which are:1) religious beliefs;2) coherence and mutual respect among family members;3) confrontation skills;4) decision- making and problem -solving skills; and 5) communication skills (Samani, 2008). The Lickert scale is used to score FPS (1= Strongly Disagree, 5= Strongly Agree). Samani(9) reports the reliability for each subscale to be +0.81 (Cronbach  $\alpha$ )and +0.71(using test-retest method in a two-week interval). In the current study, the reliability for each subscales using Cronbach α was measured as < 0.77 - 0.93 . <

Norbeck Social Support Questionnaire (NSSQ): It is a nine-item Questionnaire which measures various dimensions of social support in which the respondents are asked to list the people who show supportive behavior to them (e.g., spouse, friend, family member). The first eight questions are scored on the basis of 5 point Lickert scale (1= very little, 5= very much) and the item number 9 is a Yes/No question. Gigliotti (23) confirms the content validity of NSSQ. In this study, the reliability of NSSQ was estimated to be 0.87 using Cronbach  $\alpha$ .

## Data Analysis

The Statistical Package for the Social Sciences (SPSS 17) was used for analyzing the data. The data are reported as descriptive statistics (as Mean±Standard Deviation and Frequency percentage). The Mann Whitney U, Multivariate and ANOVA tests were used to estimate the relationship between the demographic information and the marital satisfaction, family processes and social support. Pearson correlation coefficient was used to determine the relationship between the family processes and social support and the marital satisfaction of women with MDD which were followed by stepwise regression analysis to find

out the predicting factors of the marital satisfaction. The statistical tests were considered significant at  $P \le 0.05$ .

## **Results**

A total of 188 married women with MDD completed the study. Their Mean age was 34.80± 6.48.

Table 1 shows the demographic characteristics of the study sample. The score of marital satisfaction was  $117.79 \pm 40.51$  by IMS.

As illustrated in table 2, no significant difference was observed between the mean scores of marital

satisfaction, family processes and social support of patients and different age groups, age difference of couples and different monthly income (P>0.05).

Results of MANOVA indicated no significant difference between the mean scores of marital satisfaction and family processes for patients with different educational levels (P>0.05). However, the mean scores of social support was not the same for different educational levels (F(2,185)=3.80, P=02); and the Post –Hoc test showed that undergraduates had lower support compared to patients with higher education (P=0.02).

Table 1. Characteristics of the study sample

		Number	Percentage%
Age range	<30	58	30.9
	31-40	83	44.1
	40-50	47	25.0
Educational level	Under graduated	50	26.6
	Graduated	92	48.9
	Higher education	46	24.5
Month family income	< 5 million Rails	62	33.0
·	5-10 million Rials	95	50.5
	>10 million Rials	31	16.5
Psychiatric condition of husbands	Major depressive disorder	14	7.4
	Bipolar I disorder	3	1.6
	Anxiety disorders	15	8.0
	Schizophrenia	1	0.5
	No major problem	155	82.4
Age difference between couples	<5 years	89	47.3
	6-10 years	69	36.7
	11-13 years	30	16.0
Number of children	None	22	11.7
	1-3	133	70.7
	>3	33	17.6

Table 2. Scores of marital satisfaction, family processes and social support and the relationship to demographic characteristics

	Age	Age difference	Educational level	No. of Children	Monthly Income	Disorder in husband	Marital Satisfaction
	a F	F	F	F	F	<sup>b</sup> Z	c r
Marital Satisfaction	1.47	0.19	0.19	0.10	1.34	-3.98**	1
Social support	0.37	0.50	3.80*	2.68*	0.46	-0.06	0.45**
Familyproblem solving skills	0.26	0.75	1.78	0.43	1.73	-1.88	0.63**
Family coping strategies	1.65	0.73	0.30	0.84	2.38	-1.93	0.54**
Family coherence	2.35	1.72	1.42	1.81	1.96	-03.49**	0.71**
Family communication	0.75	1.73	0.42	0.60	0.46	-1.30	0.66**
Family religious beliefs	0.76	1.84	2.43	1.05	0.28	0.19	0.38**

<sup>\*</sup> P≤0.05, \*\* P≤0.01; <sup>a</sup> F= F score in Multivariate analysis of variance; <sup>b</sup> Z = Z score in Mann Whitney U test; <sup>c</sup> r= Pearson coefficient correlation; PD=Psychiatric Disorder

Table 3. Stepwise multiple regression analysis in Predictive factors of marital satisfaction

ariables in 6 <sup>th</sup> step	R <sup>2</sup>	Adjusted R <sup>2</sup>	В	β	P-Value	
Family coherence	0.51	0.51	1.40	0.26	< 0.001	
Problem solving skills	0.57	0.57	1.19	0.23	< 0.001	
Communication skills	0.59	0.58	1.71	0.21	< 0.01	
Husband disorder history	0.61	0.61	-18.31	-0.17	< 0.001	
Social support	0.63	0.62	1.03	0.15	< 0.01	
Religious beliefs	0.64	0.63	0.83	0.11	< 0.05	

The mean score of marital satisfaction was lower when a psychiatric disorder was diagnosed for the husband (P<0.01). According to the Pearson correlation coefficient, a positive correlation was observed between marital satisfaction, family processes and social support (P<0.01).

### **Discussion**

The present study aimed to investigate the family processes and social support as the predicators of the marital satisfaction among women with MDD; it also evaluated the relationship between the patients' demographic properties and family processes, social support and marital satisfaction.

The results of this study showed no relationship between the patients' age and marital satisfaction, family processes and social support. However, some reports indicate a contradictory relationship (6). A study (24) reported a positive relationship between age and sexual satisfaction among the couples while another study showed a negative relationship between age and social support among the diabetic patients (25). This contradiction is probably due to the difference of study populations and focus on the different aspects of marital satisfaction.

In the current sample, no relationship was found between age difference of couples and marital satisfaction, family processes and social support. The maximum age difference between couples was 13 which seem to be culturally acceptable in Iran. Thus, age difference cannot be considered as an effective factor in the patients' marital satisfaction, family processes and social support in this population. Likewise, the findings showed that the educational level of women with MDD had no effect on their marital satisfaction and family processes. However, low scores of social support was reported for the patients with low level of education in the present study which is compatible with the study on diabetic patients(25). Given the fact that higher education contributes to one's promotion of knowledge, this state enhances the use of different sources of social support. According to the findings of the present study, no relationship was found between the number of children and marital satisfaction and family processes of women with MDD. However, the results of another study (24) showed a positive relationship between the number of the children and the normal couple's sexual satisfaction and the marital adaptation. In other words, the more the number of children, the more the sexual satisfaction between them.

On the other hand, having several kids of young age may cause individual and family problems for the patients with psychiatric disorders. The results of this study indicate that patients with no children enjoyed higher scores of social support compared to those with more than three children. As the women with just one child are probably younger than those with several children, the findings of the present study validates a previous report which shows a weak correlation (r=0.3)

between age and social support (25). Thus, the lack of relationship between age and social support may be explained by the weak correlation between these two variables.

The monthly income of family was not a significant factor in the current study which does not support the findings of a previous study where a high level of marital satisfaction was reported for average- income compared to low-income families (26).

Another finding of this study indicates that a psychiatric disorder in husbands of women with MDD negative lypredicated their marital satisfaction. Stress in either husband or wife was reported to result in low marital satisfaction and close relationship between them (27). According to Bodenmann et al. Stress-Divorce model(6), the psychological problems among the couples reduce their emotional relationships and decreases the time spent together which in turn leads to mutual alienation and marital dissatisfaction.

The present study (9) refers to emotional compromise, mutual respect and life enjoyment as the factors contributing to family coherence and calls family coherence the most important and the strongest predicator of marital satisfaction. Likewise, another study (28) emphasized the role of compromise in marital quality. Thus, the higher the emotional compromise and marital life enjoyment, the higher the marital satisfaction of women with MDD.

As for the previous studies, the present study found a relationship between family communication skills and marital satisfaction (29). Therefore, providing training for couples to improve their communication skills is effective in reducing their marital conflicts (30). However, hostility has a negative effect on the couple's marital satisfaction (31, 32). It seems that possessing listening and speaking skills help couples to express their emotions explicitly and leads to pleasant emotions and marital satisfaction. This is reflected in the results of previous studies which show a relationship between communication skills and satisfaction with the couple's relationship (33).

The family problem solving skills are reported as a predicator of marital satisfaction (34). A study on married university students reports that teaching problem-solving skills decreases marital dissatisfaction (35). Another study shows that satisfied couples tend to use constructive problem-solving strategies (dialogue and loyalty) (36). They rarely use destructive strategies like escalation of conflict or withdrawal. Apparently, efficient use of problem-solving skills provides the couples with the opportunity to discover the effective and compatible strategies to solve their life problems (37). Solving family problems acts as a confrontation strategy decreasing life tension on the one hand and increasing marital satisfaction on the other.

A relationship is reported between religious beliefs and marital satisfaction (38). However, according to stepwise regression analysis of the current study religious beliefs are not among the predicative factors for marital satisfaction. It seems that the religious

beliefs provide an appropriate condition by organizing the effective confrontation strategies in solving the problems. This is compatible with finding of a study (13) in which religious beliefs affected the symptoms of stress and depression. Moreover, religious beliefs not only contribute to the formation and maintenance of the emotional relationship but they can also affect the marital quality (39).

On the basis of stress-marital satisfaction relationship theory, stress affects couple's performance (time of being together, communication and well-being of both partners), and it leads to low satisfaction within the relationship and may lead to divorce (6). Thus, by promoting one's confrontation skills against life problems, s/he would be able to cope with them and solve them in a proper manner.

The results of the present study was compatible with previous reports (18) in which a relationship between social support and the depressed patients' marital satisfaction is identified. In a study (41) referring to the relationship between spousal support satisfaction and physiological responses to marital conflicts, perceived communication patterns contributed neuroendocrine responses to marital conflict (42). It might be related to the fact that social support (17) contributes to interpersonal empathy and the formation of the marital satisfaction by organizing interpersonal excitement and decreasing depression symptoms. The spouse's psychological disorder history is reported as a predicator of marital satisfaction (43). Apparently, wife/husband's psychological problems affect all family members by affecting the action/reaction system causing a decrease in marital satisfaction.

The present study focused on women with MDD attending a referral clinic and the results may not be generalized to all patients with MDD, but the results may still have clinical significance. The main reason for this selection was the breakout of depression among Iranian women and the need to promote their marital satisfaction by designing family training courses. Another limitation of this study pertains to the age range of the sample (<50). Thus, the findings of the present study cannot be generalized to the differences observed in family processes and marital satisfaction in participants over 50 years of age. Furthermore, in this study the maximum age difference between wife and husband was 13. A greater difference may affect their marital satisfaction. The only reference for the amount of monthly income was patients' answers and these results may be biased as we did not have any tools to check the accuracy of these claims. This study did not include the age of children who could help us to have a better understanding of the findings. Moreover, the study was designated as a correlation study and lacks a control group. Further studies can overcome these limitations.

## **Conclusion**

Women's depression can cause various problems for a family and may cause marital satisfaction. Thus, along

with treating depression, the complementary teaching courses are needed to promote marital satisfaction. The results of the present study showed a positive correlation between all family processes and social support with the depressed patients' marital satisfaction. Family processes including (family coherence, problem-solving skills, communication skill, and religious beliefs) and social support as well as the husbands' psychiatric disorder explain 2/3 of marital satisfaction variance. The primary findings of this study indicate that family processes are a proper domain for psychological intervention along with medical treatments to promote marital satisfaction of women with MDD.

#### References

- Sadock BJ, SadockVA. Kaplan and Sadock's synopsis of psychiatry: Behavioral Sciences/Clinical Psychiatry, 10<sup>th</sup> eds. Philadelphia: Lippincott Williams & Wilkins; 2007.
- 2. Ahmadvand A, Sepehrmanesh Z, Ghoreishi FS,Afshinmajd S. Prevalence of psychiatric disorders in the general population of Kashan, Iran. Arch Iran Med 2012; 15: 205-209.
- Lundblad AM, Hansson K. Relational problems and psychiatric symptoms in couple therapy. Int J Soc Welfare 2005; 14: 256-264.
- Whisman MA, Uebelacker LA. Impairment and distress associated with relationship discord in a national sample of married or cohabiting adults. J FamPsychol 2006; 20: 369-377.
- Ostir GV, Ottenbacher KJ, Fried LP,Guralnik JM. The Effect of Depressive Symptoms on the Association Between Functional Status and Social Participation. Soc Indic Res 2007; 80: 379-392.
- Bodenmann G, Ledermann T, Bradbury TN. Stress, sex, and satisfaction inmarriage. Personal Relationships 2007; 14: 551-569.
- 7. Fernandez-Guasti A, Fiedler JL, Herrera L, Handa RJ. Sex, stress, and mood disorders: at the intersection of adrenal and gonadal hormones. HormMetab Res 2012; 44: 607-618.
- Ingoldsby BB, Smith SR,Miller JE. Exploring family theories. Los Angeles, California: Roxbury Publishing Company; 2004
- 9- Samani S. Developing a Family Process Scale for the Iranian Families. IJPCP 2008; 14: 162-168.
- Roskar S, Zorko M, Bucik V, Marusic A. Problem solving for depressed suicide attempters and depressed individuals without suicide attempt. Psychiatr Danub 2007; 19: 296-302.
- Leykin Y, Roberts CS, DerubeisRJ.Decision-Making and depressive symptomatology. CognitTher Res 2011; 35: 333-341.
- SegrinCh, Rynes KN. The mediating role of positive relations with others in associations between depressive symptoms, social skills, and perceived stress. Journal of Research in Personality 2009; 43: 962-971.
- Hasanovic M,Pajevic I. Religious moral beliefs as mental health protective factor of war veterans suffering from PTSD, depressiveness, anxiety,

- tobacco and alcohol abuse in comorbidity. PsychiatrDanub 2010; 22: 203-210.
- Garrison CZ, Waller JL, Cuffe SP, McKeown RE, Addy CL, Jackson KL. Incidence of major depressive disorder and dysthymia in young adolescents. J Am Acad Child Adolesc Psychiatry 1997; 36: 458-465.
- Derntl B, Seidel EM, Eickhoff SB, Kellermann T, Gur RC, Schneider F, et al. Neural correlates of social approach and withdrawal in patients with major depression. SocNeurosci 2011; 6: 482-501.
- Hollist CS, Miller RB, Falceto OG and Fernandes CL. Marital satisfaction and depression: a replication of the Marital Discord Model in a Latino sample. Fam Process 2007; 46: 485-498.
- 17. Marroquin B. Interpersonal emotion regulation as a mechanism of social support in depression. ClinPsychol Rev 2011; 31: 1276-1290.
- Unger DG, Jacobs SH B, Cannon CH. Social Support and Marital Satisfaction among Couples Coping with Chronic Constructive Airway Disease. J Soci Personal Relationship 1996; 13: 123-142.
- Sharifi V, Assadi SM, Mohammadi MR, Amini H, Kaviani H, Semnani Y, et al. Structured Clinical Interview for DSM-IV (SCID): Persian Translation and Cultural Adaptation. Iran J Psychiatry 2007; 1: 46-48.
- Domar AD, Clapp D, Slawsby EA, Dusek J, Kessel B,Freizinger M. Impact of group psychological interventions on pregnancy rates in infertile women. FertilSteril 2000; 73: 805-811.
- Shakeri J, Hossieni M, Golshani S, SadeghiKh, Fizollahy V. Assessment of general health, stress coping and marital satisfaction in infertile women undergoing IVF treatment. J ReprodInfertil 2006; 7: 269-275.
- 22. Norbeck JS, Lindsey AM, Carrieri VL. Further development of the Norbeck Social Support Questionnaire: normative data and validity testing. Nurs Res 1983; 32: 4-9.
- Gigliotti E. A confirmatory factor analysis of situation-specific Norbeck Social Support Questionnaire items. Nurs Res 2006; 55: 217-222.
- 24. Jose O,Alfons V. Do demographics affect marital satisfaction? J Sex Marital Ther 2007; 33: 73-85.
- 25. Ghasemipoor M, Ghasemi V and Zamani AR. Investigating the relation of social support functions and the demographic features of diabetic patients. Iran J Nurs Midwifery Res 2010; 15: 1-7.
- Dakin J, Wampler R. Money Doesn't Buy Happiness, but It Helps :Marital Satisfaction, Psychological Distress, and Demographic Differences between Low- and Middle-Income Clinic Couples. Am J Family Ther 2008; 36: 300– 311.
- Randall AK,Bodenmann G. The role of stress on close relationships and marital satisfaction. ClinPsychol Rev 2009; 29: 105-115.
- 28. Cundiff JM, Smith TW, Frandsen CA. Incremental validity of spouse ratings versus self-reports of personality as predictors of marital quality and behavior during marital conflict. Psychol Assess 2012; 24: 676-684.
- 29. Alayi Z, AhmadiGatab T, BabaeiZadKhamen A. Relation between Communication Skills and Marital-adaptability among university students.

- Procedia Social and Behavioral Sciences 2011; 30: 1959-1963.
- Moghadam GF, Ahadi H, Jamhari F, Fakhri N. A Comparison of the effectiveness of communication skills training for marital conflicts and quality of life in female students of Islamic Azad University, Science and Research Branch, WJ Sport Scie 2012; 36: 73-79.
- 31. Renshaw KD, Blais RK, Smith TW. Components of Negative Affectivity and Marital Satisfaction: The Importance of Actor and Partner Anger. J Res Pers 2010; 44: 328-334.
- Baron KG, Smith TW, Butner J, Nealey-Moore J, Hawkins MW, Uchino BN. Hostility, anger, and marital adjustment: concurrent and prospective associations with psychosocial vulnerability. J Behav Med 2007; 30: 1-10.
   - Egeci S, Gencoz T. The Effects of Attachment
- Egeci S, Gencoz T. The Effects of Attachment Styles, Problem-Solving Skills, and Communication Skills on Relationship Satisfaction, Procedia -Social and Behavioral Sciences 2011; 30: 2324-2329.
- Johnson MD, Cohan CL, Davila J, Lawrence E, Rogge RD, Karney BR, et al. Problem-solving skills and affective expressions as predictors of change in marital satisfaction. J Consult ClinPsychol 2005; 73: 15-27.
- Ahmadi Kh, NabipoorAshrafi M, Kimiaee SA, Afzali MH. Effect of Family Problem-Solving on Marital Satisfaction, Journal of Applied Sciences 2010; 10: 682-687.
- Kriegelewicz O. [Problem-solving strategies and marital satisfaction]. Psychiatr Pol 2006; 40: 245-259
- 37. Cassidy T, Long C. Problem-solving style, stress and psychological illness: development of a multifactorial measure. Br J ClinPsychol 1996; 35 ( Pt 2): 265-277.
- 38. Mahoney A. Religion in families 1999 to 2009: A relational spirituality framework. J Marriage Fam 2010; 72: 805-827.
- Hernandez KM, Mahoney A and Pargament KI. Sanctification of sexuality: implications for newlyweds' marital and sexual quality. J FamPsychol 2011; 25: 775-780.
- 40. MahmoodiF. The relationship between the coping styles with stress and marital satisfaction and their comparison among female student and normal population of women in Tehran, Procedia - Social and Behavioral Sciences 2011; 30: 1301-1302.
- Heffner KL, Kiecolt-Glaser JK, Loving TJ, Glaser R, Malarkey WB. Spousal support satisfaction as a modifier of physiological responses to marital conflict in younger and older couples. J Behav Med 2004; 27: 233-254.
- 42. Heffner KL, Loving TJ, Kiecolt-Glaser JK, Himawan LK, Glaser R, Malarkey WB. Older spouses' cortisol responses to marital conflict: associations with demand/withdraw communication patterns. J Behav Med 2006; 29: 317-325.
- 43. Zelkowitz P,Milet TH. Postpartum psychiatric disorders: their relationship to psychological adjustment and marital satisfaction in the spouses. J AbnormPsychol 1996; 105: 281-285.