

## **BAQ:**

### **A) Define infertility?**

Answer: Infertility is “a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse.”

–WHO

### **B) Write types of infertility?**

Answer: Primary infertility refers to couples who have not become pregnant after at least 1 year of having sex without using the birth control method.

Secondary infertility refers to couples who have been able to get pregnant at least once, but now are unable to get pregnant.

### **C) List the causative factors for infertility?**

Answer: Causes for male infertility

- 1) Congenital- Undescended testes, Kartagener syndrome, Hypospadias
- 2) Thermal factor- varicocele
- 3) Infection- Mumps orchitis, Bacterial & viral infection, chronic systemic illness
- 4) General factors- Chronic debilitating diseases, smoking, alcohol consumption.
- 5) Endocrine- Kallmann's syndrome, Sertoli cell-only syndrome, hyperprolactinemia
- 6) Genetic- Klinefelter's syndrome
- 7) Iatrogenic- Radiation, cytotoxic drugs, cimetidine, beta blockers, antihypertensive, anticonvulsants, % antidepressant.

- 8) Immunological factor- Antibodies against spermatozoa surface antigens.
2. Obstructing efferent ducts: Infection e.g. TB, gonococcal, Young's syndrome, Surgical trauma e.g. vasectomy.
  3. Failure to deposit sperm high in the vagina: Erectile dysfunction, Sperm abnormality, Hypospadias, Ejaculatory defect.
  4. Errors in the seminal fluid: High or low-volume ejaculate, undue viscosity, Low fructose content, High prostaglandin content

Female infertility causes:

1. Ovarian factor: Anovulation or oligo-ovulation, Thyroid or adrenal dysfunction, LPD
2. Tubal/ Peritoneal factor: Peri tubal adhesions, Previous tubal surgery, Salpingitis Tubal endometriosis, Polyps.
3. Uterine factor: Uterine hypoplasia, Fibroid uterus, Endometritis, Congenital malformation
4. Cervical factor: Anatomic defects, 2nd DEGREE UTERINE PROLAPSE, Cervical polyps, Chr. Cervicitis
5. Vaginal factor: Atresia of vagina, Transverse vaginal septum, Narrow introitus, Vaginitis
6. Combined factor: General factors, General factors. Infrequent intercourse, Anxiety & Apprehension, Use of lubricants during intercourse, Immunological factors

**D) List the investigations done in male and female for infertility?**

Answer: Investigation for male infertility

1. History collection
  - Age, marriage
  - General medical history

- Surgical history
- Occupational history
- Social habits

## 2. Examination

- Reproductive system

## 3. Investigations

- Routine investigations – urine and blood
- Seminal fluid analysis
- Biochemical tests

## 4. Hormonal study

- Serum FSH, LH, testosterone, prolactin, and TSH

## 5. Fructose content in the seminal fluid

## 6. Testicular biopsy

## 7 TRUS

## 8. Vasogram

## 9. Karyotype analysis.

## 10. Immunological tests

## **Female Investigation**

### **1. History collection:**

- Age
- medical history
- Surgical history
- Menstrual history
- Previous obstetric history
- Contraceptive practice
- Sexual problems

### **2. Examination: General**

- Systemic
- Gynecological
- Speculum

**Special investigations:**

**Ovarian factor-**

- Anovulation or oligo-ovulation
- LPD: - BBT chart, endometrial biopsies. progesterone.
- LUF: - sonography, laparoscopy, ovarian biopsy.

**Tubal factor-**

- Dilatation & insufflation test
- HSG
- Laparoscopy
- Sono hysterosalpingography
- Fluoroscopy
- Salpingoscopy

**DIAGNOSIS OF OVULATION: 1. INDIRECT:** Menstrual history,

Evaluation of peripheral or in-organ changes, BBT

Cervical mucus study

Vaginal cytology

Hormone estimation

Serum progesterone, Serum LH, Urinary LH

Endometrial biopsy

Sonography (TVS)

**2. DIRECT:**

Laparoscopy

**3. Conclusive:**

Pregnancy

### **E) Write the nurses role in infertility?**

- Answer: **Role of nurse in infertility:** Give psychological support throughout the counselling.
- collect other information about various prior test reports and documents.
- The nurse has to encourage the family and patient to ask questions about conditions diseases etc.
- Provide all explanations about questions.
- Maintain privacy and confidentiality of all cases.
- Ensure follow-up and supportive services to individuals and families during counselling.
- Explains the infertility management and specific treatment. Give psychological support throughout the counselling.
- collect other information about various prior test reports and documents.
- The nurse has to encourage the family and patient to ask questions about conditions diseases etc.
- Provide all explanations about questions.
- Maintain privacy and confidentiality of all cases.
- Ensure follow-up and supportive services to individuals and families during counselling.
- Explains the infertility management and specific treatment.

**SAQ: What are the causative factors for infertility in males and females?**

**Answer:**

**In Males:**

1. **Low Sperm Count & Poor Motility** – Due to genetic factors, infections, or varicocele.
2. **Hormonal Imbalances** – Issues with testosterone or other reproductive hormones.
3. **Ejaculatory Disorders** – Retrograde ejaculation or blockages in sperm ducts.
4. **Lifestyle Factors** – Smoking, alcohol, drug use, obesity, and stress.
5. **Environmental Factors** – Exposure to toxins, radiation, or excessive heat (e.g., frequent hot tub use).

**In Females:**

1. **Ovulatory Disorders** – PCOS, thyroid disorders, or premature ovarian failure.
2. **Blocked Fallopian Tubes** – Caused by infections, endometriosis, or previous surgeries.
3. **Uterine Abnormalities** – Fibroids, polyps, or congenital malformations.
4. **Endometriosis** – Growth of uterine-like tissue outside the uterus, affecting fertility.
5. **Age & Lifestyle Factors** – Advanced age, obesity, smoking, and excessive stress.

Would you like a more detailed version or any modifications?

**LAQ: Discuss the causes, types and diagnosis for infertility in both men and women.**

**Answer:**

## **Introduction:**

Infertility is the inability of a couple to conceive after 12 months of regular, unprotected intercourse. It affects millions of people globally and can result from various factors related to either partner. Infertility can be primary (when a couple has never conceived) or secondary (when they have conceived before but are unable to do so again).

## **Causes of Infertility:**

### **In Women:**

1. **Ovulatory Disorders:** Conditions like polycystic ovary syndrome (PCOS), premature ovarian insufficiency, or hormonal imbalances can prevent ovulation.
2. **Blocked Fallopian Tubes:** Caused by infections, pelvic inflammatory disease (PID), or endometriosis, which prevents the sperm from reaching the egg.
3. **Uterine Abnormalities:** Fibroids, polyps, or congenital malformations can interfere with implantation.
4. **Endometriosis:** A condition where tissue similar to the uterine lining grows outside the uterus, affecting fertility.
5. **Age-Related Factors:** Women's fertility declines after the age of 35 due to reduced egg quality and quantity.

### **In Men:**

1. **Low Sperm Count or Poor Sperm Motility:** Can result from genetic conditions, infections, or lifestyle factors.
2. **Hormonal Imbalances:** Issues with testosterone or other reproductive hormones can impair sperm production.
3. **Varicocele:** Enlarged veins in the scrotum that can raise testicular temperature and affect sperm quality.

4. **Ejaculatory Disorders:** Retrograde ejaculation or blockages in the reproductive tract can prevent sperm release.
5. **Environmental and Lifestyle Factors:** Smoking, alcohol, drug use, exposure to toxins, and stress can affect sperm health.

### **Diagnosis of Infertility:**

1. **Medical History & Physical Examination:** Doctors assess lifestyle, menstrual cycles, and previous pregnancies.
2. **Hormonal Tests:** Measure levels of estrogen, progesterone, testosterone, and follicle-stimulating hormone (FSH).
3. **Ovulation Tests:** Ultrasound or blood tests can determine if ovulation is occurring.
4. **Hysterosalpingography (HSG):** A specialized X-ray to check for blockages in the fallopian tubes.
5. **Semen Analysis:** Evaluates sperm count, motility, and morphology.
6. **Laparoscopy:** A minor surgical procedure to diagnose endometriosis or tubal issues.