THE RELATIONSHIP BETWEEN STRESS AND INFERTILITY: A LITERATURE REVIEW

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ABSTRACT:
The relationship between stress and infertility has been debated for years. Women with infertility report elevated levels of anxiety and depression, so it is clear that infertility causes stress. What is less clear, however, is whether or not stress causes infertility. The impact of distress on treatment outcome is difficult to investigate for a number of factors, including inaccurate self-report measures and feelings of increased optimism at treatment onset. However, the most recent research has documented the efficacy of psychological interventions in lowering psychological distress as well as being associated with significant increases in pregnancy rates. A cognitive-behavioral group approach may be the most efficient way to achieve both goals. Given the distress levels reported by many infertile women, it is vital to expand the availability of these programs.

KEYWORDS:
- Anxiety
- Depression
- Distress
- Infertility
- IVF
- Psychosocial support
- Quality of life

INTRODUCTION:
Infertility is often a silent struggle. Patients who are struggling to conceive report feelings of depression, anxiety, isolation, and loss of control. Depression levels in patients with infertility have been compared with
patients who have been diagnosed with cancer. It is estimated that 1 in 8 couples (or 12% of married women) have trouble getting pregnant or sustaining a pregnancy. Despite the prevalence of infertility, the majority of infertile women do not share their story with family or friends, thus increasing their psychological vulnerability. The inability to reproduce naturally can cause feelings of shame, guilt, and low self-esteem. These negative feelings may lead to varying degrees of depression, anxiety, distress, and a poor quality of life.

Patients who undergo assisted reproductive treatment (ART) are at significant risk of experiencing psychiatric disorders and it is important to recognize, acknowledge, and assist these patients as they cope with their infertility diagnosis and treatment.

**DEFINITION:**

"Infertility refers to inability to achieve pregnancy after 12 months of having unprotected sexual intercourse with average frequency of 3 to 4 times per week without use of any birth control measure".

**SYMPTOMS:**

- The main symptom of infertility is the inability to get pregnant.
- A menstrual cycle that's too long (35 days or more), too short (less than 21 days), irregular or absent can mean that you're not ovulating. There might be no other signs or symptoms.

**CAUSES:**

Problems with ovulation are the most common reasons for infertility in women. A woman's age, hormonal imbalances, weight, exposure to chemicals or radiation and cigarette smoking all have an impact on fertility.

Other reasons include:

- Cervical mucus issues.
- Endometriosis.
- Damage to the fallopian tubes.
- Poor nutrition.
- Polycystic ovary syndrome.
- Uterine fibroids.

**RISK FACTORS:**

There are some general factors that affect your ability to ovulate, conceive or deliver a child successfully. These include:

- Anovulatory menstrual cycles: abnormal cycles of varying degrees, often characterized by the absence of ovulation and/or luteal phases.
- Autoimmune disorders.
- Blood clotting disorders.
- Uterine defects.
- Blockage of the cervix.
Eating disorders.

Endometriosis.

Exposure to the drug diethylstilbestrol (DES).

Chronic diseases such as diabetes.

Pelvic inflammatory disease (PID).

Many sexual partners.

Sexually transmitted diseases.

**DIAGNOSIS AND EVALUATION:**

Diagnostic procedures can identify the causes of infertility. Sometimes, diagnosis can be easy — just a matter of conducting a few simple tests. Other times, pinpointing the cause requires time and patience. And, in some cases, no cause of infertility can be found.

A diagnostic evaluation often begins with a physical exam and a thorough health history. Afterward, the physician may further evaluate using one or more of the following methods:

- **Confirming ovulation**
- **Conducting a blood test:** A blood test will determine if there is normal ovulation physiology. Ovulation dysfunction can result from hormonal deficiencies, congenital defects, and age.
- **Assessing ovarian reserve:** A physician evaluates the follicle stimulating hormone (FSH) level. A blood test is performed that can determine the number/quality of eggs remaining in a woman's ovary.
- **Measuring hormone levels:** A common cause of infertility is polycystic ovary syndrome (PCOS). This syndrome is genetically linked to hormonal imbalances thereby causing a condition that prevents ovulation.
- **Performing a post-coital test:** After intercourse, the cervical mucus is analyzed to see how well sperm survive in a woman's reproductive tract.
- **Taking a biopsy of the endometrium (lining of the uterus):** This test further investigates problems with ovulation or hormones.

Depending on the patient's condition, additional detailed tests may be performed to determine the cause of the infertility. Penn Fertility Care understands that the process of diagnosis and treatment selection may be emotionally demanding and requires the most sympathetic of approaches, with attention to the emotional needs of the couple.

**TREATMENT:**

Infertility treatment depends on the cause, your age, how long you've been infertile and personal preferences. Because infertility is a complex disorder, treatment involves significant financial, physical, psychological and time commitments.

Treatments can either attempt to restore fertility through medication or surgery, or help you get pregnant with sophisticated techniques.

**Medications to restore fertility:**

Medications that regulate or stimulate ovulation are known as fertility drugs. Fertility drugs are the main treatment for women who are infertile due to ovulation disorders.
Fertility drugs generally work like natural hormones follicle-stimulating hormone (FSH) and luteinizing hormone (LH) to trigger ovulation. They’re also used in women who ovulate to try to stimulate a better egg or an extra egg or eggs.

**CONCLUSION:**
A diagnosis of infertility can be a tremendous burden for patients. The pain and suffering of infertility patients is a major problem. Patients must be counseled and supported as they go through treatment. Although neither the American Society for Reproductive Medicine nor the European Society for Human Reproduction and Embryology have formal requirements for psychological counseling for infertility patients, there is acknowledgement that incorporating psychological interventions into routine practice at ART clinics is beneficial. It has been well documented that infertility causes stress. The impact of stress on ART outcome is still somewhat controversial. However, it is clear that psychological interventions for women with infertility have the potential to decrease anxiety and depression and may well lead to significantly higher pregnancy rates.

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