The Difference of Depression and Coping Strategies among Infertile and Fertile Women

Fozia Aamir Siddiqui*

Psychology Department University of Sindh, Jamshoro, Pakistan

The Present research is an attempt to explore the difference in the level of depression, and use of coping strategies among fertile and infertile women. The sample of the study consisted of 160 women, the sample was divided into two groups, i.e., 80 fertile women (having at least one child), and 80 infertile women. Infertile women's data was collected from private gynecologists' clinics of Hyderabad city, and data for fertile women was collected from family members, friends, and colleagues. There were two hypotheses in the study i.e., infertile women will receive greater score on Siddiqui Shah Depression Scale than fertile women; Infertile women will receive greater score on Active Avoidance coping Scale and Religious/Denial Coping Scale than fertile women. For the measurement of variables, Brief Cope Scale (Akhtar, 2005) and Siddique Shah Depression Scale (Siddiqui & Shah, 1997) were used. The responses of both group's sample on scales were computed with the help of mean, SD, and t- test through SPSS version 22. There was significant difference between the scores on Siddique Shah Depression Scale among fertile and infertile women where the infertile women received greater score on the scale. The results also revealed significant difference between the scores on Active Avoidance Coping, and Religious/Denial Coping Subscales of Brief Cope Scale.

Keywords: Depression, coping strategies, infertility, active avoidance coping, religious/denial coping

Children are the wishful gift from nature. After marriage every couple wants to become parents, because it is the major transition in the life course .Failure to conceive a baby results in lots of social, psychological and emotional issues including, social isolation, depression, sexual problems, and anxiety. There are several reasons of not conceiving a pregnancy out of which one of the major causes is infertility. Infertility represents a condition in which couple uses no ways of controlling birth, and has an inability to conceive after one year of marriage (Nouriani, 2006). It is an extremely depressing and stressful condition for the couple, when they become unable to conceive, but only the infertile woman has to face the adverse reactions of the society (Jin et al., 2013). Previous research studies suggest that, infertility brings more negative feelings, and emotional problems including depression in the life of women as compared to men (Joshi, Singh & Bindu. 2009).

In the words of Valentine (1986), diagnosis of infertility results into lots of negative emotions including low self-esteem, sorrow, grief, depression with the feelings of disappointment, embarrassment and humiliation. In the results of a study conducted by Hasanpoor-Azghdy, Simbar and Vedadhir (2014), suggests that, infertile women during their treatment of infertility experience many psychological and emotional bad experiences which also produce severe negative impact on their overall health and mental well-being. Accumulation of negative emotions gives rise to the symptoms of depression. Infertility is believed to be the common cause of depression (Sultan, 2009).

The psychological consequence of infertility in the shape of depression has negative effect in the relationship of couples (Domar, Zuttermeister, Seibel & Benson, 1992). With the diagnosis of infertility, women suffer from the symptoms of depression more as compared to their spouses because women have to go through various treatment procedures as compared to men and these procedures affect them a lot (Franco et al., 2003).

Infertile women differ from fertile women in many ways, they becomes target of several psychological problems, including depression, anxiety and stress (Zahid, 2004).

Experiencing prolonged depression as the result of infertility also affects adversely on the coping behavior of infertile women. Coping is the ability to decrease the intensity of feelings which are associated with the loss or harm, and help to deal with distress (Carver & Connor-Smith, 2010).

When the internal and external demands of the situation become highly stressful and beyond the available recourses, individuals use their thought and behaviors to deal with the situation, these are said to be coping strategies (Folkman & Moskowitz, 2004., Fernandera et al., 2005). Research suggests that, infertile women as compared to fertile women use mal adaptive coping strategies (Pottinger et al., 2006).

A pervious study conducted to explore the coping behavior of infertile women has confirmed that there is a co relation between mal adoptive out comes which infertile women use as coping strategies and to overcome negative feelings associated with stressful situations (Austenfeld & Stanton, 2004)

In past researches it is proved that, infertile women use avoidance coping strategy to deny the reality. Larissa (2000) finds that infertile women use resistance to disclose their problem, and different ways to hide their truth of infertility as coping strategies.

In 2005 Van den Akker conducted a study to examine, the coping style, quality of life, and psychological symptoms among infertile women, and results of the study revealed that, all the participants were using excessive mental avoidance of their situation and denial coping strategies.

Present research is an attempt to explore, the difference in the level of depression and the use of coping strategies between fertile and infertile women. There were two hypotheses in the study, 1. Infertile women will receive greater score on Siddique Shah Depression scale than fertile women and, 2. Infertile women will receive greater score on active avoidance coping and Religious /denial coping sub scale of Brief Cope scales compare to fertile women.

Method

Participants

The sample of the study comprised 160 women, which were divided into two groups i.e., 80 fertile women (having at least one child) and 80 infertile women (having no child). For data collection and the selection of the participants, Non probability, and convenience sampling technique was used.

The criteria for infertile group were those, who were willing to conceive, having no child, and the length of their marriage was at least four years, the criteria for fertile group was those who have at least one child. The age range of both groups was from 20 to 60 years (age range is too wide as lot of happenings can take place, also socio economic status was to be taken care of & at 60 willingness to conceive doesn't matter). The data for infertile women was collected from various local private clinics and the data for fertile group was collected from family, friends, colleagues and relatives.

Measures

Siddique Shah Depression Scale (Siddique & Shah, 1997) is a valid instrument for the measurement of depression among Pakistani population. The scale measures three categories of depression, 1 Mild 2 Moderate and 3 Severe. 0-25 scores indicate no depression, 26 -37 mild depression, and 37 and above indicate moderate to severe depression. This is a Likert type scale. The alpha coefficient of scale is 0.89 (Khan, Batool & Saqib, 2014).

Brief Cope Scale was developed by Carver (1997) and translated in Urdu by Akhtar (2005) was used in present study. The scale has 4 subscales: 1. Active Avoidance coping, which has 10 items; 2. Problem focused coping, which has 7 items; 3. Positive Coping, which also has 7 items; and 4. Religious/Denial Coping which consists of 4 items. The Scale comprised 28 items. Answers of items were scored on four point Likert scale. Never=1, Very less=2, Sometimes=3, and A lot=4. The scale has .77 reliability.

Procedure

The data for infertile group was collected from local private clinics of Hyderabad city, after the consent of concerned authority and the willingness of the participants. All the participants were informed prior the administration of both scales about the purpose of the study.

The data for fertile group were collected from family members, relatives, colleagues and friends and were also informed about the purpose of the study after their willingness to participate in the study.

The scores on both scales were statistically analyzed with the help of SPSS version 22, to find out the difference between the responses of fertile and infertile group on Siddiqui Shah Depression scale, and Brief Cope Scale.

Results

In order to find out the level of depression among infertile and fertile women, mean score on Siddique Shah Depression Scale, and the mean scores on total and mean scores obtained on subscales of Brief Cope Scale were computed. Statistical Analysis, mean standard deviation and t- test revealed significant difference between the scores of fertile and infertile women. Infertile women receive greater scores on Siddiqui Shah Depression scale, as compared to fertile women and on two subscales of Brief Cope Scale Active Avoidance coping and Religious/Denial coping, fertile women scored higher on problem focused coping and positive coping.

Table 1

Mean, Standard Deviation, and t of the Infertile and Fertile Women Score on Siddiqui Shah

Depression Scale

Depression scare				
Participants	N	M	SD	t
				-
Infertile women	80	44.7320	9.7231	
illierthe wonten	80	44.7320	9.7231	
				3.795
	0.0	22 (11 1	0.0604	3.175
Fertile Women	80	32.6414	8,0624	

P<.001

Table 1 is presenting the mean, SD, and t-value of infertile and fertile women's scores on Siddiqui Shah Depression scale. According to the findings there are significant differences (t= 3.795, p<.001) in the depression of infertile and fertile women. The mean value of infertile women (Mean=44.732) is higher than the mean value of fertile participants. (Mean=32.6414). It is indicating that infertile participants are more depressed than the fertile participants. Thus hypothesis 1 is confirmed.

Table No 2
Mean, SD and t of the Scores of Infertile and Fertile Women on Brief Cope Scale

Subscales	Infertile Women		Fertile women			
	(N=80)		(N=80)			
	M	SD	M	SD	t	p
Active Avoidance Coping	33.21	6.18	20.15	5.53	10.82	0.001***
Problem Focused coping						
Religious/ Denial Coping	18.97	6.07	20.80	6.40	2.61	0.01**
	32.72	9.46	20.13	8.50	9.88	0.001***
Positive Coping	21.7	6.21	25.72	6.37	2.71	0.01**
Over all BC Scale level		· · - ·		2.07	, -	V-V-
	106.6	27.92	86.85	26.8	21.82	

df=158, P<.01** P<.001***

Table 2 is showing the scores of infertile and fertile participants on coping strategies scale (BCS). Analysis of results is revealing significant mean differences in the scores of infertile and fertile participants on all subscales of BCS. Infertile participants received higher scores on Active Avoidance subscale (Infertile participants, Mean=33.21, fertile participants, Mean=20.50; t-value=10.82) and on Religious/Denial subscale of BPS(Infertile participants Mean=32.72, fertile participants Mean=20.30;t=9.88, p<.001), which shows that infertile participants have maladaptive coping strategies as compared to fertile participants, who scored higher on problem focused coping subscale (Fertile participants, Mean=20.80, infertile participants, 18.97; t=2.61, p>.0.01)and on positive coping style(Fertile participants, Mean=25.72, infertile participants, Mean=21.71; t=2.71). Thus hypothesis-2 is confirmed.

Discussion

The purpose to conduct the present research was to explore the difference of depression and coping strategies among infertile and fertile women. Findings revealed that infertile women suffered more from depression as compared to fertile women. This finding is consistent with a previous study conducted in the same area (Ashkani, Akbari, & Heydari, 2006). Findings of the present study also indicated that infertile women had maladaptive coping style as compared to the fertile participants which may also increase their emotional problems.

The reasons of having depressive symptoms among infertile women are not hard to seek. During the process to learn the gender role socialization from the very beginning women are taught that, they have the responsibility to increase the family by having baby. Women are

blamed to be infertile even in the case of male infertility. Although 40% reasons of infertility are due to male's inability to conceive, and 40% is due to female's inability to conceive and remaining 20% reasons are because of the infertility of both sexes (Sadock, Sadock, Kaplans, & Sadocks, 2003).

Being infertile, the women have to fight many battles, to face the criticism of family members, adverse reactions of the community, the unstable status in the family and community (Noorbala, Ramezanzadeh, Abedinia, & Naghizadeh, 2009).

Other infertility related issues includes, stress, anxiety, depression, feelings of low self-control associated with mental health (Greil, Slauson-Blevins, & McQuillan, 2010)and above all the failure of their own wishes to become mother and a diminished sense of feminity. These results are consistent with earlier studies, such as Faramarzi et al., (2013) which had indicated significant positive co-relation between depression and escape avoidance coping strategies among infertile women. Aflekseir and Zarine, 2013 conducted a study to find out the association between different types of coping strategies and infertility stress, and results revealed that the use of active avoidance increases infertility stress. The problem of infertility brings bad effects on the abilities of the women to cope with the issue of infertility (Nelson & Gellar, 2011).

Infertile women want to deny the truth of their infertility, as Nikmat, Mohammad, Omar, and Razali, 2010 refers, Religious/Denial coping as a way to deal with stress producing truth by not accepting it and an extreme increase in religiosity.

Conclusion

The present study suggests that depressive symptoms among infertile women are due to the use of maladaptive coping strategies including, active avoidance and religious/denial coping strategies to overcome their stress of infertility. It is the responsibility of health care centers to also provide guidance and counseling of patients. They can also arrange free seminars and workshops for the benefit of community.

Recommendations

There are some limitations of present study, which can be overcome with the help of future researches in the same area. Here are some recommendations, 1. The sample of the study is limited; it could be increased, to understand the problem more accurately. 2. The age range of the participants is too wide, so it is better to decrease in future researches. Other demographic variables like, socioeconomic status, education level, spousal intimacy also needs to be included in future researches.

References

- Aflekseir, A., & Zarine, M. (2013). Association between coping strategies and infertility stress among group of women with fertility problem in Shiraz, Iran. *J Reprod Infertility*, 202-206.
- Akhtar, M. (2005). Coping strategies and its relationship with stress and time demand among university students (Unpublished M.Phil dissertation). Centre of Excellence, National Institute of Psychology, Quaid-e-Azam University, Islamabad.
- Ashkani, H., Akbari, A., & Heydari, S. T. (2006). Epidemiology of depression among infertile and fertile couples in Shiraz, Southern Iran. *Indian J Med Sci*, 60, 399-406.
- Austenfeld, J. L., & Stanton, A. L. (2004). Coping through emotional approach: A new look at emotion, coping, and health-related outcomes. J Pers, 72, 1335-1363.
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, 4, 92-100.
- Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. *The Annual Review of Psychology*, 61, 679-704. doi: 10.1146/annurev.psych.093008.100352.
- Domar, A. D., Zuttermeister, P. C., Seibel, M., & Benson, H. (1992). **Psychological** improvement in infertile women after behavioral treatment: A replication. *Fertil Steril*, 58(1), 144-147. <u>PubMed Abstract</u>.
- Faramarzi, M., Pasha, H., Esmaelzadeh, S., Jorsarai, G., Mir, M. & Abedi, S. (2013). Is coping strategies predictor of anxiety and depression in couple infertile? *Health*, *5*, 643-649. doi: 10.4236/health.2013.53A085.
- Fernandera, A. F., Patten, C. A., Schroederd, D. R., Stevensed, S. R., Ebermanb, K. M., & Hurt, R. D. (2005). Exploring the association of John Henry active coping and education on smoking behavior and nicotine dependence among Blacks in the USA. *Social sciences and Medicine*, 60, 491-500. doi:10.1016/j.socscimed.2004.06.004
- Folkman, S., Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, 55, 745-774. doi:10.1146/annurev.psych. 55.090902.141456/4
- Franco, J. G. J. R., Razera, B. R. L., Mauri, A. L., Petterson, C. G., Felipe, V., & Garbellini, E. (2003). Psychological test of infertile couples. *J Assist Report Genet*, 19, 269-273.
- Greil, A. L., Slauson-Blevins, K., & McQuillan, J. (2010). The experience of infertility: A review of recent literature. *Sociology of Health and Illness*, 32(1), 140-162.

- Hasanpoor-Azghdy, S. B., Simbar, M., & Vedadhir, A. (2014). The emotional-Psychological consequences of infertility among infertile women seeking treatment: Results of a qualitative study. *Iran J Reprod Med*, *12*(2), 131-138.
- Jin, X., Wang, G., Liu, S., Zhang, J., Zeng, F., Qiu, Y., & Huang, X. (2013). Survey of the situation of infertile women seeking in vitro fertilization treatment in China. BioMed Research International. Retrieved from http://dx.doi.org/10.1155/2013/179098
- Joshi, H. L., Singh, R., & Bindu. (2009). Psychological distress, coping and subjective wellbeing among infertile women. *Journal of the Indian Academy of Applied Psychology*, 35(2), 329-336.
- Khan, M. J., Batool, S. S., & Saqib, T. (2014). Maternal depression: A risk factor of childhood mental illness. *FWU Journal of Social Sciences*, 8(1), 24-30.
- Larissa, R. (2000). Childless in the land of imperative motherland: Stigma and coping among infertile women sex roles. *A Journal of Research*, 43, 821-841.
- Nelson, A., & Gellar, P.A. (2011). Coping with fertility treatment: Infertility related stress and social support among women receiving in vitro fertilization. *Gender Medicine*, 9, S100.
- Nikmat, A. W., Mohammad, M., Omar, A., & Razali, S. (2010). *Psychological wellbeing and coping style among pre-clinical medical students*. Research Management Institute, University Teknologi Mara, Shah Alam, Sekongo, Malaysia.
- Noorbala, A. A., Ramezanzadeh, F., Abedinia, N., & Naghizadeh, M. M. (2009). Psychiatric disorders among infertile and fertile women. *Soc Psychiatry Psychiatr Epidemiol*, 44(7), 587-591.
- Nouriani, M. (2006). Sher Institute of Reproduction Medicine, Glendale, CA.
- Pottinger, A. M., McKenzie, C., Fredericks, I., DaCosta, V., Winters, S., Everett, D., & Walters, Y. (2006). Gender differences in coping with infertility among couples undergoing counselling for in vitro fertilization treatment. *West Indian Medical Journal*, 55(4), 237-242.
- Sadock, B. J., Sadock, V. A., Kaplan's., & Sadocks. (2003). Symptoms of psychiatry behavioral sciences clinical psychiatry (9th ed.). Lippincott Williams and Wilkins: Philadelphia.
- Siddiqui, S., & Shah, S. A. A. (1997). Siddiqui-Shah Depression Scale (SSDS): Development and validation. *Psychology and Developing Societies*, 9(2), 245-262.
- Sultan, S. (2009). Depression: A common factor associated with childlessness. *Pakistan Journal of Social Sciences*, 29(1),79-90.

- Valentine, D. (1986). Psychological impact of infertility: Identifying issues and needs. *Social Work in Health Care*, 11(4), 61-69.
- Van den Akker, O. B. A. (2005). Coping, quality of life and psychiatric morbidity in 3 groups of sub-fertile women: Does process or outcome affect psychological functioning? *Patient Education and Counselling*, 57(2), 183-189.
- Zahid, M. A. (2004). Coping with infertility among Kuwait women: Cultural perspective. *International Journal of Social Psychology*, 50, 294-300.