

Depression, Anxiety, Quality of Life and Sexual Dysfunction in Zabol Women with Infertility

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ABSTRACT

Nowadays, infertility is one of the health issues in public health. Women with infertility suffer from a wide range of psychological problems. The goal of this study was to evaluate depression, sexual dysfunction and quality of life in Iranian women with infertility. In this study, 189 infertile women enrolled. All participants were asked to fill valid and reliable Persian versions of Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), SF-36 and female sexual function index (FSFI).

Mean age and mean duration of marriage were 28 ± 5.9 and 5.9 ± 0.3 years, respectively. One hundred and fifteen (60.8%) women had primary infertility and the remaining subjects (39.2%) secondary infertility. Mean BDI, BAI, FSFI and their domains as well as quality of life subscales were not significantly different between the two groups. There was a significant correlation between BDI, BAI, FSFI and subscales and domains of quality of life. Women with either primary or secondary infertility did not differ in terms of depression, anxiety, sexual function and quality of life domains.

Keywords: infertility, depression, anxiety, sexual function, quality of life.

INTRODUCTION

Inability to conceive after one year of unprotected sex is defined as infertility, which is a disabling condition for couples (1). Nearly 20% of couples face this problem, which has a global impact on their lives, leading to

impaired quality of life (2, 3). Psychological problems such as depression, anxiety, stress, sexual dysfunction and suicidal attempt are among the most common difficulties experienced by these couples (4, 5). Previous studies showed that sexual dysfunction is higher among women affected by infertility than controls (5, 6). Different

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factors such as age, hormonal treatment and psychological well-being will influence sexual function in infertile women (5). Impairment of quality of life is an issue of concern in infertile women, and its level is lower than that of healthy controls (7). As there are few studies regarding this issue in Iran, we designed this study to evaluate depression, sexual dysfunction and quality of life in Iranian women with infertility. □

METHODS

This cross sectional study was done in Zabol Clinic of Infertility between January 2017 and January 2018.

Inclusion criteria were: candidates for *in vitro* fertilization (IVF) and no underlying diseases such as kidney disease, coronary disease, PCO (polycystic ovarian syndrome).

All participants were asked to fill valid and reliable Persian versions of Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), SF-36 and female sexual function index (FSFI) (8-10).

BDI consists of 21 questions rating from 0-3. Scores between 0 and 9 indicate no depression, scores between 10 and 18 show mild to moderate depression, scores between 19 and 29 indicate moderate to severe depression, and scores between 30 and 63 correspond to severe depression (8).

BAI includes 21 questions, each rating from 0 to 3. Scores between 0 and 7 are

indicative of minimal anxiety, scores between 8 and 15 show mild anxiety, scores between 16 and 25 indicate moderate anxiety, and scores between 26 and 63 show severe anxiety (11).

FSFI is a 19-item self-report tool to measure female sexual function providing scores on six domains of sexual function, which include desire, arousal, lubrication, orgasm, satisfaction, and pain (9).

The SF-36 questionnaire consists of 36 questions in eight aspects. All questions are scored on a scale of 0 to 100, with 100 representing the highest level of functioning possible. Higher scores indicate less impairment in the quality of life (10).

All data were analyzed using SPSS software version 23 (Statistical Package for the Social Sciences, version 23, SPSS Inc., Chicago, IL, USA). Data were presented as Mean±SD for continuous or frequencies for categorical variables.

	Primary	Secondary	P value
Partner age	28.9±0.5	32.5±0.5	<0.001
Education			
≤12 years	66 (57.3%)	48 (64.8%)	0.06
>12 years	123 (42.7%)	26 (35.2%)	
BMI (kg/m ²)	24.7±0.5	25.4±0.5	0.4

TABLE 1. Basic characteristics of two groups

	Primary	Secondary	P value
BDI	17.5±1.1	15.3±1.2	0.2
BAI	18.7±1.1	18.3±1.5	0.7
Desire	2.3±0.06	2.4	0.7
Arousal	1.1±0.03	1.1±0.03	0.7
Lubrication	1.2±0.03	1.2±0.04	0.8
Orgasm	1.7±0.05	1.7±0.06	0.9
Satisfaction	1.8±0.04	1.8±0.05	0.2
Pain	1.4±0.05	1.4±0.06	0.9
Total FSFI	9.9±0.1	9.8±0.2	0.9
Physical Functioning (PF)	65.2±24.4	60±24.7	0.1
Role-Physical (RP)	44.1±32.1	52.5±33.6	0.1
Role-Emotional (RE)	45.9±34.8	47.2±35	0.8
Energy/ fatigue	55.6±16.2	56.8±16.7	0.6
Emotional well being	59.6±16.5	59.2±17.2	0.8
Social functioning	65.8±20.1	61.9±22.8	0.2
Pain	65.9±21	70±23.5	0.2
General health	59.6±16	57.5±16.5	0.3

TABLE 2. Comparison of two groups regarding BDI, BAI, FSFI and its domains as well as quality of life subscales were not significantly different between the two groups

Independent sample t test was used for comparison of continuous variables. Pearson Correlation coefficient calculated. P<0.05 was considered as significant. □

RESULTS

In this study, 189 infertile women enrolled. Mean age and mean duration of marriage were 28±5.9 and 5.9±0.3 years, respectively.

One hundred and fifteen (60.8%) had primary and remaining (39.2%) had secondary infertility. Partner age was significantly higher in secondary group (Table 1).

Mean BDI, BAI, FSFI and its domains as well as quality of life subscales were not significantly different between the two groups (Table 2).

There was a significant correlation regarding BDI, BAI, FSFI and its subscales and domains of quality of life (Table 3). □

DISCUSSION

The result of this study showed that the mean scores of BDI, BAI, FSFI and SF-36 questionnaires were not significantly different between primary and secondary groups, while there were significant positive or negative correlations between most of these items. In our previous study, we found no significant difference regarding total FSFI score and its subscales in women with primary or secondary infertility (6), which confirms the current findings. In a previous study, Keshin *et al.* reported lower scores of orgasm, and satisfaction and total FSFI score in secondary group in comparison with primary one (12).

The results also showed that there was significant negative correlation regarding BDI/BAI and total FSFI score, which is indicative of negative effect of depression and anxiety on sexual function. This finding confirms findings of Lakatos *et al.* (13).

Depression is the most common psychological problem in women affected by infertility (5). This could be due to unsuccessful treatment of infertility and pressure on couples as the sense of powerlessness (13, 14).

Infertile couples experience a higher rate of anxiety, which could affect pregnancy outcome (15). In some previous studies, prevalence of anxiety was reported to vary between 9-28% in clinics for ART (16, 17), while the rate was higher for women than men (18). In a study in Taiwan, anxiety and depression was reported in 23% and 17% of infertile women under treatment (17), which is in accordance with the findings of Chi *et al.* (19). Dural *et al.* found higher quality of life scores in cases with lower anxiety and depression scores (20). BDI score had great correlation with emotional well-being, while anxiety had great correlation with pain domain of quality

of life in our cases. In the study of Namdar *et al.*, psychological dimension of QOL had greater correlation with the anxiety score (21).

We have also found that domains of quality of life were not significantly different between infertility groups, which is in agreement with the findings of Aduloju *et al.* (22). The results also show that, except RE, most domains of quality of life have a significant negative correlation with BDI and BAI. This finding is indicative of the negative effects of psychological problems on quality of life in infertile women. There is reciprocal relationship between depression and infertility treatment (23). Depressed cases do not seek treatment and couples seeking treatment become depressed after failure. It has been shown that infertility affects mental health, vitality, and emotional behavior domains of quality of life more than others (24).

In many developing countries such as Iran, child bearing is very important and infertility can have a huge negative impact on social and marital life (21).

Women suffer from a wide range of psychological problems such as depression, anxiety, poorer marital adjustment, impaired quality of life, and less intercourse satisfaction (4, 21). It is unclear whether some special groups of women with infertility suffer more from psychological problems. The results of current study showed no significant difference regarding depression, anxiety, sexual function and quality of life between primary and secondary groups.

This study had some limitations. Firstly, it conducted in a clinic in Sistan and Baluchestan province. Secondly, the sample size is limited. Thirdly, there was no control group. Larger, multicentric studies with control groups are recommended. □

CONCLUSION

Women with either primary or secondary infertility do not differ in terms of depression, anxiety, sexual function and quality of life domains. □

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