*Editorial*

# Infertility and Mental Health: a complex connection

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In India, infertility is not just a physiological disease but also a societal stigma that leads to the development of severe mental health issues. People relate infertility with the bad karma of the women's past life or blame it on her lifestyle including late night work, social drinking, wearing high heels, career orientation, being careless of her husband, or indiscipline about religious and community rituals. Society attaches a very condescending tag of *'banjh'* (Infertile) to childless women and does not allow them to participate in any auspicious functions alleging that they may bring bad luck [1].

Infertility refers to the inability to achieve fertilization and conception over a period of 12 months while attempting to get pregnant. While it occurs mostly in women over the age of 35 it can also be due to various other reasons such as: Fallopian Tube Defects and Obstructions; Polycystic Ovary Syndrome; Menopause; Diminished Ovarian Reserve; Functional Defect in the Hypothalamus or Pituitary Gland Common causes of male infertility include poor sperm quality, structural or hormonal disorders, genetic disorders, decreased libido due to substance abuse or depression, or impotence, which is often linked to alcohol, or certain prescription medications [2].

Globally, primary infertility (defined as the inability to attain a live birth) accounts for 2% of infertile women, whereas secondary infertility (women who had at least one live birth previously) accounted for approximately 10.5%. In India, primary infertility prevalence is estimated to range from 3.9% to 16.8% [3].

According to the reports of the Challenges in Infertility Management (CIIM) Summit 2019, nearly 15 percent of the Indian population suffers from some form of infertility. Research in fact indicates that the country has witnessed a 20 to 30 percent rise in infertility cases in the past five years. The population of people affected by it adds up to more than 150 million and nearly 10 million new cases are being added up in India yearly [4]. World Health Organization's (WHO) report also states that one in every four couples in developing countries had been found to be affected by infertility [5]. It was also revealed in CIIM-2019 summit reports that cases of male infertility now contribute to 60 percent of couples who remain childless, a sharp contrast to 40 percent in the year 1980. Research studies by other organizations have stated that there would be an increase in infertility treatment among couples over the next decade [6].

Even though infertility affects both men and women equally, in most societies, the woman is most often blamed when she does not get pregnant, resulting in mental health distress, stigma, discrimination, social exclusion, and abandonment. Infertility is associated with lower quality of life, and marital discord, with greater psychosocial consequences for women. Additionally, infertile women with poor social support, high sociocultural pressure to have children (especially sons), maladaptive coping (ie, emotion-focused/avoidance), prior trauma or mental health disorders, and overinvolved family members, are at particularly high risk for distress, including depression, and anxiety [7]. Typically, couples in India are expected to conceive within the first year of marriage and face considerable social pressure and coercion when that does not happen which results in increased distress [8].

**Societal Expectation Taboos Related to Infertility and Women**

For many couples, parenthood is a dream. Until quite recently the trend was to get married early and have your first child by the age of 25 in India. However, due to socio-economic changes in the 21st century and

greater development of interest in significant factors such as education, career, and financial settlement, there is a delay in parenthood [9].

In India, having children is the social norm, and being childless relates to social stigma. Infertility continues to have a profound effect on the psychological and social well-being of women, as compared to men across the country. Global statistics have shown that one in every six couples suffers from infertility, yet the subject is still a major taboo in India. As per recent research, it is found that an alarming count of 27.5 million couples is suffering from infertility problems [10].

Societal taboos limit women from finding the right infertility specialist who can counsel and guide them in their respective treatment journeys. Cultural, religious, and social factors contribute greatly to the lack of awareness regarding fertility, social stigma, and the hesitance that surrounds it. As opposed to being considered a disease that needs addressing and treatment - infertility is looked upon and talked of as a matter of personal inadequacy. Couples often feel ashamed to talk about the struggles they have faced with the fertility aspect of their health and many a time hesitate in consulting the right specialists, who can help them in finding suitable options for their treatment [11].

Infertility in India is not merely a biological issue but also a social one - wherein the silence and stigma that surrounds the topic are mostly due to the misinformation that prevails in Indian society. The problem is not just limited to rural areas, even urban and developed areas in the country are rife with superstition and misconceptions regarding infertility. Infertile women are deemed to be inauspicious and in most cases are ill-treated, rejected, or abandoned by their family and society. It is this cultural and social stigma, due to which infertility is often hushed up, to maintain one's social image. The most common advice that is doled out by parents is to not talk about the tabooed topic or even seek help, as societal pressure may often render infertile couples' social outcasts [12].

When it comes to familial and societal support, there is a huge shortage of it for couples experiencing childlessness due to infertility issues. This culture of silence and secrecy that we have allowed to fester and perpetuate around the topic of infertility, is what lies at the core of the obstacles that infertile couples must face. Lack of proper information and guidance about reproductive health and fertility care means that couples often do not realize the existence of fertility issues until it's too late. This also delays the diagnosis of infertility problems in the respective couple to a great extent, thus impacting the commencement of the treatment. For couples who decide to undertake treatment or are on their journey of conception, they might find the entire process daunting or isolating, due to the lack of a support system that they can lean upon. The solution to this conundrum doesn't lie in simply spreading information about sexual health, safe sex, or contraception alone. A prominent lack of awareness remains when discussing reproductive health and infertility, in both the rural and urban spheres of the country [13].

**Infertility and Mental Health**

Infertility has a profound impact on women's mental health and on the person. Physical, emotional, sexual, spiritual, and financial aspects of one's life are affected by this disease of the reproductive system. The most common mental health concerns reported by infertility patients are symptoms of anxiety and depression. The more physically and emotionally demanding patients' medical treatments become, the higher the reported symptoms of anxiety and depression. Each passing monthly cycle brings a roller coaster ride of emotions such as anger, betrayal, guilt, sadness, and even hope. With each friend who announces her pregnancy and with every pregnant woman she passes in the grocery store, the patient's anxiety and stress can become overwhelming [14].

With childbearing being characterized as important and mandatory in this pronatalist culture, women's failure to produce offspring creates a loss of status and stigma, putting affected women at high risk for mental health problems. Studies in other pronatalist cultures have indicated that women without children are perceived more negatively than those who have children. Among infertile women, perceived community pressure to have children is associated with distress [15].

Parenthood is one of the major transitions in adult life for both men and women. The stress of the non-fulfilment of a wish to have a child has been associated with emotional sequelae such as anger, depression, anxiety, marital problems, sexual dysfunction, and social withdrawal and isolation. Couples experience stigma, a sense of loss, and diminished self-esteem in the setting of their infertility [16]. In general, in

infertile couples, women show higher levels of distress than their male partners [17]; however, men's responses to infertility closely approximate the intensity of women's responses- but only when infertility is attributed to a male factor [16]. Both men and women experience a loss of identity and have pronounced feelings of defectiveness and incompetence. Several studies have found that the incidence of depression in infertile couples presenting for infertility treatment is significantly higher than in fertile controls, with prevalence estimates of major depression in the range of 15%-54% [18-19]. Anxiety has also been shown to be significantly higher in infertile couples when compared to the general population, with 8%-28% of infertile couples reporting clinically significant anxiety [20-21].

While the relationship between stress and infertility has not yet been established through a directional hypothesis, we do know there is an interconnection between the two. Stressors add up producing cortisol which causes damage if levels are high for too long causing chronic stress to gradually develop. Several stressors which are caused by infertility include financial worries (IVF), relationship stress, and failed fertility treatments. These add up and can eventually lead to post traumatic stress disorder (PTSD) [22].

Most infertile women develop feelings of not living up to expectations due to societal stigma, family ignorance, abandonment, and shame leads to low self-esteem. Since the 1980s, research has shown that women and their partners, experience a variety of psychological distress outcomes following pregnancy loss, including grief, anxiety, depression, and guilt [23]. Women who have undergone the loss of a viable embryo during the treatment of infertility, express a significant amount of grief, loss, and trauma. The miscarriage itself is considered as both physical and emotional loss and can be classified as a traumatic event [24].

The DSM-IV-TR defines a traumatic event as one that involves experiencing, witnessing, or learning about the "actual or threatened death or serious injury, or a threat to the physical integrity of self or others" [25], and the person's response at the time of the event must involve "intense fear, helplessness, or horror". According to Speckhard, the experience of pregnancy loss can be conceptualized as a trauma, especially if the loss is perceived as death and parental attachment has developed. The experience of pregnancy loss often results in feelings of fear, sadness, anxiety, loss of self, loss of security, and loss of personal comfort; social interaction and other previously enjoyed activities are often avoided echoing common symptoms reported by those experiencing other traumas [26].

Infertility can be a stressful experience. Some researchers suggest that stress may impact the likelihood of conceiving, although there is not enough evidence to confirm a causative link [26]. Some medical issues affecting fertility, such as polycystic ovary syndrome (PCOS), may also increase the risk of depression [27].

**Conclusion**

It is unfortunate that in most patriarchal families like in India, a woman's value and worth are linked to her fertility. Several educated and well-settled families still believe not having a child is a sin and cannot be accepted. As a pronatalist society, infertility is particularly problematic in India, causing stigma, shame, and blame, especially for women irrespective of the actual reason behind a women's infertility. Infertility consequences for women include discrimination, social exclusion, and abandonment, putting them at high risk for mental health distress. Furthermore, in countries such as India where infertility is stigmatized, assigning blame to one specific gender makes several women feel miserable and hopeless. Infertility is often a silent struggle where most women avoid sharing their stories. Beyond being characterized as a medical state, infertility is a factor that affects one's social position and state of mind. Infertility affects a couple and their relationship largely leading to poor quality of life, low self-esteem, and hopelessness.

It can be concluded that women suffering from infertility experience tremendous stress as well as physical pain. After reading this article, we hope individuals across the world begin to respect, accept and gradually destigmatize infertility in both women and men.

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