



## INFERTILITY AND MENTAL HEALTH: CHALLENGES, MANAGEMENT AND FUTURE AHEAD

### Obstetrics & Gynaecology

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### ABSTRACT

Infertility is known to distress humanity since time is known. It does not merely affect the female or her spouse rather impacts significantly the family as a whole. Its suffering is very stressful and even leads to a morbid mental health issue of- depression, anxiety, aggression, phobia, sexual dysfunction, dissociation and sleep disturbances. The medical management of these issues further complicates the picture with drug-related sexual side effects. Also, there is a significant psychological and social dysfunction associated with infertility. Thus, Infertility is a multifactorial disease that needs comprehensive multidisciplinary management and care.

### KEYWORDS

Infertility, stress, mental health.

#### INTRODUCTION:

Infertility is a disease of the male or female reproductive system defined by the failure to achieve a pregnancy after 12 months or more of regular unprotected sexual intercourse. (1) Worldwide population of the reproductive age group is affected by infertility. The current estimates show that between 48 million couples and 186 million individuals globally are affected (2, 3, 4). Speaking about the Indian population, primary infertility is about 3.9% in the age group of 25-49 years and 16.8% in the 15-49 years age group (5).

"What if infertility isn't a war but an awakening? What if it's not about death but about a renaissance?"- *Rekha Ramcharan, Manifesting Motherness: Healing from Infertility.*

Infertility is blamed on the female for the sins she has done and bestowed on the family. Though 30% of its cases are attributed to problems related to men, yet females are stigmatized being unable to bear children (6). The stigma associated affects the mental health of the female and partner which in turn affects fertility further worsening the vicious circle of infertility. The leads to emotional turmoil like disappointment, guilt, anger, shame, self-blame, disappointment in infertile couples (7). The impact of the psychological distress is noted to affect the coping skills among the couples and maladaptive coping methods which add to the anxiety and distress (8).

#### Etiological basis of Infertility and Mental Health issues:

Infertility is a multifactorial disease including biological, psychological, social and medical factors.

##### A) Biological factors and infertility:

There are a plethora of factors that affect the fertility pattern of a population- directly or indirectly that includes age at menarche, age at marriage, age at first conception; also, number of conceptions and live births (15,16).

##### B) Psychological factors and infertility:

Psychological factors like stress, anxiety, emotional crisis, depression and other psychotic disorders affect the sexual functioning of the person. It's also seen that women with anxiety are prone to have more abortions as noted in a European study (9,10).

##### C) Social factors and infertility:

Women experience a relatively greater degree of negative consequences of childlessness to a greater degree in developing countries than in developed societies (11). Stigma further lowers self-esteem and self-efficacy in infertile women (12). It is also associated with increased distress, low social support and low emotional support (13). Therefore, medical professionals need to identify, determine and manage the psychological aspects of infertility and long with medical aspects.

#### D) Medical factors and infertility:

The major female related factors for infertility include- Ovulatory disorders - 25%, Endometriosis - 15%, Pelvic adhesions - 12%, Tubal blockage - 11%, Other tubal/uterine abnormalities - 11%, Hyperprolactinemia - 7% (14).

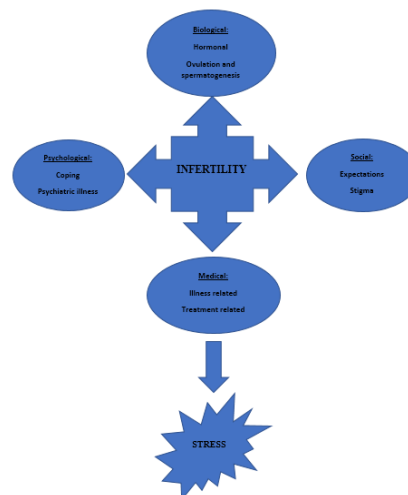


Figure 1: Etiological basis of Infertility and Mental Health issues

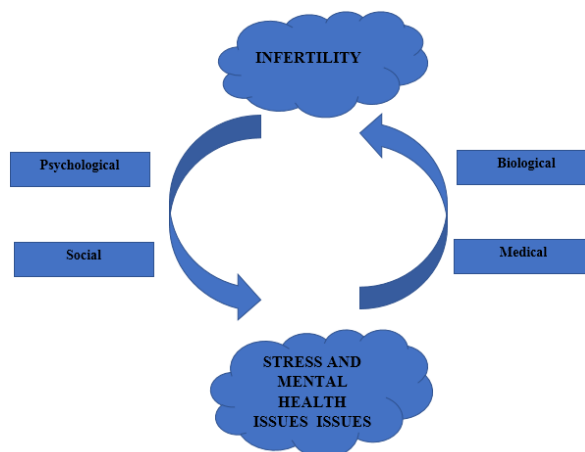


Figure 2: Vicious cycle of Infertility- stress and Mental health issues

### Discussion: Management and future ahead

Since time, infertility was known to be a medical challenge and managed therapeutically for the biological management; ignoring the submerged part of the iceberg i.e., mental health and the psychosocial status of the infertile couple. The management of the biological problem needs extensive evaluation and treatment by a gynaecologist. The mental health issues need evaluation in liaison with the psychiatrist and for managing a collaborative approach where clinical psychologists and psychosocial workers work along with the patient and family members to manage the patient pragmatically.

Psychosocial interventions like psychotherapy (infertility counselling), may help decrease infertility-related distress in individuals and may be helpful to reduce stress among couples throughout assisted reproductive treatments. These interventions support individuals and couples and studies have demonstrated improved marital relationships, pregnancy rates, individual psychological status outcome and sexual functioning of the couple (17-20). A study by Read et al in 2014 has shown an improvement of 10-34% among the patients utilizing this intervention (21).

Another aspect that needs attention is coping in the person with infertility. Education and skills training about positive coping has been shown to have a positive impact on the mood and skills of the person. Boivin et al, 2003, have also demonstrated that specific interventions like coping training, sex therapy and relaxation training; have benefited both men and women (22).

A compared study by Faramarzi et al. shows comparable results for cognitive behavioural therapy (CBT) to fluoxetine pharmacotherapy in decreasing anxiety and depressive symptoms related to infertility (23).

A piece of limited scientific evidence is available for Complementary and Alternative Medicine (CAM) and acupuncture that has been explored as a non-pharmacological intervention to treat mood symptoms during infertility. (Domar et al. 2009) (24). In a study by Balk et al (2010), women receiving acupuncture on the day of embryo transfer had lower perceived stress and higher rates of pregnancy than the ones who received placebo at a rate of 64.7% vs 42.5% without acupuncture (25).

In addition, studies also demonstrate the role of a healthy balanced diet and exercise to be an integral part of the management of infertility. In one study (Clark et al. 2013), weight loss of 5-10% in obese women with PCOS by improvements in diet and exercise lead to decreased levels of anxiety and depression (26).

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