

## A REVIEW ARTICLE ON INFERTILITY IN MALES AND FEMALE

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**ABSTRACT**

Infertility is defined as 1 year of unprotected intercourse during which a pregnancy is not achieved. Mostly 15% to 20% of all couples are infertile, with higher rates seen in older couples. Mostly infertility occurs in any parts of the reproductive system either in male or female. In males it occurs due to abnormality in semen and about 1.2% had other sexual dysfunction and in females it occurs due to having of ovulatory cause and irregular menstruation cycles. Mostly females take medicine to stop their menstruation cycles; this is also one of the causes for infertility in females. In females it is due to blocked or damaged fallopian tubes and Endometriosis where tissue that behaves like the lining of the womb is found outside the womb. About 255 women's and 238 men's are admitted to an infertility clinic. Infertility is also caused due to stress and psychological problems and also hormonal imbalance.

**KEYWORDS:** Infertility, retrospective.**MATERIAL AND METHODS**

A population-based Retrospective observational outcome study of infertile couples.

**What are the types of infertility?****Types of infertility include**

**Primary infertility:** You've never been pregnant and can't conceive after one year (or six months if you're 35 or older) of regular, unprotected sexual intercourse.

**Secondary infertility:** You can't get pregnant again after having at least one successful pregnancy.

**Unexplained infertility:** Fertility testing hasn't found a reason that a person or couple is unable to get pregnant.

**CAUSES**

All of the steps during ovulation and fertilization need to happen correctly in order to get pregnant. Sometimes the issues that cause infertility in couples are present at birth, and sometimes they develop later in life. Infertility causes can affect one or both partners. Sometimes, no cause can be found.

**Causes of male infertility**

- Abnormal sperm production or function due to undescended testicles, genetic defects, health problems such as diabetes, or infections such as chlamydia, gonorrhea, mumps or HIV. Enlarged veins in the testes (varicocele) also can affect the quality of sperm.
- Problems with the delivery of sperm due to sexual problems, such as premature ejaculation; certain genetic diseases, such as cystic fibrosis; structural

problems, such as a blockage in the testicle; or damage or injury to the reproductive organs.

- Overexposure to certain environmental factors, such as pesticides and other chemicals, and radiation. Cigarette smoking, alcohol, marijuana, anabolic steroids, and taking medications to treat bacterial infections, high blood pressure and depression also can affect fertility. Frequent exposure to heat, such as in saunas or hot tubs, can raise body temperature and may affect sperm production.

**CAUSES OF FEMALE INFERTILITY****Causes of female infertility may include**

- Ovulation disorders, which affect the release of eggs from the ovaries. These include hormonal disorders such as polycystic ovary syndrome. Hyperprolactinemia, a condition in which you have too much prolactin – the hormone that stimulates breast milk production – also may interfere with ovulation. Either too much thyroid hormone (hyperthyroidism) or too little (hypothyroidism) can affect the menstrual cycle or cause infertility. Other underlying causes may include too much exercise, eating disorders or tumors.
- Uterine or cervical abnormalities, including abnormalities with the cervix, polyps in the uterus or the shape of the uterus. Noncancerous (benign) tumors in the uterine wall (uterine fibroids) may cause infertility by blocking the fallopian tubes or stopping a fertilized egg from implanting in the uterus.

- Fallopian tube damage or blockage, often caused by inflammation of the fallopian tube (salpingitis). This can result from pelvic inflammatory disease, which is usually caused by a sexually transmitted infection, endometriosis or adhesions.
- Endometriosis, which occurs when endometrial tissue grows outside of the uterus, may affect the function of the ovaries, uterus and fallopian tubes.
- Primary ovarian insufficiency (early menopause), when the ovaries stop working and menstruation ends before age 40. Although the cause is often unknown, certain factors are associated with early menopause, including immune system diseases, certain genetic conditions such as Turner syndrome or carriers of Fragile X syndrome, and radiation or chemotherapy treatment.
- Pelvic adhesions, bands of scar tissue that bind organs that can form after pelvic infection, appendicitis, endometriosis or abdominal or pelvic surgery.
- Cancer and its treatment. Certain cancers – particularly reproductive cancers often impair female fertility. Both radiation and chemotherapy may affect fertility.

## Causes



### Fertilization and implantation

[Enlarge image](#)



### Male reproductive system

[Enlarge image](#)



### Female reproductive system

[Enlarge image](#)

### Diagnosis of infertility in males

**Semen analysis:** A sample may be taken to test for sperm concentration, motility, color, and quality, as well as the presence of blood or infection. Sperm counts can fluctuate, so several samples may be necessary.

**Blood test:** The lab will test for levels of testosterone and other hormones.

**Ultrasound:** This may reveal issues such as ejaculatory duct obstruction or retrograde ejaculation.

**Chlamydia test:** Chlamydia can affect fertility, but antibiotics can treat it. However, antibiotics cannot cure existing damage to fertility. Any existing damage to fertility.

### Diagnosis of infertility in females

**Blood test:** This can assess hormone levels and whether a female is ovulating.

**Hysterosalpingography:** A technician injects fluid into the uterus and takes X-rays to determine whether the fluid travels properly out of the uterus and into the fallopian tubes. If a blockage is present, surgery may be necessary.

**Laparoscopy:** A thin, flexible tube with a camera at the end is inserted into the abdomen and pelvis, allowing a doctor to look at the fallopian tubes, uterus, and ovaries. This can reveal signs of endometriosis, scarring, blockages, and some irregularities in the uterus and fallopian tubes.

### Other tests can include

1. Ovarian reserve testing to count the eggs after ovulation
2. Pelvic ultrasound to produce an image of the uterus and ovaries.
3. Thyroid test as it may affect the hormonal balance.

### TREATMENT

However, timing intercourse may not be sufficient on its own to help a couple conceive. Treatments will depend on the underlying cause of infertility.

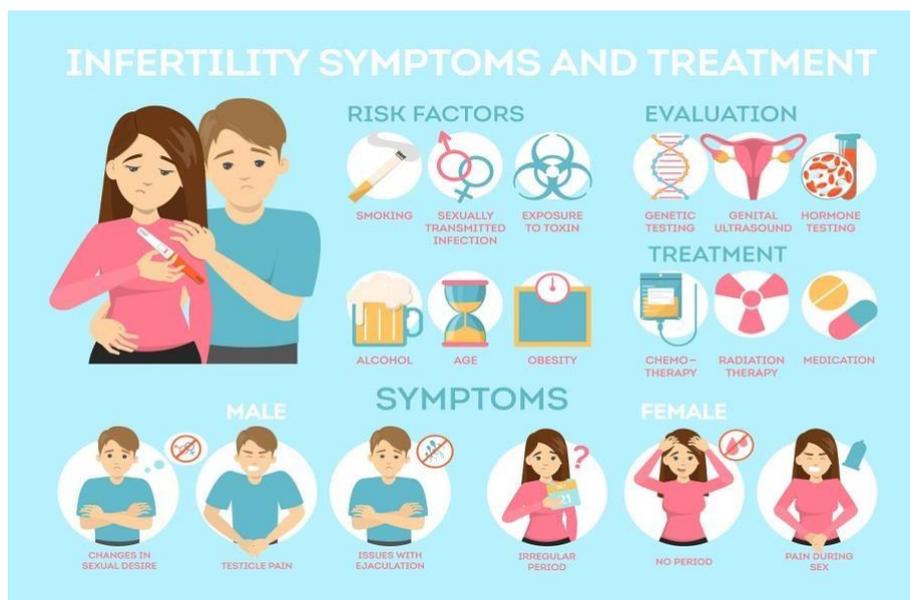
In males, this can include medications for erectile dysfunction. Surgery may include a procedure to remove a varicose vein in the scrotum or repair a blocked epididymis.

In females, doctors can prescribe fertility. Drugs to regulate or induce ovulation. These can include clomiphene (Clomid, Serophene), letrozole (Femara), dopamine agonist medications, and a variety of hormonal drugs.

### Learn more about fertility drugs for females

If the fallopian tubes are blocked or scarred, surgical repair may make it easier for eggs to pass through. A person may also be advised to undergo IVF.

Doctors may also treat endometriosis with laparoscopic surgery. They make a small incision in the abdomen and insert a thin, flexible microscope with a light at the end, called a laparoscope. The surgeon can then remove implants and scar tissue, which may reduce pain and aid fertility.



## DISCUSSION

- Possible causes include a low sperm count in male and in females ovulation disorder.
- A sample of 110 participants (13 males and 97 females) were included in the present study.
- Male predominantly reported negative emotional experience and stigma, often feeling overlooked when compared with women's despite being equally affected by these issues.
- Infertility can be primary or secondary. Primary infertility is when someone is not able to conceive at all. Secondary infertility is when someone has previously conceived but is no longer able to.
- Mostly patients referred for in vitro fertilization and intrauterine insemination.
- Spreading awareness and facilitating dialogue and education across not only the infertile population but also the community, is therefore critical to begin addressing the mental health effects of infertility.

## CONCLUSION

- Infertility affects millions of people and has an impact on their families and communities.
- Estimates suggest that approximately one in every six people of reproductive age worldwide experience infertility in their lifetime.
- In the male reproductive system, infertility is most commonly caused by problems in the ejection of semen, absence or low levels of sperm, or abnormal shape (morphology) and movement (motility) of the sperm.
- In the female reproductive system, infertility may be caused by a range of abnormalities of the ovaries, uterus, fallopian tubes, and the endocrine system, among others.
- Fertility care encompasses the prevention, diagnosis and treatment of infertility.

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