

## Psychological Consequences of Infertility among Infertile Women Seeking Treatment

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**Abstract:** Infertility is a major life event that brings about social and psychological problems. It is one of the health problems that may be faced married couple. In Saudi Arabia, infertility traditionally has been viewed as a female problem. Psychosocial factors in 'functional' infertility, the extent to which depression, anxiety and expressed emotional patterns correlate to infertility is not yet clear. No study has been published in Hafer Albatin to look at psychosocial impact of infertility on the infertile couples. **The aims** of the present study were to explore psychosocial impact of infertility on female partner in couples with infertility problem. A descriptive design was used for the conduction of this study. The sample consisted of 1000 infertile women in infertility units, selected purposively from outpatient clinics at Maternity and Children Hospital, Hafer Albatin City, Saudi Arabia

. A structured interview questionnaire sheet was the instrument used to collect the data. Finding from this study revealed that most women had satisfactory awareness about modern treatment options for infertility. They were also highly motivated to find treatment and accessed both traditional and modern health care. Furthermore, treatment barriers within modern health care were identified. Conclusion and recommendation: this study revealed the importance of health education and counseling for the infertile women and both need to be integrated into infertility management, particularly in urban areas. The introduction of clinical guidelines is recommended in order to overcome barriers and improve the utilization of psychosocial support services.

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### I. Introduction

Infertility is not always a woman's problem. In only about one-third of cases is infertility due to female factors. In another one-third of cases, infertility is due to male factors. The remaining cases are caused by a mixture of male and female factors or by unknown factors (*American Society for Reproductive Medicine, 2007*).

Infertility is a life crisis with a wide range of socio-cultural, emotional, physical and financial problems. More than 80 million people worldwide are infertile. Infertility rates vary among different countries, less than 5% to over 30% (*Greil, 2010*). In Iran, a widespread study was conducted in 2005 to determine the prevalence of infertility. The study showed that 24.9% of the couples had experienced primary infertility during their married life (*Domar, 2011*).

Infertility has a great impact on individuals, physical and psychosocial well-being. The stress of the non-fulfillment of a wish for child has been associated with emotional squeal such as; anger, depression, anxiety, marital problems, sexual dysfunction, and social isolation (*Larsen, 2004; Hammarberg, 2003*).

Couples experience stigma, sense of loss, and diminished self-esteem as a result of infertility. In general, women show higher level of distress than their male couples (*Androsson, 2007*). Infertility forms an integral part of reproductive health. In recent years, there has been an increase in publicity about infertility and reproductive medicine technologies, which has given some way to reduce both the stigma of infertility and the reluctance of couple to seek advice. It has significant psychological and economic consequences at both personal and social levels (*Dyer, 2005*).

In their review, *klossner (2006) and Handerson& Macdonald (2004)* concluded that the major focus of nursing care related to infertility involves providing support for couple as they undergo diagnosis and their chosen treatment option. Providing emotional support is an essential component in care, especially when a treatment has been unsuccessful. In addition, therapeutic communication skills are an essential component in nursing care.

Infertility problem have become a public health concern through-out the world. In recent years, there has been an increase in publicity about infertility and reproductive medicine technologies, which has given some way to reduce both the stigma of infertility and the reluctance of couple to seek advice.

**Aim of The study:** Assess psychosocial impact of infertility on women with infertility problem.

## **II. Subjects and Methods**

**Research Design:** This study is an exploratory descriptive study that attempts to explore and describe a phenomenon as it occurs.

**Setting:** The study was carried out at outpatient clinics at Maternity and Children Hospital, Hafer Albatin City, Saudi Arabia

**Sample:** A purposive sample of 1000 infertile women was selected from the above infertility setting **Study**

**Duration:** December 2015 to July 2018.

### **Inclusion criteria:**

The women selected for the study sample fulfilled the following criteria:

- 1- Have 2 or more years of unsuccessful trial to achieve a pregnancy regardless of aetiology (primary infertility).
- 2- At fertile age group.

**Data collection technique:** Data were collected through interview based on questioner.

**Tool of data collection:** A Structured interview questionnaire sheet was designed, validated and utilized by the researcher to collect the necessary data. It entailed three parts:

### **Part one: general characteristics: (Appendix I)**

- 1)-Socio-demographic data of women such as age, education, occupation, and family income.
- 2)-Present marriage and Infertility history such as age at present marriage, duration of marriage, duration of infertility, type of infertility and causes of infertility.

### **Part two :( Appendix II) Psychosocial impact of infertility:**

**\*Psychological impact of infertility** Such as; anxiety, depression, self-esteem, stress and sadness.

**\*Psychosocial impact of infertility on the women:** such as; change in sexual relation, embarrassed if someone knows their infertility, change in relation with family-in-law, husband blame about infertility, looked down by other and life is meaningless, incomplete without a child.

\*\*\* Psychosocial impact of infertility questionnaire modified form a Likert scale (1985) and Hazalina questionnaire (2005). All rights reserved.

### **Operation of the study:**

#### **1-Approval**

Official letters clarifying the purpose of the study was obtained from applied medical sciences college and forwarded to concerned personnel at Maternity and Children Hospital, Hafer Albatin City as an approval to facilitate data collection. The nursing staff responsible for study subjects under the study was also approached. The purpose of the study was explained to them, to facilitate data collection.

#### **2. Tool development:**

The tool for data collection was developed by the researcher after extensive review of recent and related literature. The content validity of the developed tool was established by a group of obstetric nurses' and physicians specialists who working in various settings and who agreed upon the accuracy and importance of information in the questionnaire prior to the data collection phase of this study.

#### **3. Consent:**

The purpose of the study was explained to each woman and oral consent to participate in the study was obtained from her.

### **Limitation of the study:**

Frequent interruption of the interviews by the conduction of different infertility procedures resulted in incomplete interviews, which were excluded from the study.

**Statistical analysis:**

Data analysis was carried-out by the researcher and under the supervision of a statistical specialist. The collected data was categorized, coded, computerized, tabulated, and analyzed using-percentage, mean, standard deviation, through SPSS statistical software package. Upon the completion of data entry, frequencies and descriptive statistics for each variable were examined to describe the sample.

A scoring system for women's awareness of infertility services and its utilization was used (Appendix II). The correct answers were pre-determined according to literature and the questions were coded accordingly. Each awareness or utilization question was given a score and the total score of awareness and utilization was obtained for each study subject. The possible range of total score was from zero to 22 for awareness, while it was from zero to 12 for utilization. Women's total score of awareness and utilization were classified as follows:

- \* Weak <50% correct answers.
- \* Satisfactory 50% to < 75% correct answers.
- \* Good 75% or more correct answers.

**III. Result**

**Table (I): Distribution of study sample according to their socio demographic characteristics.**

Socio demographic characteristics	No. (1000)	%
<b>Age (years):</b>		
<20	10	01.0
20 -	497	49.7
35 -	388	38.8
45+	105	10.5
Range	18-50	
Mean ±SD	30.06 ± 6.02	
<b>Education:</b>		
-Illiterate/ read& write.	281	28.1
- Basic/ Secondary	504	50.4
-University	215	21.5
<b>Occupation</b>		
- Housewife	743	74.3
- Working	257	25.7
<b>Residence:</b>		
- Urban	553	55.3
- Rural	447	44.7
<b>Family income:</b>		
-Not enough	418	41.8
-Just enough	354	35.4
- Enough & can save from it.	228	22.8

Table (I): Showed the distribution of women according to their socio demographic characteristics. As regards age, it was observed that women's age ranged between 18-50 years with a mean of  $30.06 \pm 6.02$ . Almost one-half (49.7%) of the study sample aged 20 to less than 30 years, while 38.8% of them aged 30 to less than 45 years. In relation to the educational level, it was noticed that more than one-half (50.4%) of women had basic or secondary education, while more than one-fourth (28.1%) of them were illiterate or just read and write. The majority (74.3%) of women were housewives, while more than one-fourth (25.7%) of them were working. Concerning residency, the same table revealed that more than half (55.3%) of the study subjects were from urban areas. Furthermore, the majority (77.2%) of women reported either had not enough family income or had enough family income but they can note save money.

**Table (II): Distribution of women according to their present marriages and infertility history.**

present marriages and infertility history	No. (1000)	%
<b>Age at marriage(years):</b>		
<20	307	30.7
20-	564	56.4
35+	129	12.9
Range	15-38	
Mean ±SD	22.42± 5.8	
<b>Duration of present marriage(years):</b>		
<5		
5-	264	26.4
10 +	384	38.4

	352	35.2
Range	3 -29	
Mean ± SD	8.04± 5.02	
<b>Duration of infertility(years):</b>		
<10	656	65.6
10 +	344	34.4
Range	2-29	
Mean +SD	5.10±8.20	
<b>Type of infertility</b>		
-Primary	876	87.6
-Secondary	124	12.4
<b>-Causes of infertility</b>		
-Male causes	515	51.5
-Female causes-	400	40.0
-Unexplained	85	8.5

Table (II): Illustrated the distribution of women according to their present marriages history of infertility. Women age at present marriage ranged between 15-38 years (with a mean of 22.42± 5.8). More than one-tenth (12.9%) of the sample were married at 30 years or more. As regards the duration of marriage, it was noticed that more than one-fourth (26.4%) of the sample had duration of marriage less than 5 years, while 38.4% of them had duration of marriage from 5 to less than 10 years and the remaining 35.2% had duration of marriage 10 years or more. Concerning the duration of the present infertility, it was noticed that almost two-thirds (65.6%) of women were infertile for less than 10 years, while more than one-third (34.4%) of them were infertile for 10 years or more. As regards the type of infertility it was observed that, more than three-fourths (87.6%) of women had primary infertility, while only 12.4% of them had secondary infertility. Furthermore, almost one-half (51.5%) of study subjects had male causes of infertility, while more than one-fourth (40.0%) had female causes. The rest of the study subjects had unexplained causes of infertility (8.5%).

**Table (XI): Distribution of women according to psychological impact of infertility on them.**

Psychosocial impact	Low		Moderate		Severe	
	No.	%	No.	%	No.	%
-Anxiety	303	30.3	403	40.3	294	29.4
-Depression	237	23.7	199	19.9	564	56.4
- Loss of self-esteem	773	77.3	227	22.7	-	-

Table (XI): Showed distribution of women according to psychological impact of infertility on them. It was found that nearly one-half (40.3%) of the study sample had moderate anxiety, 30.3% had low anxiety level, and 29.4% of them had severe anxiety. The table also indicated that more than one-half of the samples (56.4%) complained of severe depression, while (23.7%) had low depression. Only 19.9% had moderate depression. Also the majority (77.3%) of women had low level loss of self-esteem, while nearly one-fourth (22.7%) of women showed moderate loss of self-esteem.

**Table (XII): Distribution of women according to social impact of infertility on them.**

Item (n=1000).	Yes or sometimes		No	
	No.	%	No.	%
Life meaningless without child	903	90.3	97	9.7
Sadness & stress	872	87.2	128	12.8
Changes in relation with family in-law	809	80.9	191	19.1
Incomplete without child	786	78.6	214	21.4
Looked down by other	764	76.4	236	23.6
Being worry that their husbands will find another	750	75.0	250	25.0
Embarrassed if someone knows their infertility	719	71.9	281	28.1
Changes in sexual relation	653	65.3	347	34.7
Uncomfortable being around her friends with their children.	327	32.7	673	67.3
Husband blame her about infertility	235	23.5	765	76.5
Guilt feeling	201	20.1	799	79.9

Table (XII): Presented distribution of women according to social impact of infertility on them. It was found that the majority of the study subjects answered yes for the following items; a life meaning less without child, felt of sadness and stress and feeling of changes in their relation with family in-law [90.3%, 87.2% & 80.9% respectively]. The same table showed that more than three-quarter of women felt incomplete without a child, felt looked down by others for having infertility problem, worried that their husbands will find another women [78.6%, 76.4% & 75.0% respectively]. The same table showed that 71.9% of women mentioned that they embarrassed if someone knew their infertility and more than two thirds 65.3% felt of changes in sexual relation. While 32.7% answered yes for the statement that they felt uncomfortable being around their friends with their children. Furthermore, husbands blame them for infertility and guilt feeling in their infertility [23.5%, & 20.1% respectively].

#### **IV. Discussion**

Among the majority of the study subjects. The same finding was reported by *Hammerli (2009)* who emphasized on the importance of information about infertility and the plan of its management as it is the basis for the success of such treatments and prevention of repetition of the same treatments, with the results of being confronted by many complications. Although information has been delivered in a sensitive way, however, in contradiction, more than two-thirds (68.0%) of the study subjects were dissatisfied with the services offered to them. Lack of emotional support, high cost, repetition of the treatment, unknown future plan, difficult transportation, and unsuitable time for check- up were most commonly the reasons of dissatisfaction cited by the study subjects [94.9%, 93.5%, 85.8%, 79.8%, 75.1%, & 42.6% respectively](Table VII). This was not expected since the women were actively looking for a solution to their problem and often showed great persistence in trying to access help.

The importance of traditional healer in the management of involuntary childlessness has been highlighted in other studies. In Mozambique, childless women visited traditional healers more commonly and undertook longer journeys and paid more money in order to do so than access modern health care (*Dyer, 2009; Gameiro, et al 2012; Noorbala, 2009*). This is the case in the present study finding. It may reflect the fact that such traditional belief of as; using non-medical elements as; egg, honey and danker [38.7%, 29.1%, & 20.2% respectively] and use of harmful- superstitions as beads, walk in graveyard, and sitting on the delivered placenta [64.4%, 59.9%, and 25.6% respectively] are deeply rooted in Saudi country specially in rural area, and are shared by both man and women. Therefore, the need for clearing up these misconceptions and building trust between the nurse and client is imperative during the counseling process.

It is striking to find out in the present study that the vast majority (94.6%) of the study subject confronted with barriers in seeking infertility services. Economic, psychological and social barriers were cited by most of the respondents [87.0%, 47.1% & 26.4%, respectively] (Table X). The present study is also in keeping with the reports from the developed world, which indicate that these barriers increase the psychosocial burden of the family and influence their health seeking behavior *Papreen, et al (2000) in Bangladesh and Redshaw, et al (2007)*.

In view of the psychosocial impact of infertility on infertile women's quality of life, it is not surprising to find in the present results that infertility is a major cause of severe anxiety (29.4%), severe depression (56.4%), sadness and stress (87.2%), being looked down by other (76.4%), or being inefficient without a child (78.6%). It is not worthy that although most of the respondents (80.9%) felt that infertility was a threat to their own relationships, only 23.5% of men blamed their wives for infertility. The same finding was reported by *Ahmad, et al (2008); Staniec, et al (2007); Link and Phelan (2006); Peterson, et al (2003); and Riessman (2000)*. These studies highlight the need for health care workers to understand how men and women experience distress in order to offer support, promote communication between the couples and fine effective intervention.

#### **V. Conclusion**

**Based on the findings of the present study, it can be concluded that:-**

- Women were satisfied with their care but improvements may be made by giving more explanation and written information.
- The psychosocial impact of infertility was a major cause of severe anxiety, severe depression, sadness, stress, being incomplete without a child, and change in sexual relation as well as relation with family in-law.

#### **VI. Recommendations**

Based on the finding of the present study, it seems that there is a great need for improving nurse's knowledge about women's awareness and utilization of infertility services through the following recommendations which come to mind for health care, education, and research are proposed:-

- This necessitates the provision of in-services training programs refreshing courses, seminars and conference to upgrade nurses practical and intellectual knowledge about infertility management and to help them perform their role effective.
- Infertile women needs to plan for the infertility treatments (when, how, and where to seek treatment to avoid failure and repetitions of infertility services.
- The nurse should be an educator and counselor for the infertile women to increase their awareness regarding infertility managements, importance of treatment seeking behaviors, and reduce the psychosocial burden as impact of infertility.
- Additional research is needed to cover most of Saudi Arabia and get a better understanding of the impact of infertility on Saudi couples.

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