

FAMILY PLANNING

DR Muhammad Saeed Raza

Lecturer

Community Medicine Department

Sargodha Medical College

CONTRACEPTIVE METHODS

```
graph TD; A[CONTRACEPTIVE METHODS] --> B[SPACING METHODS]; A --> C[TERMINAL METHODS]
```

**SPACING
METHODS**

**TERMINAL
METHODS**

SPACING METHODS

- BARRIER METHODS
 - a) PHYSICAL METHODS
 - b) CHEMICAL METHODS
 - c) COMBINED METHODS
- INTRA-UTERINE DEVICES
- HORMONAL METHODS
- POST-CONCEPTIONAL METHODS
- MISCELLANEOUS

TERMINAL METHODS

➤ MALE STERILISATION

➤ FEMALE STERILISATION

MISCELLANEOUS METHODS

- Abstinence
- Coitus interruptus
- Safe periods
- Natural family planning
 - basal body temperature
 - cervical mucus method
 - symptothermic method
- Breast feeding
- Birth control vaccine

➤ Abstinence

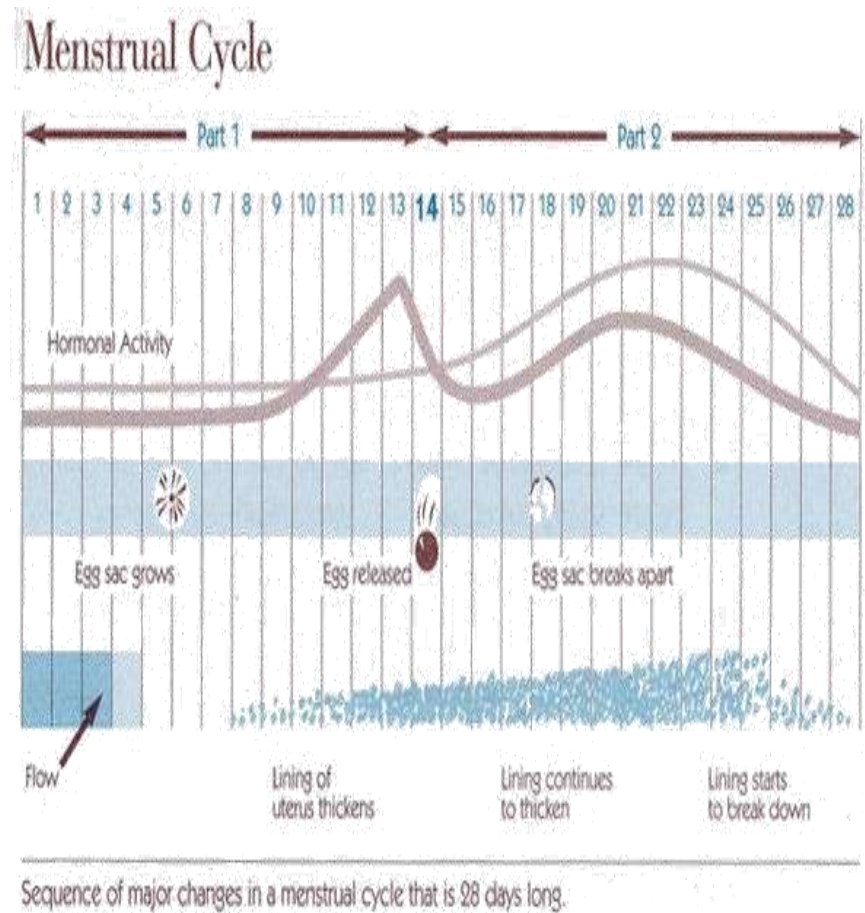
The only method of birth control which is completely effective is Complete sexual abstinence

➤ **Coitus Interruptus**

- This is the oldest method of voluntary fertility controls.
- Widely practiced method.
- Preventing the deposition of the semen into the vagina.
- **Disadvantages**
 - The pre-coital secretions of the male may contain sperms.

➤ Safe Periods

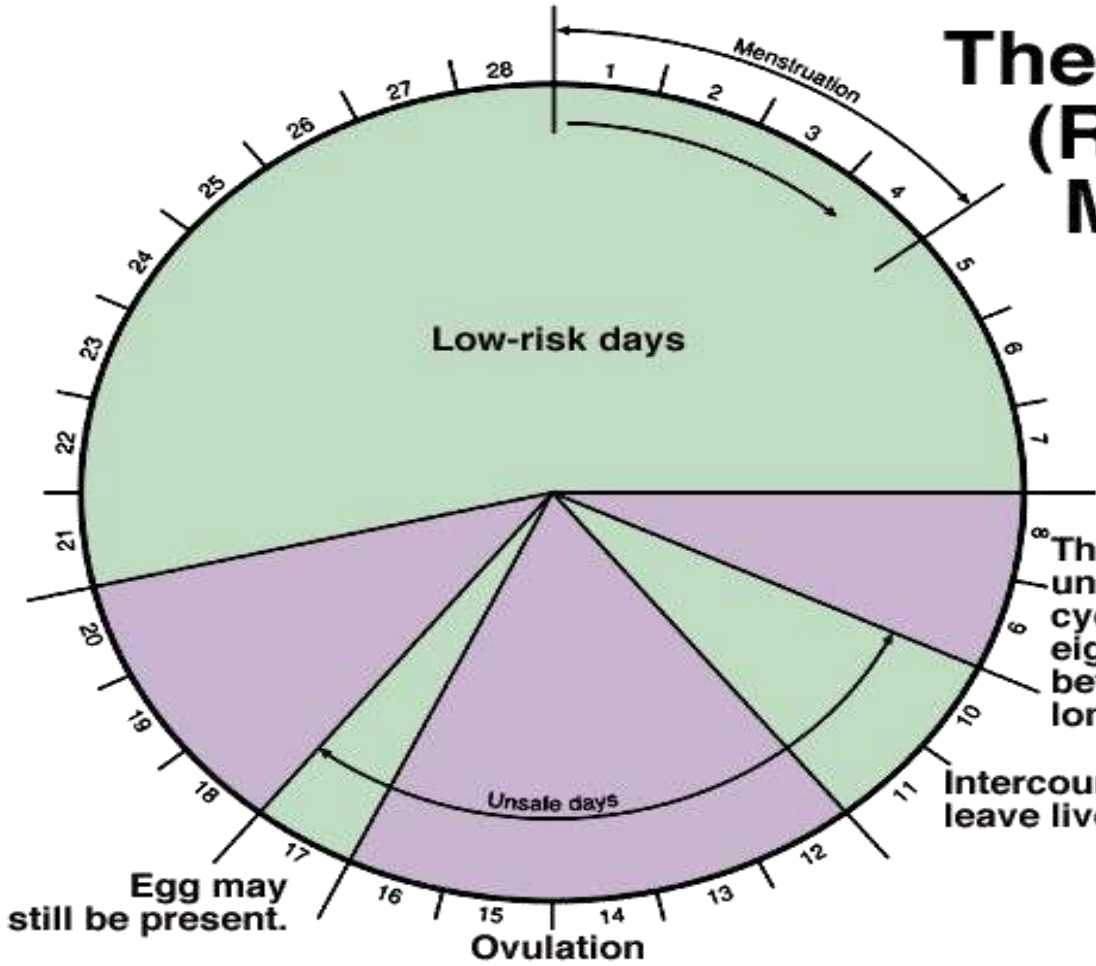
- It is also called 'rhythm method' or 'calendar method'
- It is based on the fact that ovulation occurs from 12 to 16 days before the onset of menstruation.



- The first day of the fertile phase is found by subtracting 18 days from the length of the shortest cycle.
- To find the last day of the fertile phase, subtract 11 days from the longest cycle.
- Sample
 - In this sample, the shortest menstrual cycle in the past 6 months was 25 days. The longest menstrual cycle in the past 6 months was 35 days.

- To calculate the fertile phase
 - Subtract 18 from the shortest cycle (25 days) = 7
 - Subtract 11 from the longest cycle (35 days) = 24
 - This means the first day of the fertile phase is Day 7. The last day of the fertile phase is Day 24. If a couple is using this method, avoid intercourse during the fertile phase.

The Calendar (Rhythm) Method



These days may be unsafe if twenty-eight-day cycle varies as much as eight to nine days between shortest and longest cycles.

Intercourse on these days may leave live sperm to fertilize egg.

Egg may still be present.

Ovulation

- Disadvantages
 - Women's menstrual cycles are not always regular.
 - It is only possible for this method to be used by educated and responsible couples with high degree of motivation and co operation.
 - Compulsory abstinence of sexual intercourse for nearly one half of every month.
 - A high failure rate of 9 per 100 women years.

Natural Family Planning Methods

- Variety of methods used to plan or prevent pregnancy, based on identifying the women's fertile days.
- The term "natural family planning" is applied to three methods, they are ...
 - ❖ basal body temperature method (BBT)
 - ❖ cervical mucus method
 - ❖ symtothermic method

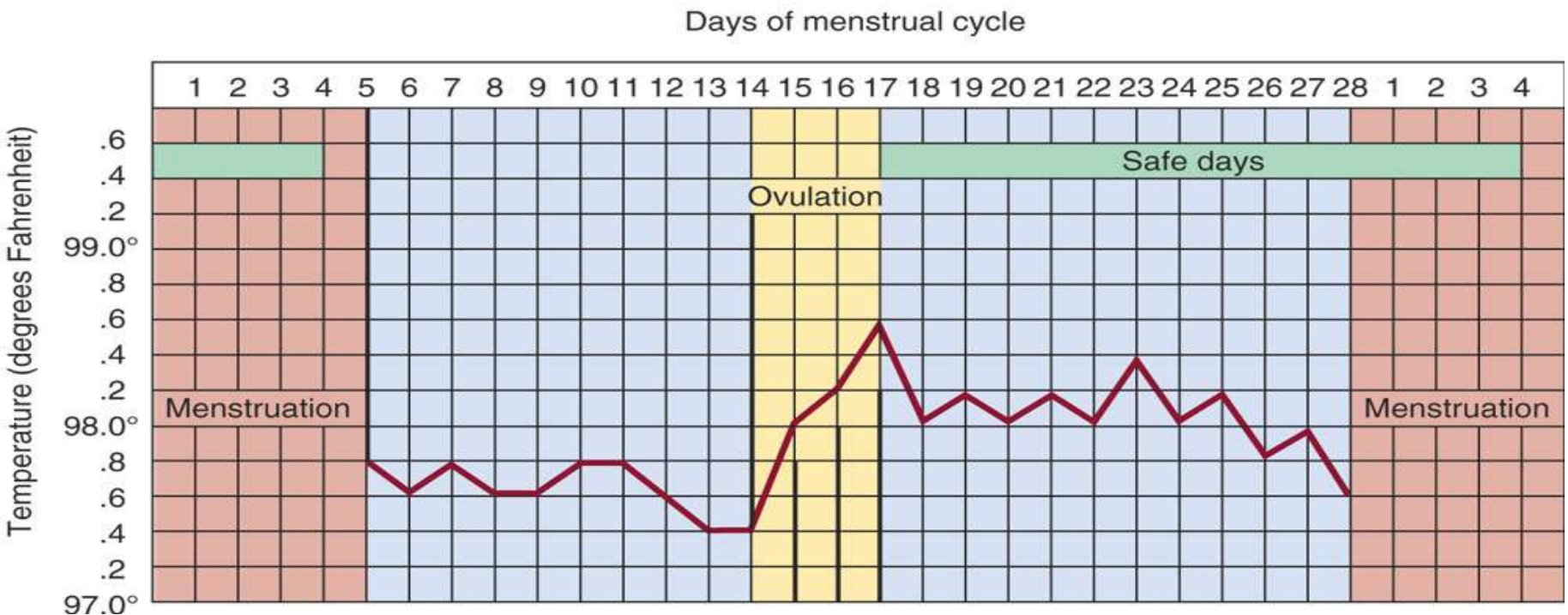
Basal Body Temperature Method

- The BBT method depends upon the identification of BBT at the time of ovulation, as a result of increase in the production of progesterone.
- The rise of temperature is very small, 0.3–0.5 degree C.
- When no ovulation occur the body temperature does not rise.
- The temperature is preferably measured before getting out of the bed in the morning.

This method is reliable if the intercourse is restricted to the post-ovulatory infertile period, commencing 3 days after the ovulatory temperature rise and continuing up to the beginning of menstruation.

Drawbacks—abstinence is necessary for the entire pre-ovulatory phase.

The failure rate is as high as 15%.

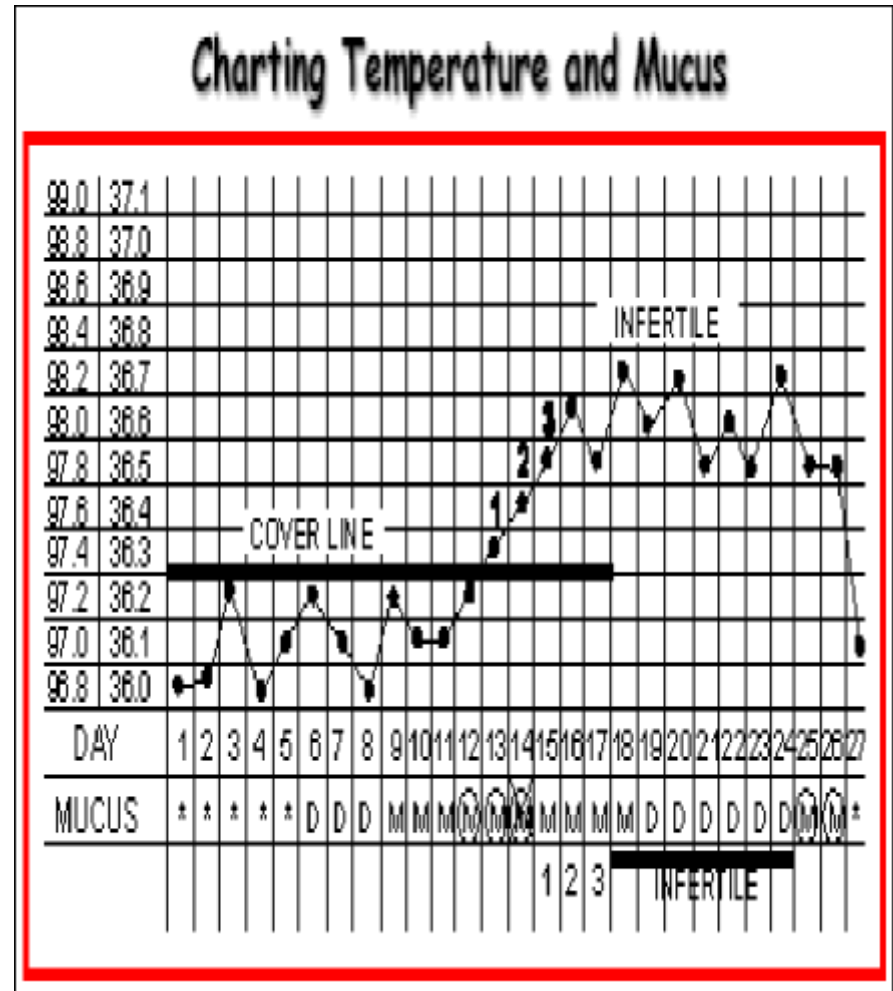


Cervical Mucus Method

- This method is based on the observation of changes in the characteristics of cervical mucus.
- Cervical Mucus has regular, cyclic pattern changes. The cycle starts with the beginning of period and ends at the beginning of the next period.
- At the time of ovulation, cervical mucus becomes watery clear resembling raw egg white, smooth, slippery and profuse.
- After ovulation, under the influence of progesterone, the mucus thickens and lessens in quantity.
- From the beginning of the change in your mucus pattern until it disappears or changes (four days after the greatest volume) are the unsafe days.

Symptothermic Method

- This method combines the temperature, cervical mucus and calendar techniques for identifying the fertile period.
- This is more effective.



Breast-Feeding

- Lactation prolongs postpartum amenorrhoea.
- This is because levels of prolactin are increased.
- However, once menstruation returns, continued lactation no longer offers any protection against pregnancy.
- This method is most effective during the first 6 months of exclusive breastfeeding.
- Women using this method have a 2% chance of getting pregnant in the first 6 months.

Birth Control Vaccine

- The most advanced research involves immunization with a vaccine prepared from beta sub-unit of human chorionic gonadotropin (hCG).
- Immunization with hCG would block continuation of pregnancy.
- Antibodies appeared in about 4–6 weeks and reached maximum after about 5 months and slowly declined reaching zero levels after a period ranging from 6–11 months.
- The immunity can be boosted by a second dose. But there are many uncertainties.

Post Conceptional Methods

These are the methods employed for the termination of the pregnancy.

It includes

- ✓ Menstrual regulation
- ✓ Menstrual induction
- ✓ Abortion

Menstrual regulation

- It consists of aspiration of uterine contents 6-14 days of a missed period but before most pregnancy tests can accurately determine whether or not a woman is pregnant.
- **Complications** :
 - IMMEDIATE - Uterine perforation, Trauma
 - LATE - Tendency to abortion, Infertility
Menstrual disorders
Increase in ectopic pregnancy
Rh immunization

Menstrual regulation differs from abortion in the following respects :

- Lack of certainty if pregnancy is being terminated.
- Lack of legal restrictions.
- Increased safety of early procedures.

Menstrual Induction

- Intrauterine application of 1-5 mg of PGF2 solution disturbs the normal progesterone prostaglandin balance.
- The uterus responds with a sustained contraction lasting about 7 minutes, followed by cyclic contractions continuing for 3-4 hours.

Oral Abortifaciant:

- Mifepristone (RU 486) in combination with misoprostol is 95 percent successful in terminating pregnancies of upto 9 weeks duration with minimum complications.
- The common regime is mifepristone 200 mg orally on day 1, followed by misoprostol 800 mg vaginally either immediately or within 6-8 hours.

Contraindications:

- History of allergy or hypersensitivity to these drugs
- Confirmed or suspected ectopic pregnancy
- IUD in place
- Chronic adrenal failure
- Hemorrhagic disorder
- Inherited porphyria
- If a patient does not have access to medical facilities to provide emergency treatment of complications

ABORTION

- Defined as “termination of pregnancy before the foetus becomes viable”.
- This has been fixed at 28 weeks when the foetus weighs approximately 1000 g.
- **Abortions types:**
 - a) Spontaneous
 - b) Induced.
- Spontaneous may be considered as nature’s method of birth control.
- Induced abortions may be legal or illegal.

Hazards of Abortion

A- Early Complications:

- Hemorrhage
- Shock
- Sepsis
- Uterine perforation
- Cervical injuries
- Anesthetic and psychiatric complications

B- Late Sequelae:

- Infertility
- Ectopic gestation
- Increased risk of spontaneous abortion
- Reduced birth weight

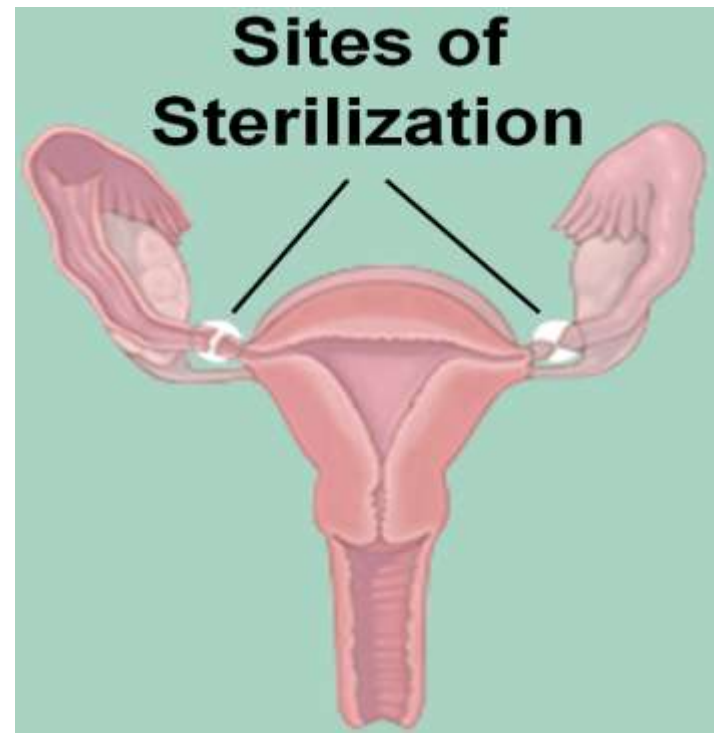
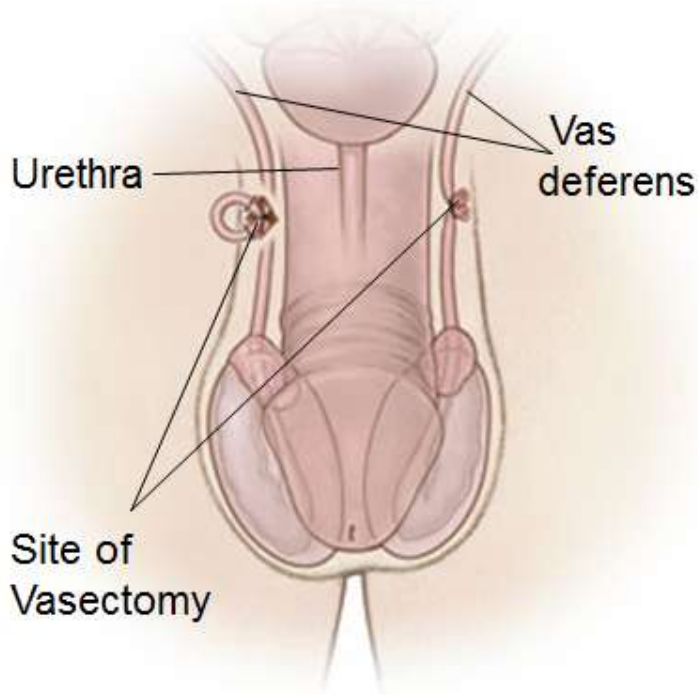
Conditions under which a pregnancy can be terminated:

- Medical
- Eugenic
- Humanitarian
- Socio-economic
- Failure of contraceptive devices

Terminal Methods Of Family Planning

Terminal Methods of Sterilization

1. **Male sterilization – Vasectomy (10-15%)**
2. **Female sterilization – Tubectomy (85%)**



Advantages of Terminal methods of Family Planning

- Most effective method
- One time method
- Cost effective

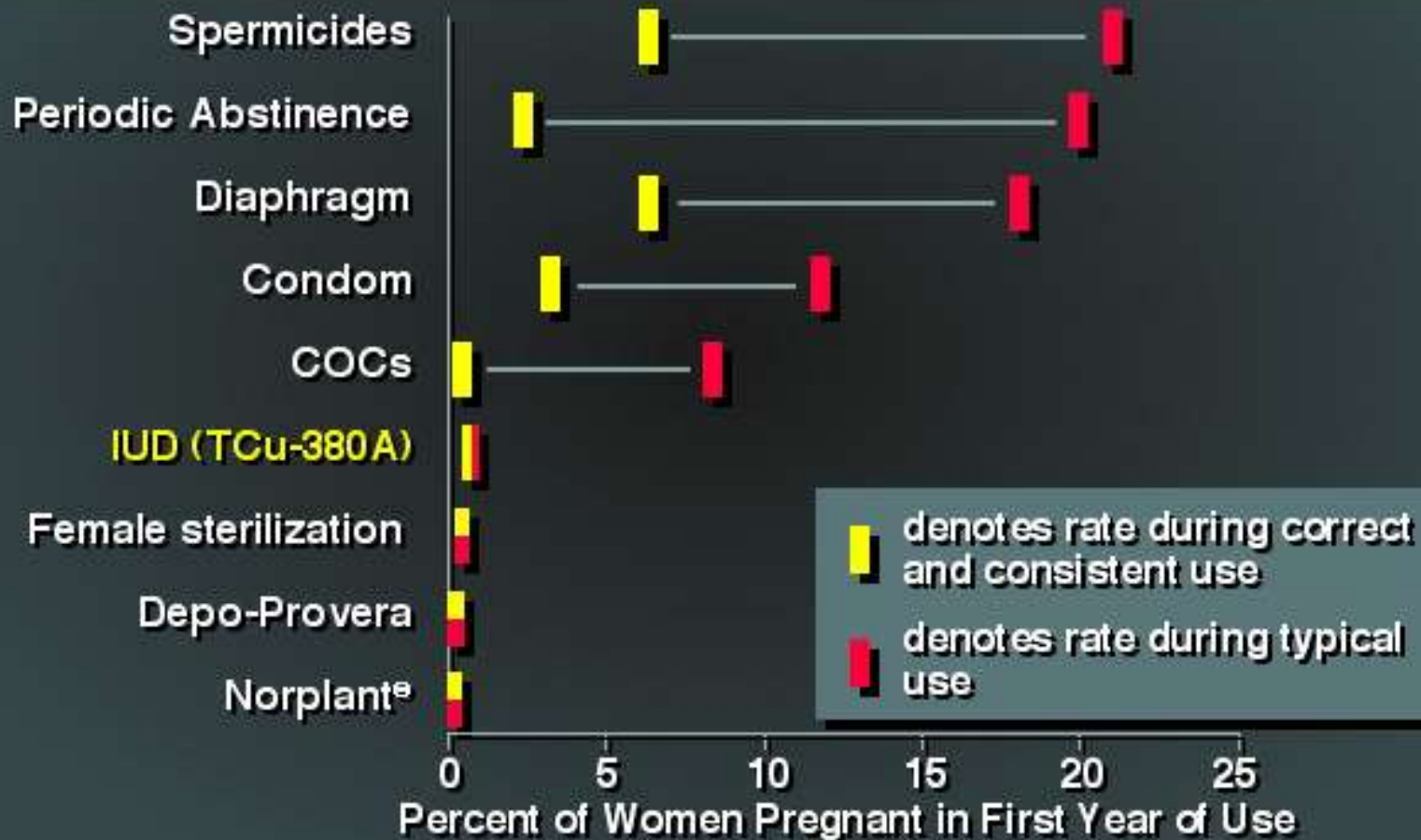
Complications

- Pain
- Bruising and swelling (scrotal haematoma)
- Infection (wound sepsis, cellulitis & abscess)
- Sperm granuloma (5%)
- Post-Vasectomy Pain Syndrome
- Spontaneous Recanalization
- Auto-immune response
- Psychological

- Contraceptive methods are evaluated on the basis of Use – effectiveness.
- The two methods being used for measuring contraceptive efficacy are:-
 - 1) Pearl index .
 - 2) life – table analysis .

S.NO	Methods	Pregnancy rate/HWY
1	None Used	80
2	Rhythm	20-30
3	Coitus Interruptus	20-30
4	Condom	14
5	Diaphragm	12
6	IUCD	1.5-3
7	Pill	0.5

Contraceptive Failure Rates*

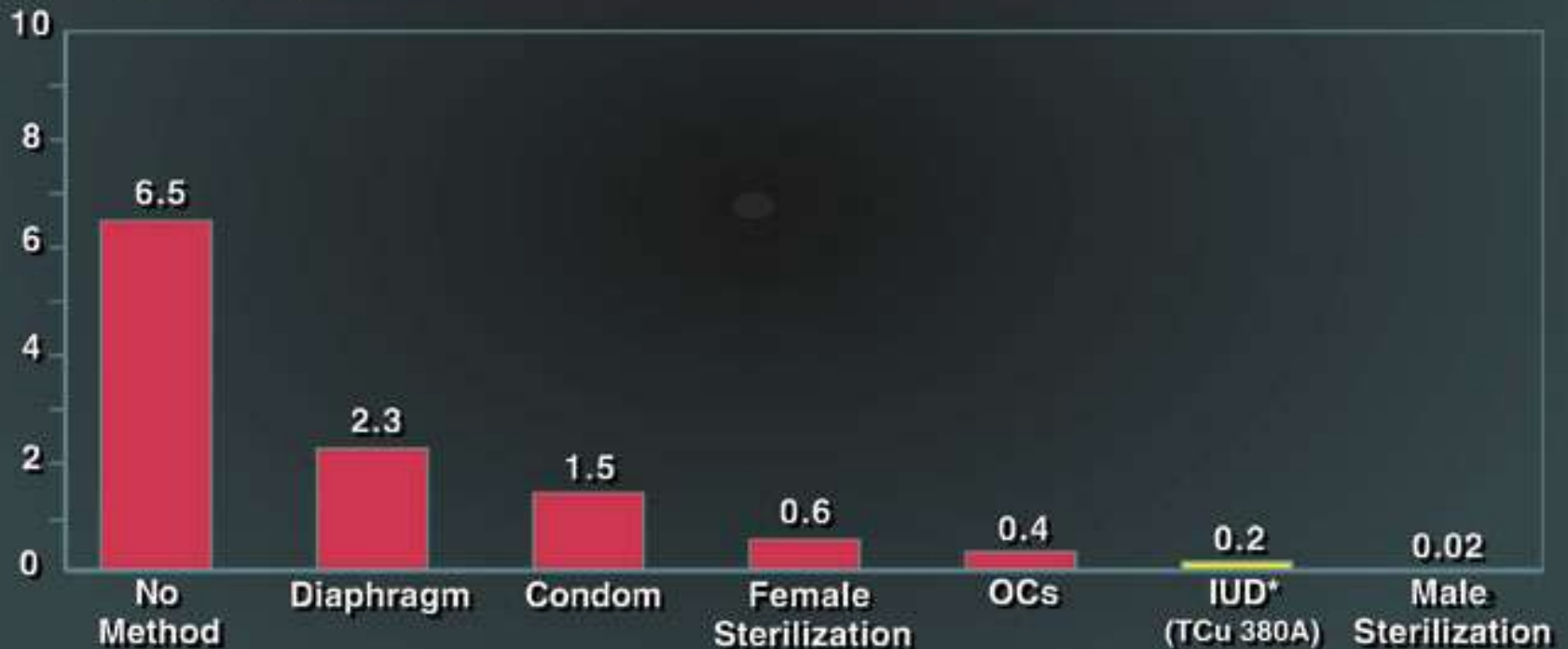


Source: Trussell, 1994; Jones/Forrest, 1992 (COC typical use data).

* U.S. data

Estimated Ectopic Pregnancy Rates by Method

Typical Ectopic Pregnancy Rate
per 1000 woman years



* Adapted from: Sivin, 1991.



THANK YOU