



Psychosocial Responses among Infertile Women and Normal Women

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ABSTRACT: Infertility has a strong and negative impact in several areas of the individual's life. The infertile women may lose prestige in society, may develop a low self-esteem, and may lose hope for the future. This study compared psychosocial responses in 90 infertile women and normal women. An ex post facto design was used. The subjects of the present study were infertile women in an infertility treatment center in, Ahwaz, Iran. Women selected by randomly sampling. The women completed the psychosocial responses. Data were analyzed using analysis of variance. Differences were found between the groups on the psychosocial responses (self-image/self-esteem, guilt/blame, sexuality problems, and interpersonal relationship).

Keywords: Infertility, self-image/self-esteem, guilt/blame, sexuality problems, and interpersonal relationship

Received 01 Jan. 2014
Accepted 23 Feb. 2014

ORIGINAL ARTICLE

INTRODUCTION

Infertility is defined as the inability to attain a successful pregnancy after 12 consecutive months of regular, unprotected sexual intercourse (Watkins and Baldo, 2004). In Iran 14–18% of women have reported difficulties in trying to conceive within 12 months at some point in their lives. Similar prevalence's for lifetime infertility have been reported in most other industrialized countries (Oakley et al., 2008; Boivin et al., 2007)

Also, In 2002, fertility problems affected 7.9 million women in the United States, and the rate of such problems among women aged 15–44 had increased 44% since 1982 (Chandra and Stephen, 2005).

As consistently demonstrated infertility has a strong and negative impact in several areas of the individual's life. The infertile women may lose prestige in society, may develop a low self-esteem, and may lose hope for the future. In traditional communities, probably the women are mostly affected because of the reactions she receives from her husband, husband's family, and the social group rather than the infertility problem (Albayrak and Gunay, 2007).

However, facing infertility sometimes can also bring out contradictory feelings. Most describe it as a crisis in their marriage, and even if they are generally satisfied with their sexual relationship, couples with a longer period of infertility experience have lower levels of sexual satisfaction than couples with a shorter one (Berg and Wilson, 1991). However, some couples have reported that the crisis of infertility improved their communication, (Lee, Sun, and Chao, 2001) and benefited their marriage (Schmidt et al., 2005; Schmidt, 2006). Culture has been found to have a significant role in giving infertility a

different meaning. In a study in South Africa, 43% of women reported that feeling not able to conceive a child had serious negative effects, particularly on their sexual relations (Van Zyl, 1987). Other studies have also reported on conflict and problems between partners (Berg and Wilson, 1991). Furthermore, several studies have reported high levels of mental distress among infertile patients (Eugster and Vingerhoets, 1999; Wischmann, 2005).

In sum, According to previous studies, infertility is found to be associated with high levels of fertility-related stress (Boivinet al., 2001), grief, depression, guilt and anxiety (Dunkel-Schetter and Lobel, 1991). In addition, more evident are the impact of infertility on marriage and the sex life of couples (Schmidt, Holstein, Christensen, & Boivin, 2005).

Purpose of research

This study compares infertile women and normal women on psychosocial responses (self-image/self-esteem, guilt/blame, sexuality problems, and interpersonal relationship). We hypothesized those infertile women would score lower on the psychosocial responses than fertile women.

Research Question

Are there differences between infertile women and normal women on psychosocial responses (self-image/self-esteem, guilt/blame, sexuality problems, and interpersonal relationship)?

MATERIALS AND METHODS

Participants and Procedures

This study was an ex post facto design. The subjects of the present study were infertile women in an

infertility treatment center in, Ahwaz, Iran. The sample included 45 infertile women, and 45 normal women. Subjects selected by randomly sampling. The average female age was 30 and Mean duration of infertility was 6.2 years (range 1.5–13 years).

Research Instruments

Psychosocial responses are measured by the Infertility Questionnaire-The questionnaire previously used for lifeline couple (Lee et al., 2001). This questionnaire includes four units: self-image/self-esteem, guilt/blame, sexuality problems, and interpersonal relationship. It is quantified by a scale of 1 to 5. The reliabilities of the internal consistency Cronbach's are 0.76 (self-image/self-esteem), 0.79 (guilt/blame), 0.61 (sexuality problems) and 0.87 (interpersonal relationship). In this study, reliabilities of the internal consistency Cronbach's are 0.74 (self-image/self-esteem), 0.77 (guilt/blame), 0.64 (sexuality problems) and 0.83 (interpersonal relationship).

RESULTS

In this research, results were analyzed with analysis of variance (ANOVA). ANOVA were performed to assess differences between group's scores on psychosocial responses (self-image/self-esteem,

guilt/blame, sexuality problems, and interpersonal relationship).

One-way ANOVA indicate that the scores are statistically significant (Table 2). As can be seen in Table 2, significant differences emerge for self-image/self-esteem between the two groups $F(1, 88) = 15.18, p < 0.05$. In fact, distinctly lower level of self-image/self-esteem in infertile women.

One-way ANOVA indicate that the scores are statistically significant (table 3). As can be seen in Table 3, significant differences emerge for guilt/blame between the two groups $F(1, 88) = 20.21, p < .05$. In fact, distinctly lower level of guilt/blame in infertile women.

One-way ANOVA indicate that the scores are statistically significant (Table 4). As can be seen in Table 4, significant differences emerge for sexuality problems between the two groups $F(1, 88) = 5.51, p < .05$. In fact, distinctly higher level of sexuality problems in infertile women.

One-way ANOVA indicate that the scores are statistically significant (table 5). As can be seen in Table 5, significant differences emerge for interpersonal relationship between the two groups $F(1, 88) = 10.99, p < 0.05$. In fact, distinctly lower level of interpersonal relationship in infertile women

Table 1. Means and standard deviations for psychosocial responses

Group v	Variable	N	Mean	Std. Deviation	Std. Error Mean
normal women	Self-image/self-esteem	45	22.80	3.55	0.52
	Guilt/blame	45	14.06	1.21	0.18
	Sexuality problems	45	23.24	3.85	0.57
	Interpersonal relationship	45	15.71	3.42	0.51
infertile women	Self-image/self-esteem	45	19.73	3.90	0.58
	Guilt/blame	45	12.13	2.61	0.39
	Sexuality problems	45	21.33	3.86	0.57
	Interpersonal relationship	45	13.17	3.81	0.56

Table 2. Results of One-Way ANOVA Comparison of Means on the self-image/self-esteem

Variable	Source	SS	df	MS	F	Sig.
Self-image/self-esteem	Between Groups	211.60	1	211.60	15.18	.0001
	Within Groups	1226.00	88	13.93		
	Total	1437.60	89			

Table 3. Results of One-Way ANOVA Comparison of Means on the guilt/blame

Variable	Source	SS	df	MS	F	Sig.
Guilt/blame	Between Groups	84.100	1	84.100	20.21	.0001
	Within Groups	366.00	88	4.15		
	Total	450.10	89			

Table 4. Results of One-Way ANOVA Comparison of Means on the sexuality problems

Variable	Source	SS	df	MS	F	Sig.
Sexuality problems	Between Groups	82.17	1	82.17	5.51	.021
	Within Groups	1310.31	88	14.89		
	Total	1392.48	89			

Table 5. Results of One-Way ANOVA Comparison of Means on the interpersonal relationship

Variable	Source	SS	df	MS	F	Sig.
Interpersonal relationship	Between Groups	144.400	1	144.400	10.99	.001
	Within Groups	1155.82	88	13.13		
	Total	1300.22	89			

DISCUSSION

Infertility is the inability of a couple to achieve conception after a year of unprotected intercourse (six months if the woman is over age 35) or the inability to carry a pregnancy to a live birth). The psychological aspects of experiencing infertility have been well documented in the literature. They include a range of reactions including depression, grief, anxiety and chronic stress.

The current study described and compared psychosocial responses (self-image/self-esteem, guilt/blame, sexuality problems, and interpersonal relationship) among ninety infertile women and normal women. Significant differences emerge in the psychosocial responses between the two groups.

In summary, this research has indicated a distinctly higher level of psychosocial responses in normal women. As can be seen in Table 2, significant differences emerge for self-image/self-esteem between the two groups. In fact, distinctly lower level of self-image/self-esteem in infertile women. These results are consistent with Albayrak and Gu'nay (2007). Additionally, as can be seen in Table 3, significant differences emerge for guilt/blame and interpersonal relationship between the two groups. In fact, distinctly lower level of guilt/blame in infertile women. These results are consistent with Dunkel-Schetter and Lobel (Eugster and Vingerhoets, 1999). Similarly, as can be seen in Table 4, significant differences emerge for sexuality problems between the two groups. In fact, distinctly higher level of sexuality problems in infertile women. These results are consistent with Schmidt et al. (2005). Further, Berg and Wilson (1991). Also, as can be seen in Table 5, significant differences emerge for interpersonal relationship between the two groups. In fact, distinctly lower level of interpersonal relationship in infertile women. These results are consistent with Albayrak and Gu'nay (2007). Hopefully, the findings have important implications for both practice and future research.

Limitations

It is important to consider the limitations of this study. The study was conducted on a relatively small sample, so generalization of results is limited.

Another limitation of this study was that, despite efforts to ensure that each participant responded to each item on the scales, there were occasional missing

values. There are four ways to deal with missing data : a) eliminating the participant's data altogether, (b) replacing the missing data with the investigator's guess of a likely response, based on prior knowledge of how a given participant is likely to respond, (c) calculating the overall mean from the available data and replacing missing values with the mean across groups, or (d) inserting the group mean for a missing value (Dunkel-Schetter and Lobel, 1991). Rather than eliminating the entire set of responses from participants who omitted items, we chose to replace missing values with mean score.

REFERENCES

- Albayrak, E., & Gunay, O. (2007). State and trait anxiety levels of childless women in Kayseri, Turkey. *The European Journal of Contraception and Reproductive Health Care*, 12(4), 385-390.
- Berg, B. J., & Wilson, J. F. (1991). Psychological functioning across stages of treatment in infertility. *Journal of Behavioral Medicine*, 14, 11-26.
- Boivin, J., Appleton, T. C., Baetens, P., Baron, J., Bitzer, J., & Corrigan, E. (2001). Guidelines for counseling in infertility. *Human Reproduction*, 16, 1301-1304.
- Boivin, J., Bunting, L., Collins, J. A., & Nygren, K. G. (2007). International estimates of infertility prevalence and treatment-seeking: potential need and demand for infertility medical care. *Hum Reprod*, 22, 1506-1512.
- Chandra, A., & Stephen, E. H. (2005). *Infertility and medical care for infertility: Trends and differentials in national self-reported data*. Bethesda, MD: Presented at the NIH Conference on Health Disparities and Infertility.
- Dunkel-Schetter, C., & Lobel, M. (1991). *Psychological reactions to infertility*. In AL. StantonC. Dunkel-Schetter (Eds.), *Infertility: perspectives from stress and coping research*. New York: Plenum.
- Eugster, A., & Vingerhoets, A. J. (1999). Psychological aspects of in vitro fertilization: a review. *Social Science and Medicine*, 48, 575-589.
- Lee, T. Y., Sun, G. H., & Chao, S. C. (2001). The effect of an infertility diagnosis on the distress, marital and sexual satisfaction between husbands and wives in Taiwan. *Human Reproduction*, 16, 1762-1767.
- Oakley, L., Doyle, P., & Maconochie, N. (2008). Lifetime prevalence of infertility and infertility treatment in the UK: results from a population-based survey of reproduction. *Hum Reprod*, 23, 447-450.

- Schmidt, L. (2006). Infertility and assisted reproduction in Denmark. Epidemiology and psychosocial consequences. *Danish Medical Bulletin*, 53, 390-417.
- Schmidt, L., Holstein, B., Christensen, U., & Boivin, J. (2005). Does infertility cause marital benefit? An epidemiological study of 2250 women and men in fertility treatment. *Patient Education and Counseling*, 59, 244-251.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics (3rded.)*. New York: HarperCollins.
- Van Zyl, J. A. (1987). Sex and infertility, part II: Influence of psychogenic factors and psychosexual problems. *South African Medical Journal*, 72,485-487.
- Watkins, K. J., & Baldo, T. D. (2004). The infertility experience: Bio psychosocial effects and suggestions for counselors. *Journal of Counseling and Development*, 82(4), 394-420.
- Wischmann, T. (2005). *Psychosocial aspects of fertility disorders*. Urology.