Marital Satisfaction in Women with and Without Polycystic Ovary Syndrome: A Comparative Study

Kobra Valian[1], Leila Amini[2]*, Homa Sadeghi Avval Shahr[2], Ali Montazeri[3]

[1.] Department of Midwifery, School of Nursing & Midwifery, Tehran University of Medical Sciences, Tehran, Iran.
[2.] Department of Midwifery, School of Nursing & Midwifery, Iran University of Medical Sciences, Tehran, Iran.
[3.] Mental Health Research Group, Health Metrics Research Center, Iranian Institute for Health Sciences Research, ACECR, Tehran, Iran.
*Corresponding author: Leila Amini, Department of Midwifery, School of Nursing & Midwifery, Iran University of Medical Sciences, Tehran, Iran.
E-mail: amini.l@iums.ac.ir

Abstract: Polycystic ovary syndrome is a sex hormone disorder that can influence on marital satisfaction of affected married women. In the other hand, problems in marital relationships can causes problems in social relationships, tendency to social deviations and declining of cultural values among couples. By the way, the aim of this study was comparison of marital satisfaction in women with and without PCOS regarding to marital duration. In this comparative study, 100 women with polycystic ovary syndrome and 300 healthy individuals compared for marital satisfaction regarding to their marital duration. This study was done in selected clinics in Tehran city, 2012-2013. Samples selected using consecutive sampling. Einrich marital satisfaction inventory and demographic questionnaire were completed by women. To analyze data, SPSS version 16 was used. In the group of women with polycystic ovary syndrome the most women had average level of satisfaction in communications, conflict resolution, and ideal distortion subscales (34%, 46%, 42%, and 51% respectively), and there was no significant relationship between these subscales with duration of marital life. In the group of women without polycystic ovary syndrome the most women with respect to subscales of marital satisfaction, communications, conflict resolution and ideal distortion were in the average level (44.7%, 36.8%, 34.8% and 40.7% respectively) too. In two groups, there was no significant relationship between these subscales and duration of marital life. But there was a significant difference in marital satisfaction between women with and without polycystic ovary syndrome. Individuals with polycystic ovary syndrome have lower marital satisfaction than non-PCOS women. It is necessary to offering appropriate interferences for patients and their families.

Keywords: marital satisfaction, Polycystic Ovary Syndrome

Introduction

The polycystic ovary syndrome (PCOS) is one of the widespread endocrine disorders among women that affect 5-10 percent of them in the reproductive age (1). This syndrome not only applies long term impacts on well-being and health, but also changes the quality of life of these patients (2). Polycystic ovary syndrome appears with different clinical symptoms such as Amenorrhea, dysfunctional uterine bleeding, anovulation, and obesity. Clinical and metabolic consequences of this phenomenon are obesity, infertility, hirsutism, acne, cardiovascular diseases, insulin resistance and consequently type 2 diabetes, and endometrial and breast cancers. Also, mental consequences of this syndrome such as anxiety are prevalent (1). Other aspects of PCOS are increasing of LH to FSH ratio, and ultrasound evidences of PCOS (3). As PCOS is a syndrome with sex hormone disorders, therefore can influence on marital satisfaction of affected married women. Problem in sexual relationships causes problems in social relations, tendency to social deviations and decreasing of cultural values between men and women (4). Marital satisfaction is a status that couples are happy and satisfied from being together (5). In another definition, sexual satisfaction is ideas of each person toward his/her sexual behavior that depicts it as enjoyable (6). In religious views, marital satisfaction is a status in which men and women feel rest and confident from being with each other (Rome Surah: a part of 21). Marital discords have relationship with lower health level and specific physical diseases like cancer, heart disease, and chronic pain. Analysis related to marital interactions represents mechanisms that marital conflicts can change the immune, endocrine, and cardiovascular functions (7). The aim

of this study was marital satisfaction comparison in women with and without PCOS during 2012-2013 in Tehran.

Method and material

This comparative study was done in selected gynecology and infertility clinics in Tehran. In these research 100 women with Polycystic Ovary Syndrome and 300 healthy individuals was selected using consecutive sampling. The tool of collecting data was ENRICH marital satisfaction inventory. This inventory is a valid research tool that is used in researches and different clinical works. This scale consists of 4 sub-scales that involves 35 questions that is in form of five items of "completely agree, agree, no idea, disagree, completely disagree" that are marked from 1 to 5 and then these numbers were interpreted and analyzed based on the guideline table of interpreting ENRICH couple inventory. The validity of this form is recorded by David Alson and using Alfa coefficient method that is 0.92 and in Iran Solaimanian and Navabi-Nejad for the first time in 1997 calculated the internal correlation of the test for the long form of 0.93 and short form of 0.95. Its validity by Mahdavian in 1997 using reevaluation method for men was 0.93 and for women it was 0.94 (8). Diagnosis of polycystic ovary syndrome was based on the Rotterdam criteria (chronic anovulation, oligomenourreh, amenorrhea or irregular menses),

clinical hyperandrogenemia (such as hirsutism, acne) or laboratory hyperandrogenemia (increase serum testosterone or DHEAS), or sonographic evidences (existence of at least 10 follicles with 2 to 8 mm diameter). Data analysis was used by SPSS software. To adjust tables descriptive-statistics method was used. Also to analyze data statistical tests of t and chi-squire were used.

Results

In this study, 100 women with and 300 women without Polycystic Ovary Syndrome disease were compared. Mean and standard deviation of age in PCOS women was 28.30 (6.08) and in non-PCOS women it was 22.29 (6.726). 51% of PCOS women and 58.3% of non-PCOS women were educated at the level of high school and 72% of PCOS women and 80% of non-PCOS women was at the average economic status. In addition, 52% of PCOS women and 70% of healthy women were housekeepers. The mean weight in PCOS women was 66.71 (8.807) and for control group it was 60.84 (8.73). Mean of BMI in PCOS women was 22.92 (3.648) and in non-PCOS it was 22.91 (3.495). 42% of PCOS women was in overweight group (BMI=26-29) and 20% of them were obese (BMI≥30). In the control group, 58.3% of women had normal weight (BMI=20-25). Other additional information is shown in table-1.

Table 1: demographic information of samples

Variables		N(%))	
		PCOS	Non-PCOS
Age	Under 30 years	70(70)	195(65)
	30 years and more	30(30)	105(35)
Literacy	Primary and guidance school	11(11)	25(8.3)
	High school	51(51)	175(58.3)
	Academic	38(38)	10(33.3)
Economic status	Good	9(9)	42(14)
	Average	72(72)	241(80)
	Weak	19(19)	17(5.7)
BMI	0-19	1(1)	55(18.3)
	20-25	37(37)	175(58.3)
	26-29	42 (42)	60(20)
	30 and higher	20(20)	10(3.3)
Occupational status	Employed	48(48)	90(30)
	housekeeper	52(52)	210(70)

In the group of PCOS women with Polycystic Ovary Syndrome the most numbers with respect to scales of marital satisfaction, communications, conflict resolution, ideal distortion were in the average level and respectively were 34%, 46%, 42%, and 51% and

there was no significant relationship between these subscales with duration of marital life. In the group of non-PCOS women, the most numbers with respect to subscales of marital satisfaction (44.7%) was at the average level and in the subscales of communications,

conflict resolution and ideal distortion people were in the high level and they were respectively 36.8%, 34.8% and 40.7% and among these subscales there was no significant relationship with duration of marital life. In the people with duration less than 6 years, the most number with respect to subscale of marital satisfaction (34% PCOS women and 44.7% non-PCOS women) was at the average level. In subscale of communications the greatest number of PCOS women was (46%) at the average level and non-PCOS women (36.8) were at the high level. In subscale of conflict resolution the most number in both groups (42% PCOS women and 23.4% non-PCOS women) was at the average level and in the subscales of ideal subscale the most number of PCOS women(51%) were at average level and non-PCOS women group (44.7%) were at a higher level. Using the Mann-Whitney U test showed that in the PCOS and non-PCOS women

groups with duration of marital life lower than 6 years, there was a significant difference in all of the subscales. In the people with duration of marriage time more than 6 years the most numbers with respect to subscale of marital satisfaction was 17 % for PCOS women and 23.3 % for non-PCOS women that was at an average level. In subscales of communications conflict resolution and ideal distortion the most numbers of PCOS women(21% , 15% and 26%) were at average level and non-PCOS women (20.7%, 20.4%, and 23.6%) were at a high level. Using Mann-Whitney U test showed that in the PCOS women and non-PCOS groups with 6 years and higher marital life duration, there is a significant difference in all of the subscales ($p < 0.05$) so that, women with Polycystic Ovary Syndrome have lower marital satisfaction than non-PCOS women (table 2 and 3).

Table-2- Marital satisfaction in PCOS and non-PCOS with marital duration less than 6 years.

Group\Subscales	PCOS					Non-PCOS					Result of test Mann-Whitney U
	Very high	High	Average	Low	Very low	Very high	High	Average	Low	Very Low	
	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	
Marital satisfaction	0(0)	1(1)	17(17)	14(14)	0(0)	0	8(2.7)	67(23.3)	28(9.3)	7(23)	U=602 P<0.001
Communications	0(0)	4(4)	21(21)	7(7)	0(0)	0	2(0.7)	33(11)	62(20.7)	12(4)	U=419 P<0.001
Conflict resolution	0(0)	6(6)	15(15)	11(11)	0(0)	0	3(1)	43(14.4)	61(20.4)	2(0.7)	U=560 P<0.001
Ideal distortion	0(0)	4(4)	261(26)	2(2)	0(0)	0	1(0.3)	35(11.7)	70(23.6)	4(1.3)	U=374 P<0.001

Table-3- Marital satisfaction in PCOS and non-PCOS with marital duration 6 years and higher.

Group\Subscales	PCOS						Non-PCOS						Result of test Mann-Whitney U
	Very high	high	average	low	Very low	Sum	Very high	high	average	Low	Very low	sum	
	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	Number (percent)	
Marital satisfaction	0(0)	5(5)	34(34)	29(29)	0(0)	68(68)	5(1.7)	44(14.7)	134(44.7)	7(2.3)	0(0)	190(63.3)	U=2190 P<0.001
Communications	0(0)	10(10)	46(46)	12(12)	0(0)	68(68)	15(5)	110(36.8)	63(21.1)	2(0.7)	0(0)	190(63.3)	U=2049 P<0.001
Conflict resolution	1(1)	5(5)	42(42)	19(19)	1(1)	68(68)	10(3.3)	104(34.8)	70(23.4)	6(2)	0(0)	190(63.3)	U=1957 P<0.001
Ideal distortion	1(1)	7(7)	51(51)	9(9)	0(0)	68(68)	7(2.3)	122(40.7)	58(19.3)	3(1)	0(0)	190(63.3)	U=1924 P<0.001

Discussion

In the Polycystic Ovary Syndrome group the most numbers regarding to communications, conflict resolution, and ideal distortion subscales were in the average level (34%, 46%, 42%, and 51% respectively) and there was no significant relationship between these subscales with duration of marital life. In the group of non-PCOS women, the most numbers with respect to subscales of marital satisfaction (44.7%) was at the average level and in the subscales of

communications, conflict resolution and ideal distortion, women were in the high level and they were respectively 36.8%, 34.8% and 40.7%. There was no significant relationship between any one of subscales and duration of marital life. But marital satisfaction was significantly different in PCOS women from non-PCOS ones ($p < 0.05$). In the other words, women with Polycystic Ovary Syndrome had lower marital satisfaction than non-affected women. Agnieszka et al. in 2007 in Poland, acomplished a

comparitive study with the purpose of evaluating the impacts of Polycystic Ovary Syndrome on quality of life and marital sexual satisfaction in 50 women with Polycystic Ovary Syndrome and 50 healthy women. The results of their study showed that quality of life and marital and sexual quality in women with Polycystic Ovary Syndrome is lower than non-PCOS women (9). Elsenbruch et al. in 2003 in the university of Essen of Germany acomplished an study with the purpose of analyzing impact of Polycystic Ovary Syndrome on health, quality of life and sexual satisfaction in 50 women with Polycystic Ovary Syndrome and 50 healthy women. Data analysis shows that PCOS women have lower life and sexual satisfaction than healthy people (11). Paivandi et al. in 2008 accomplished a study to analyze frequency of depression, anxiety and marital satisfaction in 200 infertile women that referred to infertility centers of Sari city. In this study there was a significant relationship between the rate of women marital satisfaction, depression and patients anxiety so that individuals with low intensive depression and anxiety had a higher rate of marital satisfaction (10). Despite of this, result of Kolkhoran et al. study in 2010 in two groups of 30 fertile and 30 infertile women in Tehran city showed no significant difference between marital satisfactions in two groups (12). In this study there was no significant relationship between age and marital satisfaction (p=0.487). In the study of Paivandi et al. also there was no significant relationship between age and marital satisfaction too (10). Also the result of this study is in line with the result of studies by Agha Yosefi et al. in 2010 in Khoram Abad city. In this study there was no significant relationship between age and marital satisfaction (13). In present study there was no significant relationship between literacy and marital satisfaction (p=0.216). In the study of Kolkhoran et al. there was no significant relationship between literacy and marital satisfaction too (12). But the result of study of Agha Yosefi showed that there is a significant relationship between education and marital satisfaction (p<0.001) (13).

Acknowledgements

Corresponding author:

Leila Amini, Department of Midwifery, School of Nursing and Midwifery, Iran University of Medical Sciences, Tehran, Iran,
E-mail: amini.l@iums.ac.ir

References

1. Banaszewska B, Pawelczyk L, Spaczynski RZ, Duleba AJ. Effects of simvastatin and metformin on polycystic ovary syndrome after six months of treatment. Nov 2011;96(11):3493-501.
2. Azziz R, Carmina E, Dewailly D, Diamanti-Kandarakis E, Escobar-Morreale HF, Futterweit W, Et al. Criteria for Defining Polycystic Ovary Syndrome as a Predominantly Hyperandrogenic Syndrome: An Androgen Excess Society Guideline 2006; 91 (11): 4237.
3. Brek and Novak (2012), women diseases, Translated by Fatemehdaritanha- Elham Pormatrod, publication of the institute of Artin Tab, second Volume, Khazaee publication, p.365-368.
4. Jonaidy E, Nourani Sh, Shakeri MT, Mokhber N. Sexual Satisfaction in Fertile and Infertile Women Attending State Clinics in Mashad. J Reprod Infertil 2010;10(4):269-277.
5. Ahmadi, Kh. Et al. Analyzing the marital status and marital compatibility among staff of Sepah, medical military publication 2005;7:142.
6. Jahanfar SH, Molaeenezhad M. [Text book of sexualdisorders]. 1th ed. Tehran: Salemi & bizhe publication; 2002: 253. Persian.
7. Haidari, M. analyzing the relationship religious orientation and marital satisfaction, MA thesis about psychology, Qom, Imam Khumaini's educational institute, 2003.
8. Gholizade N. Assessment and comparison of psychological health and life satisfaction between employed and housekeeper women. Azad Univ J 2008; 5(2):25-38.
9. Agnieszka Drosdzol, Violetta Skrzypulec, Barbara Mazur, Romana Pawlinka-Chmara Quality of life and marital sexual satisfaction in women with polycystic ovary syndrome 2007; 45:93-97.
10. Paivandi S, Hosseini SH, Daneshpour SMM, Mohammadpour RA, Qolami N. The Prevalence of depression, anxiety and marital satisfaction and related factors in infertile women referred to infertility clinics of Sari city in 2008. J Mazand Univ Med Sci 2011; 21(80): 26-32 (Persian).
11. Elsenbruch S, Hahn S, Kowalsky D, Offner AH, Schedlowski M, Mann K, et al. Quality of life, psychological well- being, and sexual satisfaction in woman with polycysticovary syndrom. J Clin Endocrinol Metab 2003; 88(12): 5801-7.

12. Faal Kalkhoran L, Bahrami H, farokhi N, Zeraati H, tarahomi M. Comparison of anxiety, depression, and marital satisfaction in two selected groups of fertile and unfertile women in Tehran city, the Journal of fertility and infertility 2011;12(2):157-163.

13. Aghayosefi A, Moradi K, Safari N, Ghazi Sh, Amiri F. Analyzing the relationship between marital satisfaction with physical problems in the period of pregnancy and factors that are related to it in pregnant women of Khoramabad city, 13th publication 2011, No.1.

2/19/2013