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COMPARISON OF MARITAL SATISFACTION, FAMILY COHESION AND QUALITY OF LIFE AMONG WOMEN WITH AND WITHOUT CHRONIC PAIN

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Keyword: Chronic Pain,Family Cohesion, Quality of Life and Marital Satisfaction.

Abstract:

Background & Aims: This study was done to compare the Marital Satisfaction, Family Cohesion and Quality of Life in Two Groups of Women with and without Chronic Pain. The research method was descriptive of causal-comparative.

Materials & Methods: The population was consisted of all cancer patients and non-patients who were referred to specialist pain clinics in Rasht. The study sample consisted of was 30 Women with and 30 without Chronic Pain had selected via matching (homogenization) to a sampling available way. Data were collected by-Attachment styles questionnaire, marital satisfaction questionnaire, Sense of Coherence Scale and Quality of life questionnaire. Data were analyzed by using Multivariate analysis of variance (MANOVA).

Results: The results showed that there was a significant difference in compare between Marital Satisfaction and Family Cohesion of Women with and without Chronic Pain ($p<0/05$) and, the difference in also was the significant difference between two groups in Quality of Life ($p< 0/05$).

Conclusion: Based on the results, psychological variables should be considered for the treatment of chronic pain.

Introduction:

Pain is one of the most important medical problems in the world and the most common reason for people to go to medical centers, which is significantly related to the quality of life and their overall performance. According to the International Association for the Study of Pain, pain is an unpleasant sensory and emotional experience that is associated with possible or actual tissue damage or occurs during periods of such tissue damage (1). In terms of duration of pain, pain is divided into acute and chronic. Chronic pain is one of the most basic psychosomatic diseases that people face and one of the concerns of researchers is always to address such pains and the factors that cause these pains. In general, chronic pain is a persistent state of pain experience that often cannot be attributed to a specific cause or injury, is difficult to treat, and takes longer to heal than expected. This expected time is usually defined in various sources as 3 to 6 months (2). In recent years, chronic medical pain has become increasingly prevalent.So that its rate in the adult community is 10 to 30 percent, which is a very significant amount, and leaves serious problems in the general health of patients and daily functioning and quality of life and leads to economic effects resulting from the use of health services and unemployment hours (3). Therefore, extensive studies on chronic pain are very important. Long-term pain has negative effects on health and quality of life. Among the most important of these effects is physical disability and reduced functional level (4). In addition, chronic pain can affect other aspects of a person's life and cause serious problems in many aspects of life, such as physical, mental, and even social aspects. In the physical dimension, it can make a person incapable of doing things that he has been able to do before, and he cannot even do some of his daily tasks. In the psychological dimension, it can lead to depression, anxiety and sleep disorders, and in the social dimension, due to limited activity, it may isolate and isolate the person. People with chronic pain may experience pain without physical problems, in which psychological factors play an important role in the onset, exacerbation, and persistence of pain. Patients with chronic pain have negative feedback about their pain (5). According to the bio-psychological and social model of pain, the perception and expression of pain by each person is not only influenced by biological factors, but also by psychological and social factors (6).Research shows that the extent and severity of pain and disability in patients with chronic pain cannot be explained by biological factors alone, but also the need for psychological and emotional factors (7).

Among the factors that cause psychological disturbances and consequently reduce the level of happiness of people with chronic pain, is the component of reducing marital satisfaction, marital satisfaction has a greater and more direct contribution to the happiness and psychological well-being of women than men (8). Low marital satisfaction is associated with negative consequences such as isolation, depression, dysfunctional coping methods, patient psychological incompatibility and more negative responses from the spouse (8, 9). The spouse's negative responses to pain may also lead to decreased marital satisfaction and consequently increased pain intensity. This leads to increased symptoms of anxiety and depression and the emergence of a negative perception of marriage. Negative perception of the spouse causes frustration, unhappiness, loss of spouse support and depressed mood due to loneliness (10, 11, and 12). In research by Kerns, Haythornthwaite, Southwick & Giller(13), marital satisfaction predicted the severity of depressive symptoms in patients with chronic pain. Depressed patients with chronic pain showed more pain, disability, and marital dissatisfaction than non-depressed patients. The results showed that patients with chronic pain who had lower marital satisfaction reported more depressive symptoms.

The role of the family as an important social factor on chronic pain has attracted the attention of pain researchers (14). One of the most important variables in describing family functions is family cohesion. Family Cohesion; It is the feeling of solidarity, connection and emotional commitment that family members have towards each other (15). Olson also defines family cohesion as the feeling of emotional closeness to other family members. Research has shown that family communication is a facilitator for cohesion and adjustment between family members (16).

Family Cohesion is the emotional bond that family members have with each other (17). Because chronic pain affects almost every aspect of the family and over time leads to important consequences in the family. People with chronic pain become physically and emotionally dependent on others, which lead to changes in family roles, and family members often take on additional family responsibilities. As a result, family life is limited; Communication, activities, and interactions between family members focus on pain and chronic illness. The social life of the family is damaged and they may gradually withdraw from friends and society, and a pattern is formed in the family that is characterized by mutual commitment and abandonment of personal independence (18). Research findings have shown that the feeling of cohesion in the family is a protective factor against psychological pathology and reduces the risk of mental illness (19). One of the most important concepts in patients with chronic pain is the concept of quality of life. The use of the term quality of life in rehabilitation has been around since the 1960s and has been used in rehabilitation-related approaches to patients' health (20). Quality of life A person's perceptions of his or her living situation, according to the cultural systems and values in which he or she lives, are related to his or her goals, expectations, criteria, and concerns (World Health Organization, 1993). Quality of life determines a person's satisfaction with life and physical health has an effective role in its evaluation. People with chronic pain do not engage in pleasurable activities due to chronic pain and are therefore at risk for depression. These people experience significant changes in career, entertainment, sports, and household chores, and may feel more lonely, irritable, or helpless than ever before. This feeling of depression and helplessness may be exacerbated by the failure of various treatments. According to the above, it seems that psychological and emotional factors such as marital satisfaction, family Cohesion and quality of life play an important role in the formation and persistence of chronic pain ,and since coping with such severe pain requires mobilizing one's physical and mental strength together, which makes one feel more in control of chronic pain; Since the number of researches in this field is much more limited than the needs of the country , also, the existence of cultural differences in Iran compared to other countries in which research related to the present study is conducted, it seems that, the study of the effects and consequences of chronic pain on the variables of marital satisfaction, family cohesion and quality of life in women with chronic pain, to be effective in developing more effective treatments tailored to the needs of Iranian society. Therefore, the present study hypothesizes that there is a difference between marital satisfaction, family cohesion and quality of life in women with and without chronic pain, and in which of these dimensions these differences can be seen more.

Research method:

The present study is a descriptive study of comparative type. The statistical population of this study includes all women with and without chronic pain in the age range of 40 to 60 in Rasht, in the winter of 1998, they had referred to the Mehr Pain Clinic in Rasht for medical treatment, and 60 people were selected as the sample group through purposive sampling. Admission

requirements for the subject include: 1) Diagnosis of chronic pain by a specialist, 2) Being 40 to 60 years old, 3) No history of hospitalization due to mental disorders. Selection and sampling of non-chronic pain women were also selected from the hospital staff and welfare staff in Rasht using the available sampling method. These people have no history of chronic illness or other severe mental or physical illness. Inclusion criteria in this group were 40 to 60 years old, no history of hospitalization due to the mental disorders mentioned above, plus no chronic pain. Also, these people were matched with the patient sample group in terms of demographic characteristics (economic status, gender, age, occupation and education, number of children).

Research tools:

Enrich marital satisfaction questionnaire

The Enrich Marital Satisfaction Questionnaire has 125, 115, 47 and 35 phrase forms. In this research, a 35-question form has been used. The 35-question form was created by Olson in 2006 by revising the original form to assess potentially problematic areas or to identify areas of strength and fertility of the marital relationship. This questionnaire is also used to identify couples who need counseling and strengthening their relationship. The Enrich Questionnaire consists of 35 items from 4 subscales of ideal distortion, marital satisfaction, communication and conflict resolution (29). In 2000, Olson reported the reliability coefficient of this scale with Cronbach's alpha for the subscales of marital satisfaction, communication, conflict resolution, and ideal distortion as 0.86, 0.81, 0.84 and 0.83, respectively, and the reliability of the questionnaire retrieval as 0.86, 0.81, 0.90 and 0.92, respectively. Sami, Nazari, Mohsenzadeh and Taheri (30) have reported the reliability coefficient of this scale with Cronbach's alpha method for the subscales of marital satisfaction, communication, conflict resolution and ideal distortion 0.79, 0.76, 0.72 and 0.75, respectively. Asodeh (29) reported the reliability coefficient of this scale with Cronbach's alpha for the subscales of marital satisfaction, communication, conflict resolution and ideal distortion 0.68, 0.78, 0.62 and 0.77, respectively. Reliability of marital satisfaction, communication, conflict resolution and ideal distortion subscales in the present study was obtained using Cronbach's alpha coefficient of 0.75, 0.79, 0.81 and 0.80, respectively.

Elson Sense of Coherence Scale:

Elson Sense of Coherence Scale Based on a collection of texts on correlation and inspired by the combined model of Elson (1999) by Samani (31). This scale has 28 questions and is scored in 1 to 5 options. The questionnaire gives an overall score that the higher the score, the higher the cohesion of the family. This scale has 8 factors; Solidarity with father, mother, duration of interaction, location, decision making, emotional connection, marital relationship and parent-child relationship. The internal consistency coefficient of the scale is 0.85, Cronbach's alpha coefficient is 0.79 and the reliability coefficient with the retest method is 0.80 (31). In the research of Pamplaiga, Merino, Iriart and Olson (32), the reliability coefficient of the family Cohesion Scale has been reported to be 0.75. In the present study, Cronbach's alpha of this questionnaire was 0.88.

Quality of life questionnaire of the World Health Organization:

World Health Organization quality of life scale:This questionnaire was designed by the World Health Organization to assess the quality of life (World Health Organization Group, 1998). The

short form of this questionnaire consists of 26 items and evaluates the four areas of physical health, mental health, social relations and environmental health with 24 questions (with 7, 6, 3 and 8 questions, respectively). In Iran, Nejat, Montazeri, Halavi, Mohammad and Majdzadeh (33) have standardized this scale on 1167 people. The reliability of the questionnaire was obtained by Cronbach's alpha method for healthy population in the field of physical health 0.70, mental health 0.73, social relations 0.55 and environmental communication 0.84, and the reliability coefficient of the retest method after 2 weeks has been reported to be about 0.7. In the research of Sepehrian Azar, Issazadegan and Motalebi (34), Cronbach's alpha for the areas of physical health, mental health, social relations and environmental communication have been reported as 0.89, 0.90, 0.87 and 0.89, respectively. In the present study, the reliability of this questionnaire in patients with chronic pain was calculated by Cronbach's alpha method, alpha was obtained as 0.83, 0.86, 0.78 and 0.89 for physical health, mental health, social relations and environmental communication, respectively.

Findings

This study was performed on 60 subjects as a sample group in each group of 30 people, 50% of the statistical sample was women with chronic pain and 50% were women without chronic pain. 28% of the statistical sample studied patients with undergraduate education, 23% with diploma education, 20% with associate education, and 29% with university education.

Table1: Descriptive indices of marital satisfaction and family cohesion and quality of life in two groups of women with and without chronic pain.

	Variable	group	Average	Standard deviation
marital satisfaction	Ideal distortion	chronic	27.26	5.31
		non-chronic	30.50	3.03
	marital satisfaction	chronic	26.76	4.26
		non-chronic	34.83	3.27
	connections	chronic	28.66	4.30
		non-chronic	34.07	3.53
	Conflict resolution	chronic	27.90	4.47
		non-chronic	35.63	0.385
family Cohesion	Solidarity with the mother	chronic	9.53	3.29
		non-chronic	10.63	2.17
	Solidarity with the father	chronic	9.26	2.90
		non-chronic	10.41	2.42
	Duration of interaction	chronic	8.53	2.94
		non-chronic	12.64	2.78
	Place	chronic	9.13	2.92
		non-chronic	12.82	3.14
	Decision making	chronic	9.43	2.38
		non-chronic	11.56	2.51
	Emotional connection	chronic	11.72	3.76
		non-chronic	14.36	3.07
	Marital relations	chronic	8.56	2.44

		non-chronic	13.26	2.73
quality of life	Physical health	chronic	23.60	6.44
		non-chronic	24.10	5.96
	mental health	chronic	18.93	5.17
		non-chronic	21.13	4.72
	Community Relations	chronic	9.66	2.83
		non-chronic	11.36	1.93
	Environmental health	chronic	24.58	6.55
		non-chronic	27.26	4.73

The results of Table 1 show that the mean variables of marital satisfaction, family Cohesion and quality of life are different in the two groups of women with and without chronic pain ,but the significance of this difference is examined by inferential statistics below.

Table 2: Kolmogorov-Smirnov sample and Shapiro-Wilkes test to determine the normality of the factors

Type of test	Index dimensions	**marital satisfaction**	**family Cohesion**	**quality of life**
Kolmogorov-Smirnov	Number	60	60	60
	Kolmogorov- Sminoroff values	0.897	1.231	0.873
	Significance level (two domains)	0.211	0.098	0.221
Shapiro Wilkes	Shapiro Wilkes values	0.715	0.842	0.770
	Significance level (two domains)	0.512	0.483	0.309

Based on the results of Table 2, the significance level of all research factors in both tests was more than 0.05. Therefore, the hypothesis of normal distribution of factors was confirmed and the hypothesis that the distribution of data was abnormal was not confirmed. Therefore, due to the normality of data distribution, parametric tests are used in subsequent analyzes.

Table 3: Manua test assumptions

Test	amount	The significance level
Box,s M	24.135	0.308
F	1.24	

Based on the results of Table (3), according to the results of M and F tests and the significant level obtained 0.308, it can be said that, the covariance matrix observed in the dependent variables is different between the two groups and can be used as a maneuver.

Table 4: Results of multivariate analysis of variance to compare marital satisfaction, family cohesion and quality of life in two groups of women with and without chronic pain.

Test statistics	**amount**	**F**	**df**	**The significance level**
Pilay effect	0.660	23.428	3	0.0001
Landai Wilkes	0.340	26.245	3	
The effect of hoteling	1.940	24.328	3	
The largest root on	3.794	19.216	3	

With the significance of multivariate analysis of variance test in Table (4), it is concluded that there should be a significant difference in at least one of the variables of marital satisfaction, family cohesion and quality of life in the group of women with and without women with chronic pain. Therefore, in order to investigate the observed significance between the two groups of women with and without chronic pain in which of the variables of marital satisfaction, family Cohesion and quality of life, univariate variance is investigated.

Table 5: Results of univariate analysis of variance to compare marital satisfaction, family cohesion and quality of life in two groups of women with and without chronic pain

Resource statistics		Sum of squares	df	Average squares	F	The significance level	Partial η^2
group	marital	976.067	1	976.067	67.59	0.000	0.538
	family Cohesion	426.667	1	426.667	27.476	0.000	0.321
	quality of life	799.350	1	799.350	45.835	0.000	0.441
Error	marital	837.533	58	14.440			
	family Cohesion	900.667	58	15.529			
	quality of life	1011.500	58	17.440			
total	marital	58732.000	60				
	family Cohesion	60234.000	60				
	quality of life	61535.000	60				

As the results of Table (5) show, there was a significant difference between the two groups of women with and without chronic pain in marital satisfaction, family Cohesion and quality of life. The findings also indicate that 0.53%, 0.32% and 0.44% of variance in the components of

marital satisfaction, family Cohesion and quality of life are explained by the grouping variable (Women with and without chronic pain).

Discussion:

This study was done to compare marital satisfaction, family cohesion and quality of life among women with and without chronic pain. The results of the present study showed that there is a significant difference between the two groups of women with and without chronic pain in marital satisfaction, family cohesion and quality of life. Thus, the group of women with chronic pain had lower family Cohesion and quality of life scores and lower marital satisfaction than non-chronic women.

In the field of marital satisfaction, the results showed a significant difference between women with chronic pain and women without chronic pain in terms of marital satisfaction; thus, in terms of marital satisfaction, there is a significant difference between the two groups.These results are consistent with the findings of Mitenti, Kindet, Mitni, Bernardes, Kano, Verhafstadt and Gubert (35), (9), Taylor, Davis and Zatra, (36), Turk, Kerns and Rosenberg, (37), Geiser, Kano and Leonard, (10), Kano, Gillis, Heinz, Jesser and Furan, (12), Kerns, Heathrow White, Sutwick & Giller, (14), Leonard & Kano, (38) Mann and Zatra, and Abbasi, Dehghani, Kiev, Jafari, Behesht and Shams, (39).

Explaining the difference between marital satisfaction between women with and without chronic pain, chronic illness is seen as an unfortunate event in life that can change the way families react and interact. With this in mind, chronic pain should be viewed as a family problem that, like other chronic illnesses, affects all members of the family. Women with chronic pain are more likely to have marital satisfaction and have problems with marital adjustment than healthy people; because with the onset of the disease, the spouse is forced to change roles and accept a new role compared to his past, hence, the benefits of communication in the couple's relationship will be one-sided and the burden of double responsibility of the spouse due to the disease will have a significant effect on the quality of life and marital satisfaction and how their relationship. Another explanation for this finding is that some women who cannot show their dissatisfaction with their married life or husband or women who were in a marital relationship are different from their appearance. Such people do not have the right to express their tastes and needs, they take refuge in pain and subconsciously take revenge on their spouses, and some may take refuge in pain when they find themselves unable or unwilling to perform marital duties.

The results also showed that family cohesion of women with chronic pain was lower than women without chronic pain. These results are consistent with the findings of Zinser, Ozakan, Orton and Swig, (40), Smith and Friedman, (19), Zandieh, Peasant and Asrzadegan, (41), Leonard and Kano, (38), Lewandowski, Morris, Drucker and Risk, (42), and Nichols and Schwartz, (43). The results of these studies have shown that, chronic diseases such as chronic pain of a family member are associated with unhealthy family functioning and changes in the dimensions of problem solving, emotional integration roles and overall family functioning as well as communication, roles and emotional attachment . In addition, disabilities due to chronic pain have significant effects on role changes among family members and satisfaction with the patient and his family.

In explaining these findings, it can be said that when the disease persists for a long time and becomes chronic, it imposes a lot of economic, social and family costs, and family cohesion and patterns are likely to be affected by this chronic disease. The presence of these changes in the family system, which are mostly unintended, disturbs the cohesion and balance of the family system, and as a result, the family is forced to change its roles and responsibilities in order to return to normalcy. When a family member with chronic pain loses many working hours, and people with chronic pain have to rely on other family members for care and support, and caregivers are responsible for the illness of people with chronic pain. As a result, relationships within the family are disrupted when the roles of one or all members are repeatedly disrupted, leading to dysfunction and cohesion of family roles.

In this regard, other family members hold the sick and caregiver responsible for these role changes and may feel that they are taking on additional family responsibilities; because when the expectations of the patient and caregiver's roles are not met, inconsistent and ineffective behaviors in the family system create a vicious cycle involving compensatory behaviors. On the other hand, caring for a person with chronic pain in the family causes a feeling of hopelessness and helplessness in the caregiver. In these families, family members want to help someone with chronic pain, but previous unsuccessful experiences have taught them that they can do nothing to reduce or stop chronic pain, resulting in a sense of helplessness and failure. Organs communicate less with the affected person so that the chronic pain does not worsen and the affected limb is not bothered. Separation of members from each other leads to more separation and weakening of family ties and reduced family cohesion, this in turn causes tension and discomfort between members and creates a negative emotional atmosphere in the family environment.

Another result of the study shows that there is a significant difference between women with chronic pain and women without chronic pain in terms of quality of life. The results of this study are in line with the results of Miro, Soleh, Gertz, Jensen and Angel (44),Yamagishi, Morita, Maista, Iragshi, Akiyama and Akizuki et al. (45), Souza, Oliveira, Esfil, Genro, Rosa, Ch׀vez et al., (46), Arabi and Bagheri (1396), Barseloz, Kande and Martinez, (48), Ghadimi Karhroudi and Sepehrian Azar (49), Versigina, Ambrosatis and Spacas, (50), Lucas (51), Harris, Salmir, Egan and Idain, (52) and Jailon Delja et al. Based on this, it can be concluded that the quality of life of disabled people is lower than normal people, also physical activity, self-esteem and quality of life of people with physical disabilities are lower than normal people.

Explaining this finding, it can be said that there is a lot of evidence that quality of life acts as a factor that affects the severity of disease, treatment and mortality in a wide range of diseases. Quality of life is a very valuable structure that measures a person's feelings about their state of health. According to the results of the present study and other psychological research on patients with chronic pain, it can be stated that chronic pain is a multidimensional disorder and many psychological factors are involved in the occurrence of this disease, and the role of quality of life can be considered as one of the predictors of chronic pain.

Based on this, it can be said that the more severe the pain, the more the patient's physical and psychological health is affected and causes problems such as sleep problems, more irritability and less physical activity, and finally less tolerance of the patient.All of these factors reduce the quality of life of people with chronic pain compared to people without chronic pain. Also, because people with long-term and severe illnesses have different perceptions of normal life due to illness and the resulting condition, and consequently their goals, expectations and desires will

be different.They have worries about their lives and recovery, suffer from the harassment of others, their independence is threatened by their illness, and they have different types of recreation, activity, and nutrition than normal people. The combination of these factors causes their quality of life to be lower than ordinary people.

Limitations in generalizing the research findings and using the questionnaire are some of the limitations of this research. In order to better generalize the results, it is suggested that a similar study be conducted using random sampling. Due to the greater ability of the findings to generalize the results and increase external credibility, it is suggested that a similar study be conducted in the statistical community and other cities. Other studies have been conducted by selecting larger samples so that, in addition to comparing their results with this study, they do not generalize the findings with great caution. Considering that the present study was performed on a sample of women with and without chronic pain, it is suggested that in future research, the effect of marital satisfaction, family Cohesion and quality of life variables in people with chronic diseases such as cancer, diabetes, migraine, etc. be examined. This will be able to add to the richness of the research literature in this field.

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Resources:

1. Martel, M. -E., Lafontaine, M. -F, Thériault, A., & Balbinotti, M. “Chronic pain self-efficacy as a mediator of the link between romantic attachment insecurity, individual functioning and couple satisfaction: a preliminary studys”. Revista Prâksis, Novo Hamburgo, (2016). 13, 2, 119-136.

2. Aydede, M., & Shriver, A. Recently introduced definition of “nociplastic pain” by the International Association for the Study of Pain needs better formulation. Journal ofPain, (2018). 159 (6), 1176-1177.

3. Reid, K. J., Harker, J., Bala, M. M., Truyers, C., Kellen, E., Bekkering, G. E., & Kleijnen, J. Epidemiology of chronic non-cancer pain in Europe: narrative review of prevalence, pain treatments and pain impact. Current medical research and opinion, (2011). 27(2), 449-462.

4. Jensen, M. P., & Turk, D. C. Contributions of psychology to the understanding and treatment of people with chronic pain: Why it matters to ALL psychologists. American Psychologist, (2014). 69 (2), 105.

5. Jensen, M. P., Smith, A. E., Alschuler, K. N., Gillanders, D. T., Amtmann, D., & Molton, I. R. The role of pain acceptance on function in individuals with disabilities: a longitudinal study. The Journal of Pain, (2016). 157(1), 247-254.

6. Ehde, D. M., Dillworth, T. M., & Turner, J. A. Cognitive-behavioral therapy for individuals with chronic pain: efficacy, innovations, and directions for research. American Psychologist, (2014). 69(2), 153.

7. Shaygan. M, Berger. A, & Kroener-Herwig, B. How does reduction in pain lead to reduction in disability in patients with musculoskeletal pain? Journal Pain Reasearch, (2019). 12: 1879–1890.

8. Whisman, M. A., Uebelacker, L. A., & Weinstock, L. M. Psychopathology and marital satisfaction: the importance of evaluating both partners. Journal of consulting and clinical psychology, (2004). 72(5), 830.

9. Manne, S. L., & Zautra, A. J. "Spouse criticism and support: Their association with coping and psychological adjustment among women with rheumatoid arthritis". Journal of Personality and Social Psychology, (1989). 56(4), 608.

10. Geisser, M. E., Cano, A., & Leonard, M. T. Factors associated with marital satisfaction and mood among spouses of persons with chronic back pain. The Journal of Pain, (2005). 6(8), 518-525.

11. Makhanova, A., McNulty, J.K., Eckel, L.A., Nikonova, J., Maner, J.K. Sex differences in testosterone reactivity during marital conflict. Hormones andBehavior, (2018). 105, 22-27.

12. Cano, A., Gillis, M., Heinz, W., Geisser, M., & Foran, H. Marital functioning, chronic pain, and psychological distress. Journal of Pain, (2004). 107(1), 99-106.

13. Cano, A., Weisberg, J. N., & Gallagher, R. M. Marital satisfaction and pain severity mediate the association between negative spouse responses to pain and depressive symptoms in a chronic pain patient sample. Pain Medicine, (2000). 1(1), 35-43.

14. Kerns, R. D., Haythornthwaite, J., Southwick, S., & Giller, E. L. The role of marital interaction in chronic pain and depressive symptom severity. Journal of Psychosomatic Research, (1990). 34(4), 401-408.

15. Rowat KM, Knafl KA. Living with chronic pain: the spouse's perspective. Pain. (1985), Nov.

16. Olson, D. H. Family Communication and Family Satisfaction Scales. (2011). In faces IV package.

17. Smith, E. P. Prinz, R. J. Dumas, J. E. & Laughlin, J. Latent Models of Family Processes in African American Families: Relationships to Child Competence, Achievement, and Problem Behavior. Journal of Marriage and family, (2018). 23(5), 729-735.

18. Olson, D. H., McCubbin, H. I., Barnes, H., Larsen, A., Muxen, M., & Wilson, M. Family inventories: Inventories used in a national survey of families across the family life cycle. (1982). St. Paul, MN: University of Minnesota.

19. Smith, A. & Friedmann, M. “Perceived family dynamics of perpns with chronic pain”. Joumal of AdvancedNursing, (1999). 30, 543-551.

20. Kouvonen. AM, Väänänen. A, Vahtera. J, Heponiemi. T, Koskinen. A, Cox. SJ, et al. Sense of coherence and psychiatric morbidity: A 19-year register-based prospective study. Journal of Epidemiology and Community Health. (2010). 64(3): 255-61.

21. Dijkkers, M. P. Individualization in quality of life measurement instruments and approaches. Archphysmed rehabilation, (2003). 84(2), 3-10.

22. Roberts, F. The association between pain and sleep and their effects on health-related quality of life, wellbeing and disability in people presenting to healthcare clinics in New Zealand (Unpublished document submitted in partial fulfilment of the requirements for the degree of Master of Osteopathy). (2019). Unitec Institute of Technology, Auckland, New Zealand, Retrieved from.

23. Jalayondeja, C. Jalayondeja, W. Suttiwong , J. Sullivan, P., E. Nilanthi, D., L. Physical activity, selfesteem, and quality of life among people with physical disability. Southeast Asian Journal of Tropical Medicine and Public Health, (2017). 47(3), 546-58.

24. Lewis, V. M., Williams, K., Kokum, C., Woolmore, J., Jones, C., & Powell, T. Disability, depression and suicide ideation in people with multiple sclerosis. Journal of Affective Disorders, (2017). 208, 662–669.

25. Lund a, n. Nadorff, b, E. Samuel, Winer c & Seader. K. Is suicide an option?: The impact of disability on suicide acceptability in the context of depression, suicidality, and demographic factors. Journal of Affective Disorders. (2016). 189: 25-35.

26. Papadakaki, Lionis, Saridaki, Dowrick, de Brún, Reilly-de Brún, Donnell, Burns, van Weel-Baumgarten, Muijsenbergh, Spiegel & MacFarlane. Exploring barriers to primary care for migrants in Greece in times of austerity: Perspectives of service providers. Eur J Gen Pract. (2017). 23(1): 128–134.

27. Olson, D. H. Circumplex model of marital and family systems. Journal of Family Therapy, (2000). 22(2), 144-167.

28. Crichton, Bray, McKevitt, Rudd, & Wolfe. Patient outcomes up to 15 years after stroke: survival, disability, quality of life, cognition and mental health. Journal of Neurology, Neurosurgery & Psychiatry. (2016). 87 (10), 1091-1098.

29. Asoudeh. The Study of the Efficacy of "Focused On Emotion Therapy" Group Training on Quality of Life Improvement and Marital Satisfaction of Mothers of Children with Cancer. Quarterly journal of health psychology, (2013); 2(6): 79-94.

30. Sami, A., Nazari, A.M., Mohsenzadeh, F. & Taheri, M. A study aimed at the multiple relationship between attachment style, personality dimensions and marital satisfaction with marital breakdown. Journal of Behavioral Sciences Research; (2014), 13 (3): 376-387. (Persian).

31. Samani, S. Developing a Family Cohesion Scale for Iranian adolescent.Paper presented in 28thInternational Congress of Psychology. (2004). Aug 8-13, Beijing,China.

32. Pampliega, A., Merino, L., Iriarte, L., & Olson, D. H. Psychometric properties of the Spanish version of the Family Adaptability and Cohesion Evaluation Scale IV. Psicothema, (2017). 29(3), 414-420.

33. Nejat S, Montazeri A, Holakouie Naieni K, Mohammad K, Majdzadeh S. The World Health Organization quality of Life (WHOQOL-BREF) questionnaire: Translation and validation study of the Iranian version. sjsph. (2006); 4 (4):1-12.

34. Issazadegan A, Sepehrianazar F, Matlabi M. The comparison of attachment styles and fear of intimacy in people with and without cancer. mejds. (2016); 6: 205-210.

35. Mittinty, M. M., Kindt, S., Mittinty, M. N., Bernardes, S., Cano, A., Verhofstadt, L., & Goubert, L. A dyadic perspective on coping and its effects on relationship quality and psychological distress in couples living with chronic pain : a longitudinal study. Pain medicine, (2020). 21(2), e102–e113.

36. Taylor. SS, Davis. MC, Zautra. AJ. Relationship status and quality moderate daily pain-related changes in physical disability, affect, and cognitions in women with chronic pain. Journal of Pain. (2013). 154(1): 147-153.

37. Turk, D. C., Kerns, R. D., & Rosenberg, R. "Effects of marital interaction on chronic pain and disability: Examining the down side of social support. Rehabilitation Psychology, (1992). 37(4), 259.

38. Leonard, M. T., & Cano, A. Pain affects spouses too: Personal experience with pain and catastrophizing as correlates of spouse distress. Journal of Pain; (2006). 126(1), 139-146.

39. Abbasi, M., Dehghani, M., Keefe, F., Jafari, H., Behtash, H., & Shams, J. Spouse-assisted training in pain coping skills and the outcome of multidisciplinary pain management for chronic low back pain treatment: A 1-year randomized controlled trial. European Journal of Pain, (2012). 16(7), 1033-1043.

40. Zincir, H., Ozkan, F., Erten, Z. E., & Sevig, E. U. Sexual lives and family function of women with family member with disability: educational status and income. Department of public Health Nursing. (2011). 29, 197-206.

41. Zandieh, S., Dehghani, M., Asarzadegan, F. Family function in patients with chronic headache, non-chronic headache and headache free individuals. Quarterly journal of health psychology, (2016). 5(19), 45-56.

42. Lewandowski, W., Morris, R., Draucker, C. B., & Risko, J. Chronic pain and the family: Theory-driven treatment approaches. Issues in Mental Health Nursing, (2007). 28(9), 1019-1044.

43. Nichols, M. & Schwartz, R. Family therapy concepts and methods. Boston: (2003). Allum and Bacon.

44. Miró, Solé, Gertz, Jensen, & Engel. Pain Beliefs and Quality of Life in Young People with Disabilities and Bothersome Pain. Clinical Journal of Pain, (2017). 33 (11): 998-1005.

45. Yamagishi, A., Morita, T., Miyashita, M., Igarashi, A., Akiyama, M., Akizuki, N., & Eguchi, K. Pain intensity, quality of life, quality of palliative care, and satisfaction in outpatients with metastatic or recurrent cancer: a Japanese, nationwide, region-based, multicenter survey. Journal of pain and symptom management, (2012). 43(3), 503-514.

46. Souza, C.A., Oliveira, L.M., Scheffel, Vanessa K Genro, Virginia Rosa, Marcia F Chaves & João S Cunha Filho. Quality of life associated to chronic pelvic pain is independent of endometriosis diagnosis-a cross-sectional survey. Health Qual Life Outcomes, (2011). 9, 41.

47. Arabi, E., Bagheri, M. The mediating role of emotion regulation strategies on the relationship between pain intensity and quality of life in patients with chronic pain disorder. Quarterly journal of health psychology, (2017); 6(22): 72-87.

48. Barcelos. PR, Conde. DM, Deus. JM, Martinez. EZ. Quality of life of women with chronic pelvic pain: a cross sectional Analytical study. RevBras Ginecol Obstet; (2010). 32:247-253.

49. Ghadimi Karahroudi S, Sepehrian Azar F. Comparison of Health Anxiety, Sleep and Life quality in People With and Without Chronic Pain. JAP. 2020; 10 (4): 63-76Miró, Solé, Gertz, Jensen, & Engel. Pain Beliefs and Quality of Life in Young People with Disabilities and Bothersome Pain. Clinical Journal of Pain, (2017); 33 (11): 998-1005.

50. Vereščiagina, K.; Ambrozaitis, K.V.; Špakauskas, B. Health-related quality-of-life assessment in patients with low back pain using SF-36 questionnaire. Medicina, (2007). 43, 607.

51. Lucas, R., E. Long-term Disability Associated with Lasting changes in subjective well-being: Evidence from tow nationally represnative cogitudinal studies. Journal of personality andSocial Psychology, (2001). 22(4), 117-30.

52. Haris, M. Selmir, H. Inga, I., B. Edin, M. Quality of life of people with disabilities in Bosnia and Herzegovina–is there a moderating effect of the health status? Journal Scandinavian Journal of disability research. (2017). 19(4). 375-382.