# The Study of Irrational Beliefs, Defense Mechanisms and Marital Satisfaction in Fertile and Infertile women

Shahrzad Katiraei, MSc.<sup>1</sup>; Mahtab Haghighat, MSc.<sup>2</sup>; Naeime Bazmi, Ph.D.<sup>3</sup>; Fatemeh Ramezanzadeh, M.D.<sup>4</sup>; Hadi Bahrami, Ph.D.<sup>1</sup>

- Department of Psychology, Science and Research branch, Azad University, Tehran, Iran
  Department of Rehabilitation, Shahid Beheshty University, Tehran, Iran
  Department of Psychology, Alzahra University, Tehran, Iran
- 4 Reproductive Health Research Center, Tehran University of Medical Sciences, Tehran Iran

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## **Abstract**

**Objective:** This study aimed to compare irrational beliefs, defense mechanisms and marital satisfaction in fertile and infertile women.

**Materials and methods:** This study was a causal comparative survey performed on 30 fertile and 30 infertile women chosen by available and simple random sampling out of the whole clients referred to Vali–e–Asr Reproductive Health Research Center from February 2009 to September 2009. The instruments of measurement included 3 questionnaires: Jones irrational beliefs, defense mechanisms and ENRICH marital satisfaction which were performed on samples. Data were analyzed by SPSS–16 software.

**Results:** The scale of subtests of Jones irrational beliefs, defense mechanisms and marital satisfaction were significantly different in fertile and infertile women.

**Conclusion:** The results of this study showed that infertile women use irrational beliefs and defense mechanisms more than fertile women and their marital satisfaction is less than fertile women.

Keywords: Irrational beliefs, Defense mechanisms, Marital satisfaction, Infertility, Fertility

#### Introduction

In spite of improvement of assisted reproductive methods and equipments that led to significant success in managing fertility problems of infertile couples, approximately 80 millions of people in the world are experiencing infertility in their lives (1). Studies show that infertility rate has been increased 50% from the earliest reports till now (2).

#### **Correspondence:**

Shahrzad Katiraei. Science and research branch. Islamic Azad University, Hesarak, Ashrafi Isfahani Highway, Tehran, Iran Tel: +98 (21) 88661831, Fax: +98 (21) 88661095 E-mail: sh.katiraei@yahoo.com

There were important variables including environmental factors such as jobs, drugs, obesity, electro Meghan frequency and biological factors such as age, disease and psychological factors such as stress, depression and anxiety effected on infertility (3, 4)

Researchers have examined a number of psychological correlates to the experience of infertility; studies have concluded that those who experience infertility also experience stress, anger, frustration, and phobia (5). In a special study carried out by Benazon (6) infertile women were experienced more stress than fertile women.

Some studies have found that infertility as an individual crisis could cause stress and marital unsatisfac-

tion to infertile couples (7, 8). In the other study, it was considered that high level of phobia and suspicion were revealed in infertile women's behavior (5).

A number of studies have emphasized the important role of irrational beliefs and defense mechanisms in infertile woman's attitude (8).

Infertility strongly effects marital relationship and 43% of American couples and 27% of Canadian couples have got divorced due to infertility problems (9). On the other hand, infertility treatment is presented in a limited number of clinics which are so expensive and is affordable for only a few of couples and leads to marital discrepancy in others (10).

The results of a systemic review about woman's emotional adjustment to IVF indicated that unsuccessful treatment raised the women's level of negative emotion, which continued after consecutive unsuccessful cycles and when IVF resulted in pregnancy, the negative emotions disappeared (11,12). In this study, we compared of irrational beliefs, defense mechanism and marital satisfaction in fertile and infertile women.

## Materials and Methods

This causal comparative study was performed on 30 infertile women referred to Vali–e–Asr Reproductive health research center and 30 fertile women referred to Imam Hospital from February to September 2009.

The method of available sampling was used to chose 30 infertile women out of the whole clients referred to vali—e—Asr reproductive health research center and simple random sampling to chose 30 fertile women out of the whole fertile women referred to Imam hospital.

The instruments of measurement included: Jones irrational beliefs questionnaire, defense mechanism questionnaire and ENRICH\* marital satisfaction questionnaire which were performed on samples and after grading, were compared with each other.

Jones irrational beliefs questionnaire was introduced by Jones in 1968 and is the most common instrument used for measuring irrational beliefs in the world.

The questionnaire included ten subtests: Demand for approval, High self Expectation, Blame proneness, Frustration Reactive, Emotional Irresponsibility, Anxious Over concern, Problems Avoiding, Dependency, Hopelessness Changes and Perfectionism. The validity coefficient of this test was confirmed by many resear-

ches. In a study carried out by Taghipour the validity coefficient for the function of irrational beliefs which was performed on 106 students of Alame university was %77 and the reliability was %95 (13).

**Defense mechanisms questionair** was introduces by Grohol and normed by Hoseiny used for describing latent mechanisms insight human (14).

The most common mechanisms were selected as subtests that included: Repression, Compensation, Identification, Introjection, Projection, Rationalization, Reaction Formation, Regression, Displacement, Denial, Fancy, Sublimation, Conversion, and Intellectualization. In a study carried out by Hoseini which was performed on 200 students of Payame–Noor University, obtained result showed that the validity coefficient for the function of defense mechanisms was %75 and the reliability was %84 (15).

ENRICH marital satisfaction questionnaire was made by Olson, Farnese and Drankman. The questionnaire included these subtests: Ideal distortion, marital satisfaction, Personality problems, Communication, Conflict solving, financial management, Leisure time, sexual relationship, Family and friends, Justice, Religious orientation. According to Morady's study the validity coefficients for the function of marital satisfaction were %937 for men group and %944 for women group and the reliability was from %52–%60 (8).

#### Results

A total number of 60 women have entered our study. The maximum age was 40 and the minimum was 20 year. As is clear from table 1, In Jones irrational beliefs, the investigation showed that there was significant difference in the group of subtests including Demand for Approval, High self Expectation, Blame proneness, Frustration Reactive, Emotional Irresponsibility, Anxious over concern, Problems Avoiding between two groups of fertile and infertile women and no difference was observed in other subtests including: Dependency, Hopelessness changes, Perfectionism.

In defense mechanisms (Table 2), obtained results showed that there was significant difference in the group of subtests including Repression, Introjection, Projection, Reaction formation, Regression, Denial, Fancy and Conversion between two groups of fertile and infertile women and no difference was observed in other subtests including Compensation, Identification, Rationalization, Displacement, Sublimation, and Intellectualization.

In Enrich marital satisfaction (Table 3), the investigation showed that there was significant difference

<sup>\*</sup> ENRICH (Evaluation Relationship Issues Communication and Happiness)

Table 1: Irrational beliefs in fertile and infertile women

Subtests	Infertile (n= 30)	Fertile (n= 30)	P
Demand for Approval (Mean $\pm$ SD)	26±4/56	23/03±6/19	0.042
High self Expectation (Mean ± SD)	$28/31\pm4/50$	24/04±5/69	0.043
Blame Proneness (Mean $\pm$ SD)	26/64 <u>±</u> 5/38	$23/75\pm8/87$	0.043
Frustration Reactive (Mean $\pm$ SD)	29/24 <u>±</u> 4/98	$26/04\pm6/82$	0.039
Emotional Irresponsibility (Mean ± SD)	$25/17\pm4/68$	22/74±8/96	0.04
Anxious Over concern (Mean ± SD)	28/76 <u>±</u> 4/66	26/73±5/69	0.041
Problems Avoiding (Mean ± SD)	$28/03\pm4/52$	$25/30\pm5/41$	0.04
Dependency (Mean $\pm$ SD)	$22/03\pm3/17$	19/57±8/39	0.143
Hopelessness Changes (Mean ± SD)	$26/14\pm7/07$	$25/04\pm8/25$	0.590
Perfectionism (Mean $\pm$ SD)	27/04±3/78	24/03±8/55	0.099

in subtests of ideal distortion, Marital satisfaction, Personality problems, Financial management and communication with family and friends between two groups of fertile and infertile women and no difference was observed in other subtests of Conflict solving, Leisure time activity, sexual relationship, justice and religious orientation.

## Discussion

Researchers have examined a number of psychological correlates to the experience of infertility.

Infertility caused a lot of problems for infertile couples. Studies have concluded that loss of libido, premature ejaculation, impotence, aversion and inability to achieve orgasm have been identified in those experiencing infertility (16). Many authors considered the psychological consequences of infertility such as depression, anxiety, grief, tension, guilt and frustration. In recent decades the necessity of psychological counseling and interventions for infertile couples has been expressed (17).

In this study obtained results showed that infertile women use irrational beliefs more than fertile women.

According to Callaway's research infertile women used irrational beliefs more than fertile women, and experienced more depression (17).

In their study Fassino et al showed that infertile women were experiencing high level of phobia and suspicious (7).

Also, to explain the difference between infertile

Table 2: Defense mechanisms in fertile and infertile women

Subtests	Infertile (n= 30)	Fertile (n= 30)	P
Repression (Mean $\pm$ SD)	19/20	14/57	0.000
Compensation (Mean $\pm$ SD)	16/03	15/27	0.335
Identification (Mean $\pm$ SD)	11/60	10/43	0.102
Introjection (Mean $\pm$ SD)	13/77	11/40	0.007
Projection (Mean $\pm$ SD)	15/10	12/83	0.01
Rationalization (Mean $\pm$ SD)	12/67	11/97	0.274
Reaction formation (Mean $\pm$ SD)	12/70	10/27	0.004
Regression (Mean $\pm$ SD)	17/77	13/93	0.000
Displacement (Mean $\pm$ SD)	15/20	14/67	0.411
Denial (Mean $\pm$ SD)	20/63	17/33	0.002
Fancy (Mean $\pm$ SD)	10/00	6/33	0.000
Sublimation (Mean $\pm$ SD)	13/83	13/00	0.417
Conversion (Mean $\pm$ SD)	10/67	8/87	0.043
Intellectualization (Mean $\pm$ SD)	5/43	5/93	0.580

**Table 3:** Marital satisfaction in fertile and infertile women

Subtests	Infertile (n= 30)	Fertile (n= 30)	P
Ideal distortion (Mean $\pm$ SD)	$7.07 \pm 5.05$	16±7.25	0.004
Marital satisfaction (Mean $\pm$ SD)	14±7.39	19.33±9.24	0.009
Personality problems (Mean $\pm$ SD)	19.23±7.84	19.23±9.98	0.004
Communication (Mean $\pm$ SD)	$13.70\pm6.82$	$17.83 \pm 6.44$	0.01
Conflict solving (Mean $\pm$ SD)	15.33±7.85	15.73±5.83	0.823
Financial management (Mean ± SD)	$8.63\pm4.85$	$12.07 \pm 5.04$	0.009
Leisure time (Mean $\pm$ SD)	$17.17 \pm 5.87$	16.63±4.71	0.699
Sexual relationship (Mean ± SD)	10.30±7.65	11.43±8.08	0.579
Family and friends (Mean $\pm$ SD)	13.27±5.59	$18.73 \pm 4.46$	0.000
Justice (Mean $\pm$ SD)	23.60±9.51	27.40±6.41	0.075
Religious orientation (Mean $\pm$ SD)	11.60±5.68	12.50±5.35	0.530

men and women, Grill performed a study and according to its result infertile women were using irrational beliefs more than infertile men (4). In this study investigation showed that infertile women use defense mechanisms more than fertile women.

About the effect of defense mechanism on infertility there are many opinions suggested based on evidence and studies. Coleman in a study on 200 cases reported that infertile women use immature defense mechanisms more than fertile women (18).

Also in the current study obtained result showed that infertile women feel less marital satisfaction than fertile women.

Another study by Wishman (19) showed that psychological effect of infertility leading to decrease as in marital satisfaction of infertile couples.

Confirming reduction of marital satisfaction in infertile women, some studies have found irrational beliefs take part a significant role in marital unsatisfaction (20).

In freeman et al's study also it was affirmed that there was a significant difference between fertile and infertile women in their attitudes and beliefs regarding marital satisfaction (21).

It is suggested that the results should be confirmed with more detailed complementary researches in order to gain a definite pattern in irrational beliefs, defense mechanisms, marital satisfaction and other correlates to the experience of infertility which can be applied in treatment scheduling.

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