Published online 2015 December 23.

Short Communication

The Relationship Between Marital Satisfaction and Compatibility With Type 2 Diabetes

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Received 2014 July 22; Revised 2015 April 25; Accepted 2015 July 8.

Abstract

Background: Marriage is a legal pact between a man and a woman for participating in a social life together which can play an important role in dealing with difficulties.

Objectives: This study was carried out to investigate the relationship between marital satisfaction and compatibility with diabetes in patients with type 2 diabetes.

Patients and Methods: The study method was descriptive-correctional. The study sample included 160 diabetic patients (103 females and 57 males) who were randomly selected. The instruments used were Enrich marital satisfaction questionnaire and the questionnaire of compatibility with diabetes. In addition, the data were analyzed through descriptive statistics and analysis of variance by SPSS.

Results: The result of the study revealed a significant correlation (P=0.006) between marital satisfaction and compatibility with diabetesin women with type 2 diabetes (r=0.26). However, this correlation was not significant in men with diabetes. Also, a significant relationship existed between the dimensions of compatibility with diabetes and marital satisfaction in both men and women with diabetes.

Conclusions: Marital satisfaction affects compatibility with diabetes in women. Therefore, it might be possible to increase compatibility with diabetes in them by offering specialized interventions as family and couples therapies and giving consultations.

Keywords: Compatibility, Diabetes Mellitus, Marital Satisfaction

1. Background

Diabetes includes some prevalent metabolic disorders, which all have hyperglycemia phenotype in common. The global prevalence of diabetes mellitus has been remarkably increased during the last two decades and has reached from almost 30 million cases in 1985 to 285 million cases in 2010 (1). The prevalence of diabetes in Iran was about 7.7% in 2005 (2), and this amount reached 8.7% in 2007 (2).

Diabetes is a disease which is mainly controlled by patients. Obviously, many factors are required to meet the needs of the patients with diabetes. Although, complete treatment of diabetes is a long way ahead, medical care and sociopsychological support have great effects on its acute and chronic outcomes (3).

In light of high prevalence of this disease, it has become the subject of significant research in different clinical areas. Because of the increased prevalence of diabetes and its complex etiology, adaptation mechanisms are needed to make a change in the concepts of diabetes management and the treatment programs that have been considered so far. This change should be from the physical variables to sociopsychological factors which may be effective on the disease management and its outcomes (4). In addition, the new treatment recommendations have specifically confirmed the importance of the integration of sociopsychological concepts with the usual care of patients with diabetes. This new approach helps them achieve suitable control over their glucose level and leads to the person's high compatibility (5).

Marital satisfaction is a situation in which husband and wife have a sense of happiness and are satisfied from each other most of the times. Satisfactory relationships between couples can be measured by mutual love, the amount of caring from each other, and understanding of each other (6). According to Winch (as cited in Olia), marital satisfaction is the adaptation between the individual's present situation in marital relationships and his or her expected situation. Marital satisfaction does not appear from thin air and its development needs the effort of the couple. The study results show that the outcome of marital satisfaction (supporting each other) can

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affect people's health (7). Furthermore, a positive correlation has been found between marital conflict, anxiety, depression, and the low level of physical health (8).

Literature review in Iran and other countries revealed that there has been no study about the relationship between marital satisfaction and compatibility with diabetes in patients with type 2 diabetes.

Despite benefiting from multiple therapeutic interventions like diets, regular exercise, weight control, chemotherapies, and epidemiologic investigations, we are observing that symptoms grow in patients with type 2 diabetes. Therefore, the importance of diabetes and its recognition has been doubled. Marital satisfaction can improve treatment and cause it last longer. Therefore, this relationship needs to be investigated.

2. Objectives

The aim of the present study was to investigate the relationship between marital satisfactions with compatibility with type 2 diabetes.

3. Patients and Methods

This study method was descriptive-correlative. The sample consisted of patients (20 - 60 years old) with diabetes who refereed to Diabetes Clinic in Meybod, Iran. The patients with the following criteria were enrolled in the study: being 20 to 60 years old, having diagnosed their disease at least one year before the study, visiting one of the physicians in the diabetes clinic, and having medical case with the physician.

The people who had the following exclusion criteria were omitted from the study: having history of other physical diseases except the ones related to diabetes symptoms, and having mental retardation or other psychological disorders before diabetes diagnosis.

According to the mentioned criteria, 160 patients from the clinic members (103 females and 57 males) were randomly selected. The sample size was determined based on random sample size formula of Krejcie (9) which estimated to be 160 out of community of 280 patients. At first the list of the names of all people who were at that age range was taken from Meybod Diabetes Clinic. Then, the considered number of the patients was selected randomly from the list. They were called and those who had the criteria for entering into the study were chosen and invited for participating in the study. The questionnaires that were used in this study were Enrich marital satisfaction and the compatibility with diabetes.

3.1. Enrich Marital Satisfaction Questionnaire

Olson et al. used this questionnaire for investigating marital satisfaction in 1989. They believed that this scale is related to the changes that happen during the individual's life (10). This questionnaire included 47 questions rated in a 5-point scale from "completely agree" to "completely disagree." Soleimanian translated this questionnaire into

Farsi in 1994. The validity of the instruments was also calculated by content validity method and its reliability was calculated by retest method (0.82) that was significant (11).

3.2. Questionnaire of Compatibility With Diabetes

This questionnaire is composed of 27 items and 5 factors. The factors are family relationships, relationship with friends, dependency and independency conflicts, physical image, and the attitude toward the disease. These factors show how diabetes affects the individual's way of living and his or her compatibility. Those responses that show positive compatibility with diabetes were given the score of 1 and those which show negative compatibility were given 0. The reliability of this questionnaire with retest method on 15 patients with diabetes was found 0.73 after 5 weeks, and its content validity was confirmed by 3 psychologists and endocrinologists and psychiatric nursing.

4. Results

Most of the study samples were in the age range of 41 - 50 with the frequency of 50 which involves 31.2% of the participants and the least frequency was in the age range of 21 - 30 with 11 (6.8%) participants. Also, most of the participants were women 103 (64.4%).

Table 1 shows the mean and standard deviation of marital satisfaction and the aspects of compatibility with diabetes in the sample group.

Table 1 shows that the mean and standard deviation of marital satisfaction in the sample group are respectively 136.9 and 14.07, and the mean and standard deviation of compatibility with diabetes are respectively 40.12 and 3.33.

Table 2 shows the result of ANOVA (analysis of variance) on the mean of marital satisfaction score in two groups (men and women with diabetes).

Table 2 shows that, there is no significant difference between women and men with diabetes regarding marital satisfaction (P = 0.3).

Table 3 shows the correlation between marital satisfaction and aspects of compatibility with diabetes in women and men with diabetes.

Table 1. Mean, and Standard Deviation of Marital Satisfaction and Aspects of Compatibility With Diabetes in the Sample Group

Variables	Mean ± SD				
Aspects of compatibility with diabetes					
Family relationship	3.04 ± 0.68				
Dependency and independency conflicts	7.29 ± 1.1				
Relationship with friends	9.43 ± 1.32				
Attitude toward the disease	18.94 ± 1.85				
Physical image	1.41 ± 0.46				
Marital satisfaction	136.9 ± 14.07				
Compatibility with diabetes	40.12 ± 3.33				

Table 2. The Mean of Marital Satisfaction Score in two Groups

Variable Total Mean df Mean Square F P Value

Marital satisfaction 208.1 1 208.1 1.05 .3

Table 3. The Correlation Between Marital Satisfaction and Aspects of Compatibility With Diabetes in Women and Men With Diabetes

Gender	Aspects of Compatibility With Diabetes					
	Attitude Towards the Disease	Dependency and Independency Conflicts	Relationship With Friends	Family Relationship	Physical Image	With Diabetes
Females						
Marital satisfaction	-0.25	.14	-0.14	.14	.15	.26
P value ^a	0.09	.15	0.17	.14	.11	.006
Males						
Marital satisfaction	-0.05	.05	-0.17	.26	.21	.02
P value ^a	0.7	.66	0.2	.4	.11	.87

^aP values less that 0.01 are considered as significant.

Table 3 shows that a positive, significant relationship exists between marital satisfaction and compatibility with diabetes in women (P = 0.006; r = 0.26). It means that as marital satisfaction increases in women with diabetes, compatibility with diabetes will also increase. However, there is no significant relationship between marital satisfaction and compatibility with diabetes in men with diabetes (P = 0.87; P = 0.02). Also, there is no significant relationship between aspects of compatibility with diabetes and marital satisfaction in women and men.

5. Discussion

As it was mentioned, the present study was carried out to investigate the relationship between marital satisfaction and compatibility with diabetes in patients with type 2 diabetes. The results revealed that a positive significant relationship exists between marital satisfaction and compatibility with diabetes in women. It means that by increasing marital satisfaction, compatibility with diabetes increases and vice versa. In fact, marital satisfaction affects people's mental health and these result are in consistent with the results of other studies (12, 13) in which the relationship between mental health and marital satisfaction were investigated in people with chronic diseases. The results revealed that marital satisfaction predicts mental health. By improving couples' relationships, mental health will also improve. The results of the other studies (14, 15) in which the relationship between family support and blood glucose control was investigated in elderly with type 2 diabetes revealed that family support increases marital satisfaction which is in line with increasing the elderly mental health. Elder and George (16) also cited in their study that close relationships are the main source of pleasure and support during life. People who have closer relationships are in better physical and mental health condition (16, 17) which is consistent with the results of this study.

Lal and Bartle-Haring (18) investigated marital satisfaction in patients with chronic lung diseases and their results also revealed that marital satisfaction was related to psychological improvement which could affect and alleviate their chronic pains. Whitsitt (19) investigated coping strategies and compatibility with coronary artery diseases in couples and the results showed that marital quality can affect better compatibility with the disease. Lewis et al. (20) revealed in their studies that the relationship between the couples can reinforce the behaviors related to health and lead to people's improvement.

Destructive and irrational beliefs, expectations, and perceptions overshadow marital relationship. Unhappy couples experience less enjoyable and pleasant behaviors and more unpleasant ones. Therefore, this issue destroys the balance of suitable behaviors and leads to loss of intimacy. Marital satisfaction is considered as a continuum and an evolutionary process between husband and wife. Marital satisfaction includes some elements such as selfesteem, self-effectiveness, domination, and control over life. The weakness in any of these factors leads to the reduction in individual's health and ability for dealing with his or her present conditions. In fact, marital satisfaction acts as a protective and reinforcing factor for the patient. When marital satisfaction is high, domination, control, and life expectancy will increase in the person and he or she tries more to improve himself or herself. When marital satisfaction is high, the person also benefits from the advantages of this relationship which occurs in a substitutive way and he or she can adopt his or her condition.

In this study the interaction of variables like occupation, education, duration of marriage, number of children, personality, place of living, and other effective social and cultural variables were not examined with the test variables. Therefore, it is suggested that the relationship of test variables with other variables such as age,

gender, education, duration of marriage, and personality be investigated in different cities.

In addition, this study has its own limitations like the small number of the subjects who were a group of patients referred to the hospitals in Meybod. So, further studies should be done, in different cities and on other age groups with other instruments and the results should be compared.

In the future studies it is important to consider other psychological factors too, since investigating possible interactive effects of some personal issues in predicting compatibility with type 2 diabetes can help us in explaining problems regarding diabetes management in a more suitable way.

Acknowledgments

We are grateful to the hospital officials and all people who helped us in conducting this study.

Authors' Contributions

Atena Dadgari conceived and designed the study, drafted the manuscript, read and approved the final manuscript. Nahid Mazloom revised it critically for important intellectual content and performed the statistical analysis. Imane Bagheri helped with the interpretation of data and revision of the manuscript. Mohammad Reza Heidari Firouz Abadi collected and interpreted the clinical data. All authors read and approved the manuscript.

Declaration of Interest

None declared.

Clinical Trial Registration Code

None declared.

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