Psychological aspects of female infertility

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Abstract
Infertility is one of the chief health and communal problems faced by a massive population from corner to corner of the world and it’s a crucial issue for couples of child bearing age worldwide. Present study highlighted the psychosocial aspects associated with infertility in patients from different districts of Haryana. The stress of the non-fulfillment of a wish for a child has been linked with emotional squeal such as anger, depression, anxiety, marital problems and feelings of triviality. The data was collected for study the psychological aspects of female infertility from patients who came for routine treatment in Department of Obstetrics & Gynaecology (GOD), Pandit Bhagwat Dayal Sharma Health University, Rohtak, Haryana through a well-structured questionnaire. Data collection was carried by face-to-face interview of the women participants. Durations of infertility among couples varied from less than one year to more than ten years. Most couples fell in the group 1-2 years, where infertility was prevalent since 1 or 2 years. Anxiety was the most common problem which was faced by 24 percent infertile females in our study. Mood swings was another major problem faced by sixteen percent females. Depression and stress were also major problem of infertility about 42 percent females suffered from depression and 44 percent females felt stress due to infertility where 56 percent didn’t feel any stress during infertility.

Keywords: Psychological, aspects, infertility

Introduction
Infertility is one of the chief health and common problem faced by a massive population from corner to corner of the world. World Health Organization states that infertility is the inability of the sexually active couple to achieve pregnancy in one year (WHO, 2000). Infertility is a disease (an interruption, cessation, or disorder of body functions, systems, or organs) of the male or female reproductive tract which prevents the conception of a child or the ability to carry a pregnancy (American Society for Reproductive Medicine). It is a stressful experience and has a high impact on couples as psychological status. The problems of infertile couples are complex and they are influenced by different factors such as sexual differences and their cause and extent of infertility (Ramazanzadeh et al., 2004) [6]. The psychological problems of infertile couples range between 25 to 60percent. Research data showed that women struggling with infertility can have as much stress and anxiety as those suffering from a terminal illness (Domar and Kelly, 2004) [1]. The stress of the non-fulfillment of a wish for a child has been linked with emotional squeal such as anger, depression, anxiety, marital problems and feelings of triviality. Infertility and its treatment create a major and extended crisis for the couples and it is a stressful condition that creates a heavy psychological disturbance for the couples. In comparison to patients with other medical conditions, psychological symptoms related with infertility are similar to those associated to cancer, hypertension and cardiac rehabilitation (Khademi et al., 2005) [2]. Women are more likely to regard childlessness as being unacceptable (Peterson et al., 2007) [3]. About one-third of the time a physiological problem is recognized in the female, one-third of the time in the male, and about one-tenth of the time in both partners. In another 10 to 20 percent of cases the infertility cannot be determined (http://www.health.harvard.edu/). Physiological processes associated with reproduction are quite complicated & many factors are involved in it, although conceiving a child seems to be a natural process. Because of the extent of the problem worldwide, the WHO has called for the recognition of infertility as a public health issue (Fathalla, 2002) [4]. Infertile couples try hard to find a diagnosis and treatment for their infertility and due to physical & psychological impacts of the treatments, they face double tension having no child has a socio cultural significance.
Materials and Methods
This study was conducted on patients who came for routine in Department of Obstetrics & Gynaecology (GOD), Pandit Bhagwat Dayal Sharma Health University, Rohtak, Haryana. For this study, 200 women participants from various districts of Haryana. Present data was compiled with the consent of patients. Data collection was carried by face-to-face interview of the women participants. The data was collected using self-designed questionnaire. The questionnaire included 11 questions. The survey was self-administered and required approximately 20 minutes to complete. All the questions were in English but were translated to Hindi by the researcher in order to help women understand these questions. The following questionnaire was given to the patients to get it filled.

Questionnaire
A well-structured questionnaire was prepared to get detailed information. Our questionnaire was developed from existing literature and modified accordingly. All participants were requested to fill this questionnaire. It was translated to Hindi for those who could not understand it

Infertility Patients Questionnaire
We are requesting your help in evaluating the risk factors in infertility patients. your participation is voluntary. The questionnaire is confidential and will only take a few minutes of your time. Your assistance is greatly appreciated.
1. Name: Partner’s name:
2. Age: Partner’s age:
3. Duration of marriage: Duration of infertility:
4. Address: Mobile:
5. Residence: Urban Rural
6. Occupation: Partner’s occupation:
7. Education Partner’s Education:
8. Female Profile
   a. Weight Height Blood group:
   b. Diet: Vegetarian Non-vegetarian
   c. Do you have or ever had: (check all that apply)
      • Anemia Heart diseases
      • Hypertension Diabetes
      • STDs Thyroid problems
      • Ovarian cyst Excess hair growth
   d. How many pregnancies have you had?
   e. Do you use or have you ever used: Coffee/Tea Alcohol Cigarettes Drugs No
   f. Do you take exercise? If yes, what?
   g. Do you test for ovulation?
   h. Age at first period:
   i. Are your periods regular? Yes No
   j. Menstrual flow is: Light Moderate Heavy
   k. Do you bleed or spot between periods?

9. Contraceptive History
   a. What form of contraception do you use now or have you used in the past? Pills name IUDs Foams/jellies Condoms/Diaphragm

10. Emotional Status
   a. Do you suffer from depression?
   b. Do you feel stress due to infertility?
   c. Do you suffer from anxiety, sleep interruption & mood swings?
      If yes,
   d. Do you have marital problems?
   e. Do you have sexual problems with your partner?

11. Any other problem you want to share:

Result and Data Analysis
All data were analyzed using the different parameters of patients. The data was collected from 200 infertile females. Among females six percent of patients were below 20 years and 17 percent of females were in 21-23, 27-29 and 30-32 year. Six percent women were above 33 years as shown in graph:

![Graph showing age distribution of infertile females](image)

**Fig 1:** Percentage frequency of different age group of infertile females

**Table 1:** Durations of infertility among couples varied from one year to ten years.

<table>
<thead>
<tr>
<th>Years</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>7-8</th>
<th>9-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females (%)</td>
<td>34</td>
<td>27</td>
<td>7</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>
Most of the females suffered from infertility 1-2 years, where infertility was prevalent since 1 or 2 years, 34 percent females come under this group. The second most constitutive group was 3-4 years around 27 percent females suffered from infertility more than two years. In a few couples infertility duration was even as long as ten years. In six percent females infertility persisted for as long as 7-8 years.

Table 2: Percentage frequency of different risk factors for infertility

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Hypertension</th>
<th>Low blood pressure</th>
<th>Anemic</th>
<th>Thyroid</th>
<th>Ovarian cyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (%)</td>
<td>10</td>
<td>16</td>
<td>9</td>
<td>13</td>
<td>4</td>
</tr>
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</table>

Most of the females in the target group suffered from low blood pressure about 16 percent females of the target group suffered from low blood pressure. In addition to low BP hypertension was also prevalent among women who suffered from infertility, ten percent females suffered from hypertension. Among the sample datanine percent of the females were anemic. About 13 percent of women suffered from thyroid problems that include hyperthyroidism (excess thyroid hormones) & hypothyroidism (lack of thyroid hormones). Thyroid disorders can cause significant impacts on reproduction of women. About four percent of women were having ovarian cyst that also a great risk factor for infertility.

Table 3: Percentage frequency of different psychological problems due to infertility

<table>
<thead>
<tr>
<th>Psychological problems</th>
<th>Depression</th>
<th>Anxiety</th>
<th>Stress</th>
<th>Mood swings</th>
<th>Sleep interruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (%)</td>
<td>42</td>
<td>24</td>
<td>44</td>
<td>16</td>
<td>11</td>
</tr>
</tbody>
</table>

In our study group 42 percent of females suffered from depression and 24 percent with anxiety. Mood swings was another major problem faced by sixteen percent females and eleven percent females suffered from sleep interruption. But on the other hand 45 percent females did not face any problems. About 44 percent females of our sample were felt stress due to infertility, but 56 percent didn’t feel any stress.

Discussion
Present study highlighted the psychosocial aspects associated with infertility in patients from different districts of Haryana. In our study, psychosocial aspects were found to be associated with female infertility. Idiopathic infertility which accounts for 20% of cases is most recently being linked to higher levels of stress, anxiety and depression. The scores of the Beck Depression Inventory, infertile women, in comparison with the control group, showed higher scores on the depression and anxiety scales (Domar and Kelly, 2004) [1]. Most people with one anxiety disorder also have another anxiety disorder. Nearly three-quarters of those with an anxiety disorder will have their first episode by age 21.5. Anxiety disorders include panic disorder, obsessive-compulsive disorder, post-traumatic stress disorder, generalized anxiety disorder, and phobias like social phobia, agoraphobia, and specific phobia (Kessler et al., 2005) [5]. Anxiety disorders frequently co-occur with depressive disorders or substance abuse. Infertility effect on a man and woman’s emotional wellbeing. Individuals struggling with infertility, it seems important to examine the systems or relationships of which he/she is a part. Though risk factors for infertility are multiple and complex, and the given data do not represent all states of Haryana, India and this information may contribute to awareness about risk factors of infertility.

Conclusion
Infertility is a problem that affects millions of people in the world both mentally and physically. Many males and females face psychological challenges when faced with the inability to conceive a child. Stress, anxiety, depression and infertility affect mental health. It can have a negative impact on an individual’s life and increased risk for depression and anxiety which can further complicate infertility treatments. Infertility need to not only be aware of the distress, but also deal with the difficulties and provide necessary counseling. More data and molecular study will be required to validate the present study.

References
8. www.who.in