

Infertility: It's Impact on Physical, Psychological and Social Health

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Abstract

Infertility is a global health problem affecting millions of individuals. The cause of infertility may lie with either partner or both may be responsible for it. As parenthood remains an important goal for both men and women, the stress of not having a child has got tremendous impact on the mental status of both partners. Being a social taboo, the couple have to face the social stigma of infertility. The high cost and uncertainty of treatment outcome, has also got a financial concern. Though an emerging issue, infertility still remains as a neglected public health issue. Along with specific treatment, it needs an integrated holistic approach for the management.

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Infertility is a global health problem and around 200 million individuals are facing challenges in conceiving baby which amounts to be 15% couples of reproductive-age who are having some issues in conception. Every one in six couples are having some problem in conceiving. The World Health organization (WHO) defines infertility as a disease of the reproductive system affecting both male and female partners, where couples are not able to conceive after 12 months or more of regular sexual intercourse without using any contraceptive methods (WHO, 2018). The incidence of infertility is around 15-20% in developing and 8-10% in developed countries respectively (Hocaoglu, 2019).

There are different causes of infertility. It can occur due to issues with male partner or female partner and a combination where, both male and female partners are having some issues or sometimes no definite cause can be found after normal evaluation of the couple (WHO, 2021)

In the male partner, infertility is most commonly caused by abnormal semen parameters like, the count and concentration of sperm in the semen is below the normal range or sometimes completely absent, there may be structural defect in the sperm and the motile sperm count may be low, along with some other factors like ejaculatory dysfunction, infection or injury of genital tract, hormonal imbalance, hernia, hydrocele, varicocele and sometimes specific genetic defects.

In the females, infertility/subfertility may be caused by structural or functional abnormalities of reproductive organs like uterus, ovaries, and fallopian tubes along with malfunction of the endocrine system. Disorders of ovaries like ovulatory dysfunction e.g polycystic ovarian syndrome (PCOS), premature ovarian failure and diminished ovarian reserve are more common. Similarly uterine factors like adenomyosis, endometriosis, fibroid or congenital anomalies are frequently encountered. Tubal disorders like blocked fallopian tubes are another cause of infertility. In developing countries like India, where infections like tuberculosis and sexually transmitted

infections (STI) are more prevalent due to poor hygiene condition, which affects the fallopian tubes more commonly, play an important role in the cause of infertility.

Endocrine disorders causing imbalance in reproductive hormones is another factor seen in women. However, environmental and lifestyle factors such as obesity, excessive alcohol intake, smoking, sleep disorders and exposure to environmental pollutants have been associated with lower fertility rates in both male and female partner (WHO, 2020).

Infertility can be two types, primary or secondary. Primary infertility is when a female has never conceived in her life time, and secondary infertility is when the female has a history of at least one conception and not able to conceive after that (WHO, 2020). Globally primary infertility is more common. 3.9% to 16.8% of Indians have some issues of primary infertility as estimated by the World Health Organization.

All living beings have the innate and important instinct to procreate and maintain their species. Not able to have a child affects not only the individual as such but, it has got social and demographic implications also. Childlessness affects all aspects of health of individual like physical health, mental and emotional health along with social and the financial status. The couples face a physical, psychological and emotional challenging situation along with financial burden (Hocaoglu, 2019).

Effect of Infertility on Physical health

As most of the fertility treatment are concentrated around female (ovulation induction, oocyte pick up, embryo transfer and finally pregnancy, etc.), compared to males, they go through a lot of physical changes during the course of treatment. During the course of infertility treatment, fertility drugs are used for the various procedures like, induction of ovulation, controlled ovarian

hyper stimulation, prevention of premature ovulation, trigger for ovulation, preparation of uterus for transfer of fertilized embryo or embryos and maintenance of ongoing pregnancy. As these are different hormonal preparations, person taking them sometimes experience mood swings, hot flashes, weight gain or bloated feeling, sleep disturbances. Sometimes they have intense premenstrual syndrome (PMS) like symptoms. Few experience symptoms like, headaches, breast tenderness and nausea. As injectable drugs are given during the treatment, the woman has to get pricks at different sites depending on which type of drugs are prescribed, which can be a cause of distress. Skin irritation and rashes at the injection sites are also experienced by some women (Winfertility, 2020). Again, when there is failure of a treatment cycle, women go through a lot of physical, mental and psychological stress.

Psychological Effects of Infertility

Not able to have children affects couple's lives in various ways. The couples go through a lot of psychological and emotional distress. They often define infertility as "the most distressing" life event. "Misery" is the universal emotion experienced by these couples (Hocaoglu, 2019).

Failure to accomplish reproductive function leads to looser and worthless feeling among couples in turn negatively affecting their self-respect, emotions, social life, personal life and overall quality of life. Studies have shown that infertility affects all aspects of life starting from physical, psychological, emotional, sociocultural and financial status of couples. Infertile couples go through a lot of guilt feeling, fear of losing their social status which eventually leads to stress, anxiety, and depression. They chose to hide their feelings from other family members, friends, and society which in turn lead to isolation and not getting any kind of support from others (Hocaoglu, 2019).

Infertile couples go through different stages of grief like confusion, denial, anger, bargaining, which leads to unworthiness, guilt feelings, frustration resulting in withdrawal from everyone, social isolation and finally comes the stage of acceptance. First time when they go for consultation and diagnosed with infertility, they are shocked followed by denial stage. The next stage what the couples come across is anger and anxiety. An infertile partner faces the insecurity and fear of being abandoned by the spouse which is more seen in cases of women. For women, who are childless go through the fear of loss of control, loneliness, absence of social security, outcast from community and they have very low self-esteem. While women go through a sense of worthlessness and of no use, most men feel as if they have lost their manhood. During the process of evaluation and treatment, when couples are questioned in details about their sexual life, they feel embraced and perceive it as interrogation of their inter personal relationship, creating a feeling of loss of control. They lose their interest in day to day life events, lack motivation and enthusiasm in doing anything productive, finally going into depression (Harvard Mental Health Letter, 2009). Studies have shown that the incidence of major depression is in the range of 15-54% among infertile couples (Deka & Sharma, 2010). Females usually are more expressive and vocal about their emotions needing wider social support, whereas males are more into themselves and hardly share their problems with others. This disparity in expression of emotions prevents partners to understand each other's mental status as they avoid any discussion regarding the existing issues and fail to provide emotional support to each other gradually weakening the bond between them. Many a times their stress and anxiety leads to sexual dysfunction which in turn leads to conflicts in marital relationship (Harvard Mental Health Letter, 2009).

Studies have even shown that infertility has got a significant effect on mental health of individuals. The hardest psychological challenge a couple face is anxiety where as those with failed

treatment go through depression as major psychological burden. Infertile couples go through 3.4 and 2.7 times mood disorders and generalized anxiety disorders respectively in comparison with normal couples. Few of them suffer some kinds of eating disorders like obesity, anorexia nervosa or bulimia. Sometimes they go through social anxiety and panic attacks. The other common frequently encountered psychiatric problems are somatization disorder and sexual dysfunction. With respect to gender certain degree of variations are observed. While depression is more reported in infertile women, in men due to their suppressed anxiety, psychosomatic indicators are expressed more (Hocaoglu, 2019).

One study has shown that the expression of reactions to infertility depend on which partner (male/female) is having major problem in conception. It is different when the man is at fault rather than woman and vice versa. When the wife is diagnosed with fertility issues men do not report being affected equally as the wife. But when the man is the responsible partner for the subfertility/infertility they go through the same levels of mental and psychological distress as the infertile woman (Harvard Mental Health Letter, 2009).

Effects on Social Health

Worldwide millions of couples of reproductive ages are affected by some form of subfertility/infertility – which not only affects their family life but also has equal impact on the society. Childlessness leads to a kind of strained relationship between the partners. They tend to play the blame game, blaming each other for the cause of childlessness. Infertile couples are usually not invited in important family functions because of existing social taboos. They themselves tend to avoid any type of family functions, friends and social gatherings. In our society where important social responsibilities are carried out by a couple's children, the infertile couples feel incomplete unable to provide the same (Ganguly & Unisa, 2010). Although males are equally

responsible for the cause of childlessness, still the social burden “falls disproportionately on women.” Childless women are usually not accepted well in our society and face a lot of discrimination and stigma. Sometimes they even are ostracized (WHO bulletin, 2010). They are not given any kind of social or financial support. Though scientifically both males and female are equally responsible for infertility, in our society, it is always the woman who is blamed whether she really is at fault or not. Many a time men could not accept their inability to father a child and hide the truth from his partner leading to misunderstandings. Sometimes the problem is so severe that it ends up in separation or remarriage. They even take drastic steps like suicide. Many a times the female experience lot of psychological trauma like low self-esteem, emotional stress, depression, anxiety, violence and social stigma. Educational levels play another important factor, where it is seen that uneducated or less educated women suffer more from secondary infertility due to their early marriage and lack of knowledge in reproductive health. In case of marriage at a higher age (after age 30 years) incidence of infertility is highest (19.7%). Studies have shown that, infertility affects individuals from all religion, cast, rich & poor (Sarkar & Gupta, 2016).

It is estimated that, there are 2 million new cases of infertility diagnosed every year, which has got a lot of pressure on economics of the health care system (Cunha et al., 2008). Cost of infertility treatments are significant. Insurance facilities are still not widely available in our country, which means the patient has to pay from his pocket for the treatment. It can also have negative economic impact when couples go for infertility treatment. Infertility may cause a lot of financial burden as well as economic instability secondary to social consequences (Dyer & Patel, 2012).

It is a paradoxical situation where one side we are facing population growth, other side we have to face the issues of infertile couples. But the adoption of a small family norm makes the issue of involuntary infertility more pressing. Though it is an important health issue, still infertility

prevention and care often is not given much attention. It does not come in the priority health management list, especially in developing countries where the large population is another major issue (WHO, 2012). Most of the countries face the challenges to access and avail the interventions required to manage infertility issue. Diagnosis and treatment of infertility is often not prioritized in national population and development policies and reproductive health strategies and are rarely covered through public health financing. There is lack of proper infrastructure and equipment. Very few trained personnel are there to manage the assisted reproductive techniques required for infertility management. As the treatment is also very costly, it acts as a major barrier even for countries that are actively addressing the needs of people with infertility (WHO, 2020).

By improving government policies, it will be possible to address the many inequities in accessing safe and effective fertility care. To effectively address infertility problem, health policies need to recognize that infertility is a disease that can often be prevented, thereby mitigating the need for costly and poorly accessible treatments. We have to incorporate fertility awareness in national comprehensive sexuality education programmes. People should be made aware of maintaining a healthy lifestyle there by reducing behavioural risks, including prevention, diagnosis and early treatment of STIs. All governments can implement policies and programmatic interventions to avoid unsafe abortion, postpartum sepsis and abdominal/pelvic surgeries which can be associated with infertility (WHO, 2020). In addition, enabling laws and policies that regulate third party reproduction and assisted reproduction technologies (ART) are essential to ensure universal access without discrimination (WHO, 2020).

Conclusion

Infertility is an emerging medical problem and an important public health issue affecting couples around the world of all social strata with a serious psychosocial consequence. It is of special concern because of the extent of the problem which involves the whole world and the type of social stigma attached to it. There is a lack of awareness and understanding of infertility among the couples as well as the whole society. With increasing incidence of infertility and modern treatment facilities more attention is needed to address this emerging issue. As infertility also affects social and interpersonal relationship, along with mental health of the couple, we have to take an integrated and holistic approach in managing this condition. Not only the treatment but the mental-emotional, socio-cultural aspects also have to be taken care of.

References

- Bulletin of the World Health Organization. (2010). *Mother or nothing: the agony of infertility*.
<https://www.who.int/bulletin/volumes/88/12/10.011210.pdf?ua=1>
- Cunha, M. D. C. V. D., Carvalho, J. A., Albuquerque, R. M., Ludermir, A. B., & Novaes, M. (2008). Infertility: association with common mental disorders and the role of social support. *Revista de Psiquiatria do Rio Grande do Sul*, 30, 201-210.
- Deka, P. K., & Sarma, S. (2010). Psychological aspects of infertility. *British Journal of Medical Practitioners*, 3(3), 336.
- Dyer, S. J., & Patel, M. (2012). The economic impact of infertility on women in developing countries-a systematic review. *Facts, views & vision in ObGyn*, 4(2), 102.
- Ganguly, S., & Unisa, S. (2010). Trends of infertility and childlessness in India: Findings from NFHS data. *Facts, views & vision in ObGyn*, 2(2), 131.
- Harvard Health Publishing. (2009, May 1). The psychological impact of infertility and its treatment, from the harvard mental health letter.
https://www.health.harvard.edu/newsletter_article/The-psychological-impact-of-infertility-and-its-treatment
- Hocaoglu, C. (2019). The psychosocial aspect of infertility. *Infertility, Assisted Reproductive Technologies and Hormone Assays*, 65.
- Sarkar, S., & Gupta, P. (2016). Socio-demographic correlates of women's infertility and treatment seeking behavior in India. *Journal of reproduction & infertility*, 17(2), 123.

Winfertility. (2021). *The physical and emotional toll of infertility treatment.*

<https://www.winfertility.com/blog/stress-of-infertility-treatment-ivf>

World Health Organization. (2020). International Classification of Diseases, 11th Revision (ICD-11).

World Health Organization. (2020. September 14). *Infertility.* <https://www.who.int/news-room/fact-sheets/detail/infertility>

World Health Organization. (2021). *Infertility.* <https://www.who.int/health-topics/infertility>