# FAMILY PLANNING METHODS



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# **FAMILY**

It refers two or more individuals who depend on one other for emotional, physical, and financial support.

# **Family Planning**

Family planning to regulate the number and spacing of children in a family through the practice of contraception or other methods of birth control.

# FAMILY PLANNING METHODS

 DEFINITION: 'A way of thinking and living that is adopted voluntarily upon the basis of knowledge, attitudes and responsible decisions by Individuals and couples, in order to promote the health and welfare of the family group and thus contribute effectively to the social development of a country.

### **Comparing Effectiveness**

#### More effective

Less than I pregnancy per 100 women in one year











Female Sterilization



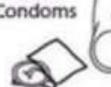
Injectables



Pills

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Diaphragm



Fertility Awareness Methods

#### Less effective

About 30 pregnancies per 100 women in one year





Spermicides

# **PURPOSES**

- Raising a child requires significant amounts of resources: time, social, financial and environmental. Planning can help assure that resources are available.
- To improve the health of the mother and child.
- Helping to prevent HIV/AIDS.

### CRITERIA FOR IDEAL CONTRACEPTIVE

- It should be safe for use means free from any kind of side effects.
- It should be reliable.
- It should be easy to administer and convenient.
- ➤ It should be cost effective.
- It should be culturally feasible and acceptable.

### **METHODS OF CONRACEPTION**

- Spacing methods:
- Natural methods
- ii. Barrier methods:-
  - a) Physical barrier methods
  - b) Chemical barrier methods
  - c) Intra- uterine devices
  - d) Hormonal methods
  - e) Post conceptional methods

### 2. Terminal methods:-

A) Vasectomy

B) Tubectomy

# 1. Spacing Methods

- Help in prevention of pregnancy as long as they are used.
- These methods can help in timing and spacing of pregnancies, preventing unwanted children.
   These methods are temporary methods.

## Natural Methods

- Natural methods do not involve the use of any of the man made devices.
- These methods are useful for timing and spacing of pregnancies.

# Coitus Interruptus / Withdrawl Method

> In this method the penis is withdrawn from the vagina before ejaculation. In this way semen is prevented from entering the uterine cavity and pregnancy does not take place. Since the penis is withdrawn and ejaculation takes place outside the vagina, this method is called coitus interruptus or withdrawal methods.

### MERITS :-

- Involves no cost
- It does not require any other device.
- With self control and discipline it can be fairly effective.

#### **DEMERITS:-**

- Require a great deal of self control.
- Thus failure rate is very high.
- Slightest delay in withdrawal can lead to pregnancy.

# Safe period

Based upon the process of ovulation and menstrual cycle which helps in determination of the safe period when coitus can be done and unsafe period when coitus can be avoided to prevent pregnancy.

#### MERITS :-

Does not require any man made device.

#### **DEMERITS:-**

- Require self control by the partners during the highly unsafe period.
- Not suitable for the women who does not have regular periods.
- Failure rate is high.
- Require great deal of will power and motivation

| Safe Times Using the Calendar Method |               |                  |                 |               |          |               |
|--------------------------------------|---------------|------------------|-----------------|---------------|----------|---------------|
| Sunday                               | Monday        | Tuesday          | Wednesday       | Thursday      | Friday   | Saturday      |
| Safe Day                             | Safe Day<br>2 | Safe Day         | Start of Period | Safe Day<br>5 | Safe Day | Sale Day<br>7 |
| State Day<br>8                       | Sale Day<br>9 | Safe Day<br>10 ] | )(              | )4            | )4       | )4            |
| V/                                   | 11            |                  |                 |               |          |               |



Safe Day Sofe Day Safe Day Safe Day 30 29 3 Start of Period

Start of Period: (

Safe Days: [ Unsafe Days: Safe Day

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Safe Clay

### Abstinence

This involves complete avoidance of sexual cohabit.

### Barrier Methods

Barrier methods are those methods which prevent meeting of sperms with the ovum. There are many major types of barrier methods.

# a. Physical Barrier Methods

1) Nirodh (condom):- it is a thin rubber sheath which is use by men. It is rolled over the erect penis before having sex. This rubber sheath prevents the entry of semen into the vagina. The condom must be held carefully when taking out the penis from the vagina to prevent spilling of semen into the vagina. It is available free of cost from urban or rural family welfare centers.

TYES:-1) dry nirodh 2) deluxe nirodh 3) super deluxe nirodh



#### MERITS:-

- ✓ It is most simple and effective methods
- ✓ Easy to use
- ✓ Disposable
- ✓ No medical supervision is required
- ✓ Protects from sexually transmitted disease

#### **DEMRITS:-**

- ✓ If not used correctly it may slip or get tear of and the semen gets spilled into vagina.
- ✓ In some rare cases the person may have allergic to rubber.
- ✓ Some people may not enjoy sex because of interference with the sensation.

# 2.) Diaphragm

- The diaphragm is used by women in her vagina to form a barrier in front of the cervix. The diaphragm is dome shaped and is like a shallow cap.
- It is made of soft synthetic rubber or plastic with a stiff but flexible rim around the edge. It is also known as DUTCH CAP.
- Diaphragm id available in different ranging from 5-10cm.
- It is held in position partly because of the tension created by the spring and partly because of the muscle tone of vagina. It is very important to observe the vaginal muscle tone otherwise the diaphragm may not remain in position.



#### MERITS:-

- ✓ A diaphragm along with spermicidal is very effective.
- ✓ Failure rete is low.
- ✓ There is no risk or any kind of contraindication.

### **DEMERITS:-**

- ✓ It requires the assistance of doctor and any other health personnel.
- ✓ It requires privacy and time to place it in the vagina.
- ✓ It requires periodical check up
- ✓ It requires facilities for its proper care and storage.

# Vaginal Sponge

- ➤ It is small polyurethane foam sponge, diffused with spermicide. The sponge is shaped in a way that it can be filled on to the cervix and has a loop on its outer surface which can be to pull out the sponge after use.
- Should be inserted before the coitus.
- Provides protection for 24 hours.
- It should remain be there for at least 6 hours after coitus.
- Sperms are trapped on in the sponge and are destroyed.
- It is better than not to use any method.



# b.) Chemical Barrier Methods

- These method usually kills the sperms and this way chemical contraceptives help in preventing the pregnancy. The chemical contraceptives which are in use are:-
- ✓ FORM OF TABLETS AROSOLS
- ✓ CREAM JELLY
- ✓ SUPPOSITORIES

### MERITS:-

- They are easy to administer
- Available free in health centers
- Not very expansive

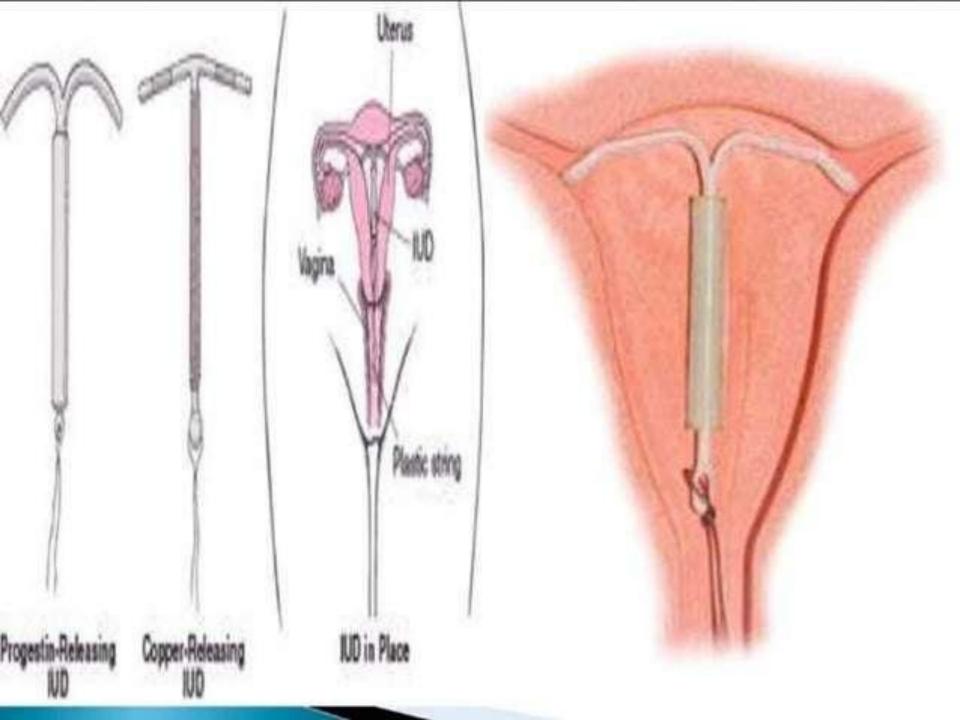
#### **DEMERITS:-**

- Most be inserted deep down and in all such points where sperms are likely to reach.
- Must be applied each time before sex.
- May cause irritation and burning.

# c) Intra Uterine Devices

These are the devices which are placed in the uterine cavity. Earlier these devices were made up of silk worm gut, silk and gold. Three different types of IUD'S generations are:

- First Generation IUD'S
- Second Generation IUD'S
- Third Generation IUD'S



### First Generation IUD'S

- ✓ These devices were made of polyethylene and are non-medicated. These are available in different sizes and shapes such as coils, spirals, loops. The lippes loop is the most popular and commonly used devices.
- ✓ It is made of polyethylene and contains barium sulphate which makes it possible to be located when required by x-ray. The loop is double 'S' shaped and has an attached made of Fine Nylon Threads.

# Second Generation IUD'S

These are also made of polyethylene but copper is added into these. The copper enhances the contraceptive effect. Variety of copper devices are :-

- ✓ Copper-7 and copper t-200
- √ Variants of T devices: TCU: 220C and TCU: 380A
- ✓ Multi load devices: ML-CU: 250, ML:375
- ✓ Nova T : TCU- 380
- ➤ All cu devices are more effective and less chances of side effects I.e. pain and bleeding.

# Third Generation IUD'S

 These contains hormones which is released slowly in the uterus. The hormone affects the lining of the uterus and cervical mucus. It may affects the sperm.

There are two types of hormone IUD'S:-

- Progestaserl
- Levonogestrel device

#### MERITS:

- Can be used for longer period
- Can be easily removed when couple wants to have child
- Do not interfere with coitus
- Inexpensive
- Very effective and failure rate if less
- Do not require hospitalization

#### DEMERITS

Bleeding, pain, perforation of uterus, expulsion.

### Oral Pills

There are variety of oral contraceptive pills.

- i. Combined pills: The pills is composed of two:-
- Hormones i.e. synthetic oestrogen and progesteogen in very small doses.
- Its action is to inhibit ovulation of ovum by blocking the secretion of gonadotropin from pituitary gland.

progestogen also thickens the mucosa of the cervix which prevents the entry of sperm into the genital canal. There are two types of pills available with the name of MALA-D, MALA-N.

MALA -D: D-Norgestrol – 1.0mg

Ethynil estradiol – 0.03mg

MALA-N: Norethisterion – 0.50mg

Ethynil Estadiol- 0.04mg

### MERITS:-

- ➤ It is 100% effective if taken regularly.
- Easy to use and does not interfere with coitus.
- Reduce the risk of anemia because menstrual bleeding is lass.
- Reduce the risk of pelvic inflammatory disease, cyst and uterine cancer.



#### **DEMERITS:-**

- Failure rate increase if take irregularly.
- Minor side effects like dizziness, nausea, vomiting, headache, weight gain etc.
- Increases the risk of heart problems if women is already at risk.
- May increases the risk of gall bladder disease and cervical cancer.

 PROGESTRON ONLY PILL:- The pill also known as mini pill. It contain only progestogen and it thickens the cervical mucus cavity.

mini pills are taken throughout the menstrual cycle and these are not used widely because of its high failure rate.

iii. Once –A MONTH PILL:- it is modified combined pill. It contains long acting oestrogen and short acting progestogen. These pills are not in use because experimental results revealed high pregnancy rate and irregularity in the menstrual cycle.

## 2. Depot Formulations

These are long acting hormonal contraceptive contains only synthethic progestogen. These are available in three forms:

- Injectable
- 2. Subdermal implants
- Veginal ring

## 1. Injectable Contraceptives

- it is again of two:-
- a. <u>Progestagen Only Injectable</u>:- There are two preparataions which are available:
- DMPA (Depot medroxy progestrone acetete)
- NET-EN (Norethiseterone anante)

Both of these contain synthetic progestogen. Progestogen prevents ovulation.



## MERITS:-

It is easy to administer, highly effective and irreversible, do not interfere with lactation and does not cause any effect on infant.

CONTRAINDICATION: - Abnormal uterine bleeding any malignancy of the genital tract, suspected malignant growth and caner breast.

### Combined Injectable Contraceptives:-

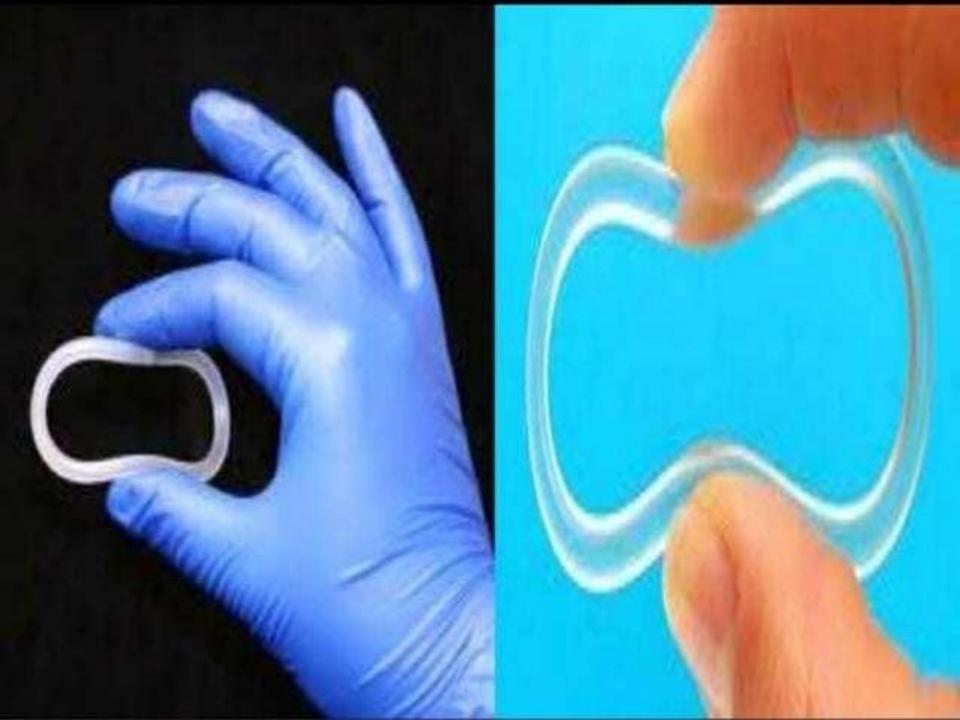
- These contains progestogen and oestrogen contraceptive action is similar to that of progestogen only injectable.
- The injection is given once in a month three days early or three days late.
- It is contraindicated in pregnancy, women, having any other problem like diabetes with complications, vascular disorder, suspected malignancy.

## 2. Subdermal Implants

- There are two varieties. The earlier one is known as Norplant and latest one is Norplant R-2
- The Norplant has six small silicon rubber tubes. each of these tubes contains 30mg of progestogen.
- The norplant-R-2 has two small rods.
- Both of these devices are placed under the skin of the arm. The tubes or the rods allow steady diffusion of steroids into the blood stream for apriod of five years to give effective contraceptive effects.

## 3. Vaginal Rings

This methods is not much in use. It consist of ring which contains small amount of progestogen. The ring is fitted into the vagina for three weeks of menstruation cycle, after which it is removed for a week and then reworn after menstruation cycle. The steroid is directly absorbed by the mucus lining of the vagina.



## e.) Post Conceptional Methods

These are the methods which are used after the missed period and pregnancy may or may not have occurred. This method is used in regulating and inducing the menstruation and terminating the pregnancy or aborting the fetus. These methods are:-

## Menstrual Regulation

 it is done with in 14 days of missed period when pregnancy is doubted but it is not confirmed. In this the uterine contents are evacuated. The procedure is very safe. There is no legal restriction.

COMPLICATION WHICH CAN OCCUR ARE:- local injury, perforation of uterus, infection.

COMPLICATION WHICH MAY OCCUR LATER ARE:- Infertility, menstruation disorders, ectopic pregnancy, .

#### Menstrual induction

This is done with in few days of missed period. It is done by application of prostaglandin F2 under sedation. This induces continuous contraction of uterus lasting for 7 min. it is followed by cyclic contraction which continues for next 3-4 hours. This initiates bleeding which lasts for a week or so.

#### Abortion

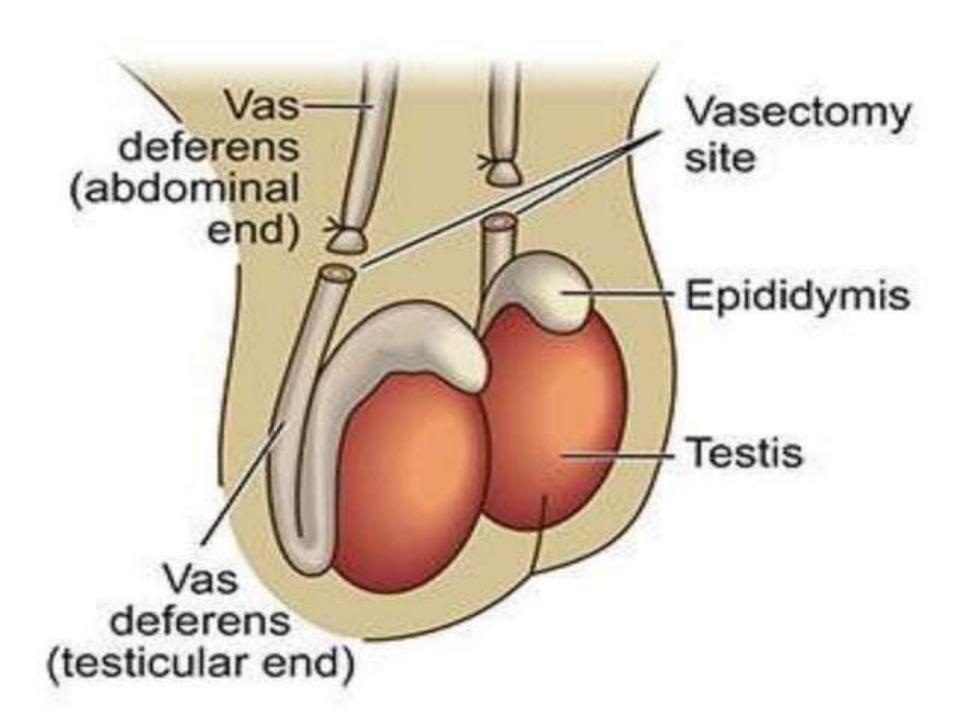
 Abortion refers to the termination of pregnancy before the fetus become viable i.e. before it is able to live outside the womb. This period is fixed at 28 weeks when the fetus weights 1000 grms, abortion are either spontaneous or induced.

#### 2. TERMINATION METHODS

Sterilization is only method which gives permanent protection from conception from conception. Either husband and wife can under go sterilization by a simple surgical operation i.e. vasectomy or tubectomy.

#### I. VASECTOMY

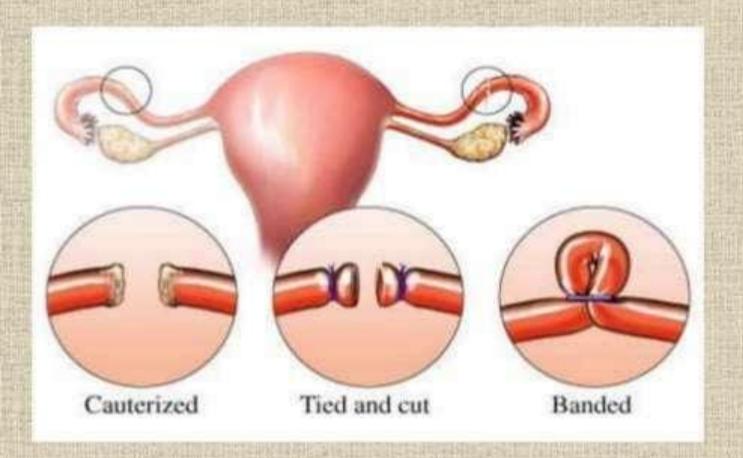
- ➤ Vasectomy is sterilization of male. It is very simple and minor operation which takes hardly 15-20 min.
- ➤ The operation involves a small cut on both sides of scrotum then a small portion of vasdeferens (about 1cm) on either side of the scrotum is cut and ligated, folded back and sutured. The operation is done not affect the sexual characteristics and sex life in any form. The sperms are produces but not ejaculated along with semen.



#### II. TUBECTOMY

- ➤ It is sterilization of female. This is done by resecting a small part of fallopian tubes and ligate the sected ends. The closing of tubes can also be done by using other methods like closing the tubes the tubes with bands clips and electrocautery.
- The operation can be done through abdominal or vaginal approach. The most common abdominal procedure are laproscopy and minilaprotomy.
- The tubectomy can be done after delivery, between delivery and after abortion.

# SELECTION OF CASES AND ANAESTHESIA IN TUBECTOMY



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