
**Psychological Impacts of Infertility and Other
Reproductive Technologies**



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***Abstract:** Individuals and couples all over the world find incapacity to conceive children to be a distressing circumstance. Infertility has a wide range of implications, including societal pressure as well as personal distress. Advances in assisted reproductive technologies, like as IVF, can give many couples hope where treatment is accessible, yet there are still challenges to overcome in terms of medical coverage and expense. The medicalization of infertility has unknowingly resulted in a dismissal of couples' emotional responses, which include distress, loss of control, stigmatization, and a disruption in their adult developmental trajectory. Evidence is accumulating that there is a link between fertility treatment stress and patient drop-out and pregnancy rates. Fortunately, psychological therapies for infertility patients, particularly those emphasizing stress management and coping-skills training, have been demonstrated to be useful.*

Key Words: Infertility, Fertility, Assisted Conception, Reproductive Technology, Clinics

Introduction

The psychological impacts that come with not being able to conceive can really take a toll on your life. Where reproductive technologies and new scientific methods of enjoying parenthood are considered as life changing procedures, they add more in the already bogged down mental health than to relieve any of it. These scientific procedures add more to the already existing problem of infertility. Although, even if the process tends to seek the positive result, the whole journey can be pretty much tiring. There can be a lot of constraints that might come in way, specially where there is sperm or gamete donation involved. Moreover, an IVF procedure can be financially burdensome.

Studies on the psychological impacts of the technology assisted conception are quite rare as compared to the studies that shows how they've been useful in regard to bestowing couple with children. There is no negation of the fact that the technology has made their ultimate wish come true but the serious psychological implication where these procedures fail are also in question. In this article, a few studies have been discussed where the psychological strain revolving around infertility and all these medical procedures are discussed.

Psychological Impacts of Infertility

There can be multiple causes of infertility either something wrong with female or the male but it's

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understood that both of them has to go through the turmoil.

“Shock and denial are often the first reactions to the discovery of infertility, followed by grief and depression” (Robinson, Stewart, 1996).

Not being able to conceive not just only make them go through emotional distress because of stigmatization but clinic visits, medications, finances and other more factors can be the reason behind the psychological implications. Also, low self-esteem among couples is also considered one of the leading factors towards chronic anxiety and depression among couples which can ultimately lead to the turbulence in their marital life. They often consider the infertility as a punishment for their past sins or incomplete male or a female. Even the constant pressure of being able to conceive can also have a disrupting impact on their sexual intimacy.

There are studies that are evident that male and females have different experiences and coping behaviors regarding infertility. 50 percent of the females who are not able to conceive for years believe that being infertile is the most painful experience of their lives while on the other hand only 15 percent of men accept to say so. There can be various factors that might explain the coping behavior. Toxic masculinity also prevents men to truly express what they feel. They have to assert themselves as strong ones and cannot accept anything openly that somehow makes them feel lesser being. The sperm testing and constant medical follow-ups also make them conscious of their masculinity as if someone is questioning them.

The rigorous testing at clinics for the diagnosis of problem is itself the procedure that brings out anxiety and stress. Vaginal ultrasounds, constant hormonal surveillance, cervix ultrasounds, endometrial biopsies, Hysterosalpingograms, or even insemination with the help of syringes can be the source of not even physical discomfort but it is also challenging for mental health, especially of the woman. Not even just trying naturally to conceive is tiring for the couple but even going for treatment comes with the great deal of emotional, physical and financial stress.

To explore the psychological correlation of infertility among couples, here is a compilation of the studies which shows the personality differences between the infertile and non-infertile couple (Figure 1).

Table 1. Recent studies of personality differences between infertile and non-infertile samples

| First author (Reference No.) | Year | Nationality of participants | Sample characteristics | Comparison group | Measures | Central findings |
|------------------------------|------|-----------------------------|---|--|---|---|
| Brinsmead [21] | 1986 | AUS | 556 IVF couples | 20 GYN patient couples | Eysenck Personality Questionnaire | Extroversion and neuroticism higher for infertile group than published norms but not higher than controls |
| Connolly [22] | 1992 | UK | 116 clinic women, 107 men | 3 fertile groups | Eysenck Personality Questionnaire | No differences |
| Edelmann [23] | 1994 | UK | 152 IVF couples | published norms | Eysenck Personality Questionnaire | No differences |
| Freeman [24] | 1985 | US | 200 IVF couples | published norms | Minnesota Multiphasic Personality inventory | No differences |
| Freeman [25] | 1987 | US | 156 IVF women | published norms | Minnesota Multiphasic Personality inventory | Psychiatric syndromes infrequent |
| Garcia [26] | 1985 | US | 49 anovulatory women | Those who achieved pregnancy compared to those who did not | Eysenck Personality Inventory | No significant differences between groups |
| Hellhammer [27] | 1985 | GER | 117 clinic men | published norms | Freiburger-Persönlichkeits Inventar | Some differences from norms on some subscales |
| Hubert [28] | 1985 | GER | 101 clinic men | published norms | Fragebogen zur Abschätzung des psychosomatischen Krankheitsgeschehens | No significant differences |
| Laios [29] | 1985 | SWE | 24 couples, 2 women undergoing tubal surgery | published norms | Eysenck Personality Inventory | Normal scores before and after surgery |
| O'Moore [35] | 1983 | IRE | 15 clinic women, 11 with idiopathic infertility | 10 controls (selection procedure not specified) | Eysenck Personality Questionnaire Sixteen Personality Factor | Infertile women higher on introversion and guilt; scores reduced after autogenic training |
| Paulson [30] | 1988 | US | 150 clinic women | 50 volunteers (students and GYN patients) | Sixteen Personality Factor | No significant differences |
| Sahaj [31] | 1988 | US | 58 IVF couple, 18 IVF women | published norms | Eysenck Personality Inventory | No significant differences |

It is evident through studies that infertile couple's stress situation can be anywhere on the spectrum. From having chronic depression or anxiety to having mild and infrequent symptoms. (Griel, 1997)

Common themes that emerge from the critical review of the literature that is present on psychological impacts of reproductive diseases and infertility are. (Griel, 1997)

- Infertility and reproductive diseases leading towards identity crisis, especially in women where they feel as if they are incomplete.
- Constant feeling of loss of control over their bodies and ambiguity.
- Affected marital relationships and sexual intimacy.
- Social stigma and pressure from society and family.
- Constant feeling of being alienated from the fertile world.
- Absorption in the fertility treatment.

Psychological Impacts of Technology Assisted Fertility Treatments

It has been noticed that fertility treatments like teaching couples about fertile window or some specific positions or prescribing drug are not as intrusive and distressful as other more medicalized procedures such as IVF or IUI are. These treatments bring around so much change in their lives. Any couple who opts for these medicalized treatments are indirectly signing up for disruptive lives. It's no lie that treatments like IVF and IUI have sought so many great results over the time but simultaneously when these treatments fail, there's more suffering than just being stigmatized by society.

Talking about the psychological impacts of the treatments, regular clinic visits for treatment are one of the leading causes for career disruption. And as all the sexual activity of couples is constantly being investigated, their privacy feels threatened which in result also draws love factor from their intimacy. Moreover, couple life starts to revolve more around the fertility treatment than anything else. You can't plan vacations; you can't have business trips and you can't move far because you've to be available on the required date. (Robison et al., 1996). You're being on constant hormonal treatments, you've to inject hormones during your cycle. It's not as easy as it is portrayed, it comes with the cost.

Hormones that are used in fertility treatments have their own side effects. Common side effects of mostly used hormones such as clomiphene, GnRH agonists and gonadotrophins are tiredness, hot flashes, night sweats, dizziness, nausea, headache and breast tenderness. And if the person is being on hormonal therapy for long span, there are also high risk of stroke, tumors in pituitary glands and bone loss. (City fertility clinic) These are just the few mentioned side effects that might happen to females who undergo fertility treatments. It involves such adverse effects that it is suitable to say that it can affect the normal functioning of life and putting you in existential crisis. You've to put your mental health at stake to undergo the fertility procedures that still depend upon the odds.

Women Mental Health, Infertility and New Reproductive Technologies

Around 15 percent of people in their reproductive age seek medical help for their conception. (Fisher & Hammarberg, 2020) Most of the treatments that help the couples with their fertility involves procedures that need to be done on woman body than male. Couples sign up for these physically demanding and mentally challenging medical treatment because of the optimistic hope of being able to be parents. The psychological consequences, especially in women are quite common. According to a study done around 38 percent of women in a clinic in Sydney, around 40.2 percent of women in clinic in Taiwan, around 30 percent women in a hospital in Tunisia have reported high rates of clinically significant symptoms of anxiety. (Fisher & Hammarberg, 2020). More than 20 percent of women attending the support group have reported to experience episodic suicidal thoughts. That's really is the percentage that cannot be ignored in any case.

Infertility is not something that is going to be just a matter of few months, it can take up to months and years for treatment but on the other hand it is not something that is going to last lifetime. Infertility or going through any fertility cannot just make one go through mental turmoil but somatic symptoms of anxiety and depression can also be there. And what else that normally doctors and clinical staff is unable to see other than somatic symptoms? Most of the women going through the treatment have reported the feeling of heart sinking, profound sadness, self-blame that cannot be medically diagnosed because according to medicine, these are not somatic. These feelings are as real as bodily symptoms are. A study also shows that women undergo more existential crisis than men do normally in the relevant case. Women tend to feel more guilty of the infertile experience they go through; moreover, it also adds up to their fears about sexual experiences and the use of contraception. They feel the burden of not being able to control their conception.

Talking about the treatment, the start of treatment inspires hope that the infertility will be helped or even cured in the future. Women, on the other hand, may have unreasonably high expectations about the likelihood of therapeutic success at this stage. Injections, scans, blood tests, and waiting to find out if eggs have fertilized are all thought to be more mentally taxing than physically taxing. IVF or other fertility treatments are never a one go thing, it might require multiple treatment cycles to make it successful. IVF procedures are physically exhausting, especially for women, and can be perceived as intrusive, as well as accompanied by alternating sentiments of optimism and despair, which are even aggravated when multiple treatment cycles are completed.

Economic Implications of Assisted Reproduction that can result in Psychological Stress

There is nothing about how exorbitant ART are. Different countries have different funding policies when it comes to ART therapies. In France, for example, IVF is fully covered by social security, whereas in Belgium, Denmark, and Norway, the state covers the majority, although not all, of the cost of IVF. In England and Wales, on the other hand, there are considerable variances in local ART provision via the National Health Service (NHS)—the "postcode lottery" effect, which leads to disparities in access to NHS-funded ART. According to latest stats, the NHS funds barely one out of every four IVF cycles performed in the United Kingdom.

One IVF cycle costs around \$10,000 to \$15000. This can really be a massive deal in other developing countries like Pakistan, India, Bangladesh etc. Where health system isn't developed enough to support these assisted reproductive technologies through insurance. Again, it's just for IVF, for surrogacy and other treatments; it might cost another fortune. Not only does this contribute to the economic burden but also leads to stress and psychological implications.

Conclusion

To sum up, infertility is a life crisis that comes with a slew of psychological issues. A crucial topic to observe in providing healthcare services is taking preventive steps when assessing psychological disorders that could hinder treatment outcomes. Having some awareness of psychological problems faced by individuals during the infertility treatment process not only aids in the adaptation of infertile individuals to infertility diagnosis and treatment procedures, but it may also reduce the intensity of reactions to infertility. As a result, it is strongly recommended that infertile couples or individuals be analyzed in the context of psychological indications and findings as part of an overall infertility treatment programmes.

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