Keywords used: problems related to infertility

Problem: Infertility is a common concern, causing emotional and relational strain. One in six individuals is affected by infertility. PCPs need to have a general understanding of what causes it and when to intervene. This knowledge enables them to discuss the couple's concerns and point them in the right direction.

Solution: This article addresses common problems related to infertility in men and women. It aims to identify risk factors associated with infertility. Additionally, this piece seeks to inspire authentic patient-provider conversations.

Infertility in Women and Men: Navigating the Challenges and Opportunities

Male, female, rich or poor - infertility rates are comparable regardless of socioeconomic factors or demographics. According to the World Health Organization (WHO), it affects roughly 17.5% of adults worldwide. "Infertility does not discriminate," declares Dr. Tedros Adhanom Ghebreyesus, Director-General at WHO.

Infertility is a common concern, causing emotional and relational strain. It equally affects the female and male reproductive systems. One in every six individuals of reproductive age struggle with infertility. Despite regular, unprotected sex, infertility causes childlessness even after 12 months of trying. So, what are common problems related to infertility in men and women?

Key Takeaways

- Infertility indiscriminately affects one in six individuals worldwide.
- Problems related to infertility in women can negatively impact ovulation, fallopian tube patency, or uterine traits.
- A semen analysis helps physicians evaluate sperm concentration, motility and mobility. This test determines whether male factors contribute to infertility.
- Male factors affect one-third of infertility cases, and female factors cause another third. A combination of male and female issues or unknown causes yields the remaining cases.
- Couples can improve their chances of getting pregnant. Pursuing healthy habits and avoiding ones that decrease fertility are steps in the right direction.

Causes of infertility in women

Infertility occurs in women for various reasons. Problems with the ovaries, fallopian tubes or uterus can impact a woman's ability to get pregnant.

Ovulation difficulty

Polycystic ovary syndrome (PCOS) happens when male hormones, like testosterone, are elevated in women. This condition causes irregular menstruation or amenorrhea. Individuals with PCOS can present with excessive hair growth and acne. *This condition is the primary cause of infertility in women.*

Diminished ovarian reserve (DOR) is a less-than-usual egg supply. Women do not produce more eggs throughout life. Instead, they are born with their total egg count, which decreases over time. Fewer eggs often result in difficulty with conception.

Functional hypothalamic amenorrhea (FHA) is a malfunction of the hypothalamus. This condition results in the absence of menstruation. FHA causes a low supply of reproductive hormones, like gonadotropin-releasing hormone (GnRH). Women with FHA often report intense weight loss, exercise regimens and high stress levels. This condition is generally associated with eating disorders.

Premature ovarian insufficiency (POI) is early menopause. The ovaries cease functioning properly before age 40. The cause is often unexplained, but cancer treatments can produce POI.

Tubal problems

When the fallopian tubes swell, they often become obstructed. Consequently, the egg cannot reach the uterus for sperm fertilization. This **obstruction is often related to a present or past infection.** Some risk factors associated with tubal occlusion are:

- Ruptured appendix
- Pelvic infection
- Chlamydia
- Endometriosis
- Gonorrhea
- Abdominal surgery

Tests that assess the fallopian tube function are a hysterosalpingogram and a chromopertubation.

Uterus issues

When the uterus is malfunctioning, infertility is likely. Physicians can evaluate the uterus using a transvaginal ultrasound, sonohysterogram or hysteroscopy. Common uterine problems associated with infertility are:

- Fibroids
- Intrauterine adhesions

- Endometrial polys
- Adenomyosis
- Congenital anomalies

Congenital or acquired factors can cause uterine infertility. A detailed medical history aids in determining which reproductive organ is most likely the culprit. With proper imaging and counseling, couples can pursue their dream of parenthood.

Causes of infertility in men

Various factors affect male infertility. A semen analysis aids in evaluating sperm concentration, motility and morphology. This test helps determine if or how male factors contribute to the couple's infertility.

Disruption of sperm function

Varicoceles are enlarged veins in a man's testicle that can affect the number or shape of his sperm. Approximately 12% of infertile men produce no sperm. However, for men who have a low sperm count, varicocele is most often the culprit. These enlarged veins are present in 40% of men with infertility and a low sperm count.

Trauma to male reproductive organs can decrease sperm count.

Lifestyle choices impact a man's ability to contribute to reproduction. Heavy alcohol use (more than seven units per week), obesity, anabolic steroid use, smoking, and illicit drug use all affect reproductive hormone levels and sperm volume.

Cancer interventions can increase male infertility. Chemotherapy, radiation and surgical removal of reproductive organs often prevent sperm production.

Cystic fibrosis and diabetes are medical conditions that can negatively affect testicular function.

Hormonal problems

The hypothalamus and pituitary gland produce hormones vital for testicular function. Problems with prolactin production or hypothalamus function can lead to decreased sperm volume.

Genetics

Genetic diseases, like Klinefelter's syndrome, myotonic dystrophy and Y-chromosome microdeletion, can cause low or no sperm production.

Maximizing fertility efforts

Many patients are eager to conceive. They want to know how they can improve their chances of pregnancy. Often, couples need to relax and give it a little more time. However, there are some things they can do to maximize their efforts of conception.

Pursue healthy habits

Being underweight or overweight, exercising too much or too little — these all can negatively impact hormones and fertility. Patients need to eat a diet rich in fruits and vegetables. They should also exercise regularly and be mindful of intensity levels.

Emotional and mental wellness is equally important. Practicing intentional gratitude helps people reduce their stress levels, improving the likelihood of conception.

Avoid habits that decrease fertility

Many unhealthy habits affect reproductive hormones. **Tobacco use, excessive alcohol consumption, and drug usage can negatively impact fertility.** Men need to avoid these harmful habits. Additionally, men should avoid frequent hot water baths. The elevated temperatures can produce a short-term impact on sperm production and mobility.

Helping relieve problems related to infertility

Women dream of holding their little ones and comforting a baby with a kiss. Men long to impart skills and wisdom to the next generation. However, for many, infertility causes death to that dream. With patient education and proper evaluation, physicians can restore hope.

<Facility Name> provides access to quality women's services. We are passionate about helping couples live happy, healthy lives. Contact <Facility Number> or click the "Refer" button to get started.

Resources

"Infertility FAQs." Centers for Disease Control and Prevention (CDC), 2023, Infertility FAQs | CDC.

"Infertility." World Health Organization (WHO), 2023, Infertility.

"1 in 6 people globally affected by infertility: WHO." World Health Organization (WHO), 2023, 1 in 6 people globally affected by infertility: WHO.

"How common is male infertility, and what are its causes?" NIH: *Eunice Kennedy Shriver* National Institute of Child Health and Human Development, 2021, How common is male infertility, and what are its causes? | NICHD - NIH: Eunice Kennedy Shriver National Institute of Child Health and Human Development.