



**Center for Distance and Online Education,  
Krishna Vishwa Vidyapeeth (Deemed to be University),  
Karad**

**Validation: E-content Module**

**E-content Module Title:** Infertility

**Name of College:** Krishna Institute of Nursing Sciences, Karad

**Number of Modules:** 1

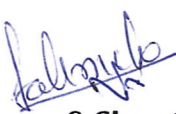
**Assignment:** 2

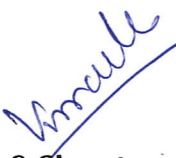
**Module Duration:** 1 hour

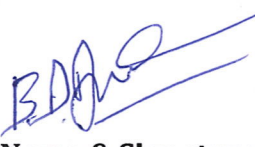
This is to certify that the E-content module has been reviewed on the following parameters and:

1. The information provided in the Video and Textual Content is factually correct and without any errors.
2. The learning outcomes and objectives of the E-content module are implemented in the assessment.
3. The assessment is rigorous as required for the module level.
4. Content under the E-content module fulfills the requirement of assignment completion.

  
**Name & Signature  
of Content  
Developer**

  
**Name & Signature  
of HOD**

  
**Name & Signature  
of Dean**

  
**Name & Signature  
of Director, CDOE**

## E-content Module Checking Report

**Center:** [Krishna Institute Of Nursing Sciences, Karad]

**Name of E-content Module:**

**Infertility**

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**Comments on Audio/Video (only freshly recorded videos):**

Verified and approved

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**Comments on Quadrant 2:**

1. Academic Script/Text Material:

2. Additional Material (Specify):

Verified and approved <https://classroom.google.com/c/NzM3MDE4NjM1NDA2/m/NzQ3ODU4MDEyNjQ2/details>

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**Comments on Quadrant 3:**

Assignments/Questions & Answers/Discussion Forum Link:

Classroom link-

<https://classroom.google.com/c/NzM3MDE4NjM1NDA2/m/NzM3MDE4Njk0Njgz/details>

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**Comments on Quadrant 4:**

<https://classroom.google.com/c/NzM3MDE4NjM1NDA2/a/NzQ3ODYwMTY4NzQx/details>

**Name & Signature of  
Reviewer**

*Salim*  
17.2.2025

## **E-content Module Certificate**

**Media Centre:** Center for Distance and Online Education, KVV, Karad

**E-content Module Title:** Krishna Institute of Nursing Sciences, Karad

**Subject:** Nursing Foundation

**E-content Module Principal Investigator (PI):** Ms. Kavita Vasantryao Kadam

**Assignments:** 2

**Module Duration:** 1 hrs.

It is to certify that the E-content module titled **Infertility** is developed by CDOE, KVV, Karad and offered by PI **Ms. Kavita Vasantryao Kadam**

The content is thoroughly reviewed at the Centre by the review committee and it is certified that:

- i. The analysis of the E-content module is thoroughly done in terms of data formulation, conceptual clarity, correctness of narrated content, accuracy of text, maps, and graphics, and the overall structure of the module. The module is free from any content errors.
- ii. The module follows the structure of syllabus approved under BOS.
- iii. The module is meeting the requirements of E-content as envisaged under MHRD guidelines

It is also certified that the final E-content module submitted to CDOE, KVV, Karad, is original content developed at the Krishna Institute of Nursing Sciences, Karad by engaging various subject matter experts under the guidance of the E-content module PI and is free from any Intellectual Property Right (IPR) and Copyright issues.



**Name & Signature of  
Content Developer**



**Name & Signature of  
Dean**



**Name & Signature of  
Director, CDOE, KVV,  
Karad**



## E-content learning resource material

Centre- Krishna Institute of Nursing Sciences Karad

### Name of LRM Video on Infertility

By Kavita Kadam

Video on **Infertility** is highly informative and well-organized. Explained the causes, types, and treatment options for infertility was very clear and easy to follow. Delivery was professional, making a complex and sensitive topic approachable. The use of visuals to demonstrate the concepts, like the stages of treatment, was very effective. This video will undoubtedly serve as a good learning tool for nursing students and anyone wanting to better understand infertility.

### Suggestions for Enhancement

Video on **Infertility** covers the essential aspects of complex topic very well. However, there are a few areas to make it even more impactful:

1. **Clarity and Engagement** (Content Delivery) While the content is well-researched, introducing more interactive elements like short discussion points after key sections would engage the audience more actively. It could also be helpful to add a brief summary of key concepts at the end of the video to reinforce the learning.
2. **Visual Aids and Demonstrations** (Application) although you used visuals effectively, incorporating more detailed diagrams or animations could enhance understanding, especially when discussing the physiological aspects of infertility. For example, showing the reproductive organs and the fertility cycle might help viewers visualize the processes better.
3. **Video Quality and Presentation** (Presentation) the video quality is good overall, but the lighting could be improved in some parts to ensure clarity, especially for visual aids. Additionally, making sure the background is not too cluttered will help keep the focus on the content.
4. **Pacing and Timing** (Timing) The pacing is mostly good, but at certain points, such as when discussing medical treatments or scientific explanations, slowing down the delivery and pausing to explain terms in simpler language could improve understanding for viewers with varying levels of prior knowledge.

Overall, video provides a comprehensive overview of infertility, and with just a few adjustments, it will become an even more effective resource for learners.

Name and signature of Reviewer

DR. (Mrs. Jyoti A. Salunkhe

*Jalunkhe*  
17.2.2025

**1. What is definition of infertility?**

- a. The fertility to conceive after one year of unprotected intercourse
- b. The fertility to conceive after six months of unprotected intercourse
- c. The fertility to conceive after two years of unprotected intercourse
- d. The fertility to conceive after three years of unprotected intercourse

**Answer a) The fertility to conceive after one year of unprotected intercourse**

**2. what percent of incidence occur in female infertility?**

- a. 10%
- b. 20%
- c. 30%
- d. 40%

**Answer: c) 30%**

**3. which of the following lifestyle may negatively impact fertility in both male and female?**

- a. Regular exercise
- b. Balanced diet
- c. Smoking
- d. Sufficient sleep

**Answer: c) Smoking**

**4. What does the acronym ART stand for in the context of infertility treatment?**

- a. Advanced Reproductive Technologies
- b. Artificial Reproductive Technology
- c. Assisted Reproductive Treatment
- d. Assisted Reproductive Technology

**Answer: d) Assisted Reproductive Technology**

**5. Which fertility treatment involves the transfer of single sperm directly into the egg?**

- a. Intrauterine insemination (IUI)
- b. Invitro fertilization (IVF)
- c. Intracytoplasmic sperm injection (ICSI)
- d. Gamete intrafallopian transfer (GIFT)

**Answer: c) Intracytoplasmic sperm injection (ICSI)**

**6. This is a major reason for infertility in women**

- a. Anovulation
- b. Over weight
- c. Age
- d. All of above

**Answer: d) All of above**

**7.Procedures used to treat infertility are**

- a. ICSI – Intracytoplasmic sperm injection
- b. IVF – In vitro fertilization
- c. IUI – Intrauterine insemination
- d. All of above

**Answer : d) All of above**

**8. What is primary infertility?**

- a. Have never conceived in the past
- b. Had conceived earlier, but unable to conceive again
- c. Cannot produce ova
- d. None of the above

**Answer: a) Have never conceived in the past**

**9. Which of the following diseases causes male infertility?**

- a. Scrotal hernia
- b. Blood pressure
- c. Dengue
- d. Diabetes mellitus

**Answer: a) Scrotal hernia**

**SHORT ANSWER QUESTIONS**

Here are some short answer questions based on the provided information about the assessment of infertility:

**1. What is definition of infertility?**

Infertility is defined as a failure to conceive within one or more years of regular unprotected intercourse.

**2. What are the two main classification of infertility?**

- There are two types of infertility
- 1. **Primary infertility** : primary infertility denotes couples who have never been able to conceive.
- 2. **Secondary infertility** : secondary infertility denotes indicates difficulty in conceiving after already having conceived.

### **3.What are some common causes of male infertility?**

- low sperm count
- obstruction in genital tract
- structural defect
- erectile dysfunction
- mobility of sperm
- volume of semen

### **4. What are few potential causes of female infertility?**

- blocked fallopian tubes
- ovulation disorder
- hormonal imbalance
- uterine fibroid

### **5.What are a few lifestyle changes that can potentially improve infertility?**

- Maintaining a healthy weight
- Quitting smoking
- Limiting alcohol intake
- Managing stress

### **6.what is ART?**

Assisted reproductive technology (ART) is a treatment for infertility that involves surgically removing eggs from a woman's ovaries and combining them with sperm in a laboratory.

### **7.what are some fertility treatment options?**

- ✓ Artificial insemination
- ✓ In vitro fertilization
- ✓ Surrogacy
- ✓ Complementary techniques

### **8.what is incidence of infertility in male and female?**

Out of 100%, 30% comes under female infertility, another 30% in male infertility and 20% incidence comes in mixed and other 20% in unexplained.



### **9. What is Intracytoplasmic sperm injection (ICSI)?**

- ICSI is the most successful form of treatment who are infertile.
- ICSI only requires one/single sperm which is injected directly into the egg and fertilized egg is transferred to uterus.

### **10. What is Zygote intrafallopian transfer?**

- ZIFT is an ART designed to transfer the fertilized embryo into the fallopian tube instead of the uterus
- Here zygote is placed in the fallopian tube through which it will reach into the uterus
- It is similar to IUF

## **Definition:**

Infertility is defined as a failure to conceive within one or more years of regular unprotected intercourse.

## **Classification:**

- There are two types of infertility
- 1. **Primary infertility** : primary infertility denotes couples who have never been able to conceive.
- 2. **Secondary infertility** : secondary infertility denotes indicates difficulty in conceiving after already having conceived.

## **Incidence:**

30% female infertility

30% male infertility

20% mixed infertility cause

20% Unexplained infertility

## **CAUSES:**

### **MALE CAUSES:**

- Sperm count
- Obstruction in genital tract
- Structural defect
- Erectile dysfunction
- Mobility of sperm
- Volume of semen

### **Male factors:**

#### **A. DEFECTIVE SPERMATOGENESIS**

1. Congenital: Due to undescended testes spermatogenesis is depressed.
2. Hypospadias
3. Thermal factor: Varicocele
4. Infection: Mumps, Orchitis damage the spermatogenesis

5. Gonadotrophin suppression: It happens in the malnutrition, heavy smoking and high alcohol consumption.

#### **B. OBSTRUCTION OF EFFERENT DUCT**

1. Gonococcal or tubercular infection
2. Surgical trauma during vasectomy.

#### **C. FAILURE TO DEPOSIT SPERM HIGH IN THE VAGINA:**

- 1) Erectile dysfunction
- 2) Ejaculatory defects such as premature retrograde or absence of ejaculation
- 3) Hypospadias.

#### **D. ERROR IN THE SEMINAL FLUID:**

1. Low fructose content
2. High prostaglandin content
3. Unusually low volume of ejaculation.

### **FEMALE CAUSES:**

#### **1.Ovulation problems:**

- An hormonal imbalance: FSH or LH secretion
- Anovulation
- Polycystic ovarian disease
- Eating disorders such as anorexia or bulimia
- Stress
- Alcohol or drug use
- Intense exercise that causes a loss of body fat.

#### **2.FALLOPIAN TUBE DAMAGE:**

- Endometriosis
- Tubal infection
- Uterine fibroids
- Fallopian tube blockage

#### **Risk factors:**

- Age
- Stress
- Smoking
- Over weight and over exercising
- Sexually transmitted

### **Diagnosis of Infertility:**

- Laparoscopy
- Ultrasound transducer

### **TREATMENT:**

- ✓ Artificial insemination
- ✓ In vitro fertilization
- ✓ Surrogacy
- ✓ Complimentary techniques

#### **❖ INTRAUTERINE INSEMINATION (IUI):**

IUI is a procedure in which a catheter is inserted through the cervix into the uterus to deposit a sperm sample directly into the uterus.

#### **❖ INVITRO FERTILIZATION( IVF):**

IVF is a process by which an egg is fertilized by sperm outside the body.

In Vitro= In glass.

#### **❖ INTRACYTOPLASMIC SPERM INJECTION(ICSI):**

- ICSI is the most successful form of treatment who are infertile.
- ICSI only requires one/single sperm which is injected directly into the egg and fertilized egg is transferred to uterus.

### **To stimulate ovulation:**

#### **Drugs are:**

1. Clomophene citrate
2. Human menopausal gonadotrophins
3. Follicle stimulating hormone
4. Gonadotrophin releasing hormone analog
5. Bromocriptine.

#### **❖ FERTILITY RESTORATION SURGERIES:**

- Tissue removal: This surgery removes endometrial or pelvic adhesions with lasers or ablation.
- Tubal surgeries: If fallopian tubes are blocked or filled with fluid, tubal surgery improve chances of becoming pregnant.

### **FEMALE INFERTILITY TREATMENT:**

- Treatment of female infertility consists of fertility restoration drugs, fertility restoration surgeries, Assisted reproductive technologies( ART) .
- Laparoscopic surgery is performed to remove adhesions and create a new tubal opening.
- Salpingectomy: It can improve chances of pregnancy with in vitro fertilization.



- Intrauterine insemination
- Invitro fertilization
- Zygote intrafallopian transfer( ZIFT) .
- Gamete intrafallopian transfer( GIFT)
- Intracytoplasmic sperm injection(ICSI)

➤ **Zygote intrafallopian transfer:**

- ZIFT is an ART designed to transfer the fertilized embryo into the fallopian tube instead of the uterus
- Here zygote is place in the fallopian tube through which it will reach into the uterus
- It is similar to IUF

➤ **Gamete intrafallopian transfer:**

GIFT involves transferring eggs and sperm into the women's fallopian tubes so fertilization occurs in the woman's body.