Review Article

SEXOLOGICAL ASPECTS OF INFERTILITY

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ABSTRACT

Background: The diagnosis of infertility and its subsequent prolonged medical procedures induce a severe psycho-emotional crisis within couples. While clinical focus predominantly shifts toward reproductive disorders, their evaluation, and treatment, statistics indicate that over 50% of couples face serious sexual problems in their intimate lives. This article aims to elucidate the bidirectional "vicious cycle" between infertility and sexological disorders, exploring the underlying mechanisms and offering strategic interventions to address these challenges.

Results: The aforementioned issue must be reviewed through two primary dimensions:

1. *Sexological Barriers as a Cause of Infertility:* In women, conditions such as vaginismus and dyspareunia physically impede penetration and intravaginal ejaculation. In men, erectile dysfunction, anejaculation, retrograde ejaculation, and premature ejaculation obstruct sperm transport to the oocyte, while hypoactive sexual desire reduces the probability of timing the brief "fertile window."

2. *Infertility Stress as a Cause of Sexual Dysfunction:* Scheduled or "calendar-driven" intercourse eliminates spontaneity. In men, this triggers "performance anxiety", an adrenaline cascade that constricts blood vessels, causing erectile failure; also, in the future, it causes a decrease in libido. In women, hyper-control inhibits the parasympathetic nervous system, disrupting vaginal lubrication and causing anorgasmia. This state is further compounded by a damaged body image and associated psychological complexes.

Conclusion

Breaking this vicious cycle requires a comprehensive, multidisciplinary approach: diversifying intimacy (establishing "non-reproductive" days to alleviate penetration pressure), reframing communication to mitigate individual guilt, and integrating sexological counseling alongside reproductive therapies. Maintaining sexual health during infertility treatments is paramount to preserving partnership cohesion and is frequently a vital prerequisite for overcoming the core issue of infertility itself.

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When a couple faces a diagnosis of infertility, their lives change in an instant. Medical offices, endless laboratory and instrumental examinations, and various forms of therapy become a part of their daily routine. On this challenging journey, all focus shifts to reproductive anatomy – eggs, spermatozoa, hormone levels, and the diagnosis and treatment of infections. However, in this process, one vital yet taboo side almost always remains in the shadows – the couple's sexual life. Infertility is not merely a physiological reality; it is a profound psychological and emotional crisis that directly damages partners' intimacy.[1] International research shows that more than 50% of couples facing infertility experience serious discomfort in their intimate lives or sexual dysfunctions. Despite this, it is rarely spoken about out loud.[2-5].

This is where a so-called "vicious cycle" most commonly forms; sexological problems and infertility are tightly interconnected: on the one hand, certain sexological disorders may physically hinder conception, while on the other hand, the infertility diagnosis itself and the exhausting, prolonged wait to have a child destroy a previously entirely healthy sexual life. [5-6]

When sex loses its primary functions – pleasure, relaxation, and emotional connection – and becomes a "mechanical chore" scheduled by a calendar, the couple comes under immense psychological pressure. To break this cycle, it is essential to understand the neurobiological and psychological mechanisms hidden behind these issues in both men and women.

When Sexological Issues Cause Infertility (The Cause)

Often, when a couple is unable to achieve pregnancy over a span of years, the cause lies not in hormonal imbalance or anatomical pathologies, but rather in sexological barriers that physically prevent complete sexual intercourse. These are cases where reproductive potential exists, but its realization is blocked at the level of genital intercourse.

The Female Factor: Vaginismus and Dyspareunia

In women, the process of conception is most commonly hindered by two sexological issues:

- **Vaginismus**: This is an involuntary, painful spasm of the pelvic floor and circumvaginal muscles during every attempt at sexual intercourse. During vaginismus, penetration becomes physically impossible. A couple may have a loving relationship for years, yet be unable to engage in vaginal sex. Consequently, sperm cannot enter the vagina, which precludes natural conception.
- **Dyspareunia**: Pain during intercourse can be caused by organic factors (e.g., endometriosis, inflammatory processes) as well as psychogenic causes. The persistent fear of pain forces a woman to avoid intimate contact subconsciously, or leads to intercourse being terminated prematurely so that ejaculation occurs outside the vagina.[9-12]

The Male Factor: Erectile and Ejaculatory Disorders

On the male side, conception requires a firm erection and ejaculation deep within the vagina. Several disorders can impede this process:

- **Chronic Erectile Dysfunction**: The inability to achieve or maintain an erection until the completion of intercourse directly blocks the possibility of conception, as sperm cannot be transported to the cervix;

- **Anejaculation**: A condition in which a man achieves orgasm and experiences the corresponding pleasurable sensations, yet no physical ejaculation of sperm occurs at all;
- **Retrograde Ejaculation**: In this condition, sperm is not ejaculated externally; instead, due to the malfunction of the bladder sphincter, it travels backward into the urinary bladder;
- **Premature Ejaculation (Ante Portam)**: A severe form of premature ejaculation that occurs immediately prior to penetration, as the penis touches the vaginal introitus. In such cases, the vast majority of spermatozoa end up outside the vagina and fail to reach their target.[13,14]

Hypoactive Libido (Marked Decrease in Sexual Desire)

If either partner (or both) suffers from a chronic lack of sexual desire and intimate contact occurs only once a month or every few months, the mathematical probability of hitting the "fertility window" drops significantly. In the female body, the egg remains viable for only 12–24 hours after ovulation; thus, low sexual frequency can miss this short window of opportunity.

When Infertility Destroys Sexual Life (The Outcome)

This is the second, equally painful side of the coin. When a couple is diagnosed with infertility, and prolonged treatment begins, sex often loses its natural charm and turns into a source of stress.[2,5,6]

"Calendar Sex" and the Loss of Passion

As soon as the reproductologist tells the couple: "Your optimal days are the 12th, 14th, and 16th of the month," spontaneity, playfulness, and romance instantly disappear from sex. Intercourse becomes a mechanical task scheduled on a calendar. Partners no longer view sex as a means of bonding and pleasure, but rather as a process of "submitting biological material."

The Male Mechanism: Performance Anxiety

This phenomenon best illustrates how the mind controls the body. When a man feels the pressure that "today is that unique chance which must not be ruined," the anxiety center in his brain is activated:[13,14]:

- **Pressure of Responsibility** (Emotional Trigger): The man realizes that today is the day of ovulation and he is "obligated" to perform. The fear arises: "What if I fail?"
- **Adrenaline Cascade** (Physiological Reaction): In response to anxiety, the body produces stress hormones – adrenaline and noradrenaline;
- **Vasoconstriction**: These hormones cause peripheral blood vessels to constrict immediately. Blood flow is redirected to muscles and the heart instead of the genitalia (as the body prepares for a "defense");
- **Loss of Erection** (Outcome): Due to the blockage of blood flow, the erection instantly fades or fails to occur at all, resulting in situational erectile dysfunction.

The Female Mechanism: Inhibition of Lubrication and Anorgasmia

In women, the stress of infertility directly impacts physical arousal. When a woman thinks only about "whether or not she will get pregnant this time" during sex, her limbic system (the brain's emotional center) blocks the parasympathetic nervous system.

It is precisely this system that is responsible for the secretion of vaginal lubrication by the Bartholin glands during sexual arousal. Consequently:

- Intercourse becomes dry and physically painful;
- The woman loses the ability to achieve orgasm (anorgasmia), as her mind is in a state of hyper-control rather than relaxation.

Impairment of Body Image

Prolonged infertility generates a feeling in individuals (especially women) that their body is "insufficient," "defective," or "not working as it should." This leads to a loss of faith in one's attractiveness. A woman develops feelings of shame and insecurities, losing the desire for erotic play or to be nude in front of her partner.[9-12]

How to Break the Vicious Cycle? (Recommendations)

During infertility treatment, a couple must not allow their intimate life to break down, as a healthy sexual connection is the very pillar that helps them navigate this stress.[15,16]

Step	Practical Action	Why is it Important?
Diversification of Sex	Establish "non-reproductive" days. Engage in sexual activity outside the ovulation window where penetration is off-limits – use only massage, oral, or manual stimulation.	This relieves "performance anxiety" in men and restores pure pleasure for both partners.
Changing the Language of Communication	Use the formula "our problem" rather than "your problem." Avoid telling your partner that today is an "obligatory" day. Try initiating it through flirting instead.	Reduces feelings of guilt and psychological pressure.
Multidisciplinary Approach	Alongside visits to a reproductologist, consult a qualified sexologist.	Helps the couple overcome psychogenic (stress-induced) infertility.

Conclusion

Sexual health and reproductive function are two parts of a single whole. The desire and idea of having a child should not sacrifice the love, passion, and attraction that brought the couple together in the first place. Protecting intimate life from mechanical schedules, offering emotional support to one another, and speaking openly about issues are the key factors for a couple to walk this challenging path not distant and alienated, but closer and stronger together.

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