Psychological Symptoms in Infertile People Referred to Babol Infertility Center

F. Khirkhah, M.D. *
S. Esmaeilzadeh, M.D.*
E. Mohammadi, M.D.*
I. Hoseinpor, M.D.*
E. Jahani, M.D.*

Abstract

Background: Studies showed that, infertility is known as a stressful incident and infertile men and women are exposed to many stresses. Thus, physicians who treat these couples should be aware of the effects of these stresses to use appropriate therapeutic procedures to reduce the stresses of the infertile couples during the treatment.

Patients and Methods: This is a descriptive-analytic and cross-sectional study. The study has been done by means of a demographic questionnaire and a SCL-90-R test on 452 infertile people who referred to Fatemeh- Zahra Infertility Center in Babol from March 2002 to November 2003.

Results: According to this study 213 people (47.1%) showed the symptoms of the psychiatric disorders, among which 66.2% and 33.8% were women and men, respectively.

Most of the symptoms were due to the paranoid thoughts (44.4%) and interpersonal sensitivity (38%), while the least of them were related to the psychosis (18.14%) and phobia (17.04%). The most prevalent was between 20 to 26 years. Most patients had education lower than diploma (60.1%), also their infertility has lasted for about 4-6 years. Most of them were housewife women and men with optional jobs and living in the city.

Conclusion: According to the presence of high percentage of the psychiatric disorders symptoms among the infertile couples, specially the more number of the women being affected by this problem, more attention and psychological supports are required besides the other therapeutic managements.

Key words: Mental health, infertility, psychiatry disorder, SCL-90-R Test.

Introduction

About 10 to 15% of couples in productive ages have infertility\(^1\). There are three theories about the relationship between infertility and psychosocial stresses:

1. Psychosocial stresses cause infertility
2. Infertility causes psychosocial stresses
3. A bilateral dependency exists between infertility and psychosocial stresses\(^2\).

When fertility of a couple fails in its expected time, they gradually think of infertility and this may lead to different severe reactions.

*Department of Psychiatry and Gynecology, Fatemeh Infertility Center, Babol, Iran.

Correspondence

S. Esmaeilzadeh, M.D.
Department of Gynecology
Fatemeh Infertility Center,
Babol, Iran

Fax: 00981112294992
Email: sesmael@yahoo.com
Their self-esteem may be threatened, sexual desires might differ and, etc. which overall cause the mannerism of couples undesirable with each other.

Although no data exists about infertility as an underlying factor for divorce, it has its role. Studies showed that women give much importance to have a healthy child, and when remind others pregnancies, or see a child, get sad.

Psychotherapy is specially useful in 3 stages:

1. At the beginning of evaluating the infertility
2. When the indications of psychotherapy exists
3. At the end of unsuccessful treatment

Group therapy is also useful for infertile patients, as most of them feel lonely.

Behavioural techniques like relaxation, stress management, nutrition and exercise counselling encountered with great success.

Couples learn many different ways to find these solutions. As most of them, reporting high levels of psychiatric stresses, advising them to go to a psychologist with speciality in relaxation and stress management should be done, not only with the aim of increasing the probability of pregnancy but also decreasing these stresses.

Patients and Methods
This noninter vential descriptive – analytic study was conducted cross-sectionally on 452 infertile patients referred to Fatemeh Zahra Infertility Center in Babol from March 2002 to November 2003.

To accomplish this, two questionnaires were needed. The first of which included questions about personal characters and the second was SCL-90-R test. It contained 90 questions to evaluate patients psychological symptoms. Answers were scored from non to severe according to their sadness for the condition, 90 items of this test include nine different dimensions: somatic problems, obsession, compulsion, interpersonal sensitivity, depression, anxiety, aggression, phobia, paranoid thoughts and psychosis. Our sample community consisted of infertile persons referred to Fatemeh Zahra Infertility Center in north of Iran. The questionnaires were filled randomly with these patients in their primary visits. The scores of each of the 9 items were considered pathological when 5 more than 1 and severe disorder when 5 more than 2. Iranian researchers calculate the important point of SCL-90-R test as 0.7 according to GSI.

Result
Their frequency is shown in table-1 on the basis of demographic variables. Two hundred ninety nine of patients had symptoms of psychiatric disorders (GSI more than 0.7) from which 66.2% were women (table-1). There is a significant correlation between sex and symptoms of psychiatric disorders, the most frequency – in both genders – relates to 20-29 years old (55.9%) and the least to more than 50 (1%).

Totally 92.7% of symptomatic patients are less than 40 years old (table-2). No correlation exists between age and symptoms of psychiatric disorders.

In patients with symptoms of psychiatric disorders the most frequent occupation was housewifery in women and optional job in men.

The most frequent educational degree in patients with symptoms of psychiatric disorders was lower than diploma (40.4%) and 60% of patients with symptoms of psychiatric disorders were educated less than diploma (not educated at all, first grade in elementary school).

There is a significant correlation between educational degree and symptoms of psychiatric disorders. In patients with symptoms of psychiatric disorders. The most frequent infertility period was 4 to 8 years (39%) and the least was 1 to 2 years (12.2%) (Table-3).

Also, a significant correlation exists between infertility period and symptoms of psychiatric disorders.

In patients with symptoms of psychiatric disorders a significant correlation exists between history of psychiatry disorders in family and symptoms of psychiatric disorders.

There aren't any significant correlations among place of living, history of having an alive
Table 1: The Frequency Distribution of 452 Cases According to Gender

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>210</td>
<td>46.5</td>
</tr>
<tr>
<td>Female</td>
<td>242</td>
<td>53.5</td>
</tr>
<tr>
<td>Total</td>
<td>452</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2: The Frequency Distribution of 452 Cases According to Age

<table>
<thead>
<tr>
<th>Age group/yr</th>
<th>Frequency</th>
<th>Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-19</td>
<td>11</td>
<td>2.4</td>
</tr>
<tr>
<td>20-29</td>
<td>232</td>
<td>51.3</td>
</tr>
<tr>
<td>30-39</td>
<td>161</td>
<td>35.6</td>
</tr>
<tr>
<td>40-49</td>
<td>24</td>
<td>5.3</td>
</tr>
<tr>
<td>&gt;50</td>
<td>2</td>
<td>0.4</td>
</tr>
<tr>
<td>Total</td>
<td>230</td>
<td>51.1</td>
</tr>
<tr>
<td>Not mentioned</td>
<td>22</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Table 3: Mean and Standard Deviation of Scores of 452 Cases According to Sex on the Basis of SCL-90-R Test.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean M</td>
<td>Standard SD</td>
<td>Deviation M</td>
</tr>
<tr>
<td>Somatization</td>
<td>0.93</td>
<td>0.64</td>
<td>0.57</td>
</tr>
<tr>
<td>Obsessive-compulsive</td>
<td>0.90</td>
<td>0.66</td>
<td>0.57</td>
</tr>
<tr>
<td>Interpersonal Sensitivity</td>
<td>0.82</td>
<td>0.63</td>
<td>0.64</td>
</tr>
<tr>
<td>Depression</td>
<td>1.1</td>
<td>0.78</td>
<td>0.62</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.76</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Phobia</td>
<td>0.56</td>
<td>0.5</td>
<td>0.35</td>
</tr>
<tr>
<td>Paranoid Thoughts</td>
<td>1.02</td>
<td>0.74</td>
<td>0.87</td>
</tr>
<tr>
<td>Psychosis</td>
<td>0.66</td>
<td>0.52</td>
<td>0.46</td>
</tr>
<tr>
<td>GSI</td>
<td>0.89</td>
<td>0.54</td>
<td>0.6</td>
</tr>
<tr>
<td>PST</td>
<td>44.3</td>
<td>19.5</td>
<td>31.2</td>
</tr>
<tr>
<td>PSDI</td>
<td>0.02</td>
<td>0.005</td>
<td>0.02</td>
</tr>
</tbody>
</table>
child, drug abuse history, history of somatic and psychiatric diseases in the patient and symptoms of psychiatric disorder.

The mean of scores in all scales was more in women than men, and the most was related to depression in women and paranoid thoughts in men.

**Discussion**

This study showed that the prevalence of symptoms of psychiatric disorders in infertile couples is 47.1% (58.26% in women and 34.28% in men). Statistics showed that the prevalence of symptoms of psychiatric disorders in general community differ from 7.3% to 39.8%.

Researchers in 1991 showed that prevalence of psychiatric disorders was 21% in Iran and 12.3% in Mazandaran and always more in women. (25.9% of women and 14.9% of men were affected in Iran and 16.8% of women and 7.5% of men were affected in Mazandaran). In epidemiologic studies, prevalence of psychiatric disorders was reported 17.1% in Qom (18.2% in women and 16% in men).

In a study which conducted in Mazandaran university of medical sciences (1997), (Dr. Mehran Zarghami, et al) the prevalence was 40%, more common in women.

In a study conducted by Dr. Bohrai and Yazdi, the prevalence of at least one psychiatric disorder was 12.5% and in the study conducted by Dr. Nasr and Bahlah it was 23.75%.

Different studies investigated prevalence of symptoms of psychiatric disorders among infertile couples by means of different psychologic questionnaires in which their prevalence were more than general community, for example, in Scotland, GHQ-12 and SF36 were used.

In 32.5% of infertile couples, scores of GHQ-12 were more than 8/12 and all of them had lower scores of SF-36 compared to general community, which suggesting weaker psychologic health.

In another study in China, regarding prevalence of psychiatric disorders among infertile women, under treatment with ART and prone to its failure, 33% of them had a score more than important point of GHQ-12 which became 43% after the failure.

In a study using SCL90R test, total scores in infertile women were equal to the women with cancer, HTN, history of CPR, and less than those with chronic pain and HIV.

Only one study is found that scores of anxiety, depression test No. 16 of personality population, besides, standard deviation and mean of scores for all variables were greatly the same as control group (fertile women).

In our research, prevalence of symptoms of psychiatric disorders was more in women than men (58.26% and 34.28%, respectively). Results of Nachtigal et al. on 66 couples showed that women involve with much more psychologic problems than men if only themselves are faulty show negative psychiatric reactions (anger, depression...).

Shattuck and Schwartz (1991) wrote: although it is documented that probability of male and female factor leading to infertility are equal, most diagnostic laboratory tests and therapeutic methods are done directly on women which results in somatic, mental and psychiatric problems, needing much more attention.

Besides in many societies fertile women are more valued and infertility brings about many problems for them.

In our study, most symptoms of psychiatric disorders existed in 20 to 29 years old, for both sexes, this was reported in 25 to 44 years old in Qom.

According to Dr. Zarghami in Sari, most affected patients in both sexes were in the third decade of life (19.7% in women and 13.5% in men).

In the study of Souter et al., on infertile couples GHQ-12 scores decreased by age. Most patients in our study were lower than diploma (40.4%), in Dr. Zarghami's were high school (43.5%) but in Qom were diploma and higher.

In recent study, a significant correlation between duration of infertility and symptoms of psychiatric disorders was found and most of them belonged to duration of 4 to 6 years. But in
the study of Soutorul et al, a significant correlation between GHQ-12 scores and duration of infertility was not found. In the research of Domaas AD, women with 2 to 3 years of infertility had more degrees of depression in compare to women with less than one year or more than 6 years of infertility. In the study of Mrs. Leyli Shahrban on depression, between the length of marriage and time of awareness of the problem, a significant correlation existed. In our study, the most frequent psychiatric disorder, in both sexes, belonged to paranoid thoughts (44.47%) and interpersonal sensitivity (38%) and the least to psychosis (18.14%) and phobia (17.04%). Also, in Qom, paranoid thoughts, depression and somatic disease had the most frequency and phobia psychosis the least.

In Dr. Zarghami's research, paranoid thoughts, somatization, depression, interpersonal sensitivity had the highest frequency and phobia and psychosis had the least. A research on prevalence of psychiatric disorders in Iran and Mazandaran was conducted in 1999.

Prevalence of depression on the basis of GHQ28 was 13.2% in Mazandaran and 21% in Iran, prevalence of anxiety was 19.8% in Mazandaran and 20.8% in Iran, prevalence of somatization was 13% in Mazandaran and 17.9% in Iran.

But in our study, prevalence of depression, anxiety and somatization was 37.17%, 29.65% and 30.53% respectively. Comparison of these figures shows that prevalence of these symptoms among infertile couples of Fatemeh Zahra Infertility Center has more increase than general population and paying much more attention to diagnosis and treatment of the disorders in needed.

References
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