

REPRODUCTIVE HEALTH

1. Reproductive Health

It refers to the state of healthy reproductive organs with normal functions. According to WHO, reproductive health can be defined as the total well-being in all aspects of reproduction, i.e. physical, emotional, social and behavioural.

2. Reproductive and Child Healthcare Programmes (RCH)

These programmes are for creating awareness among people about various aspects of reproduction. It provides facilities and support the buildup of a reproductively healthy society. Some measures taken for RCH are

- (i) Use of audio-visual and print media
- (ii) Introduction of sex education in schools
- (iii) Awareness about sexually transmitted diseases
- (iv) Instruct people about pre and post-natal care.

3. Population Explosion

The rapid increase in population over a relatively short period is called population explosion. Expected reasons for the population explosion may be

- (i) A rapid decline in death rate (mortality).
- (ii) A reduction in Maternal Mortality Rate (MMR).
- (iii) Decline in Infant Mortality Rate (IMR).
- (iv) Increase in number of people of reproductive age. **Consequences of Overpopulation** Some direct consequences of overpopulation are reduced food supply, unemployment, lack of education and poverty.

4. Birth Control (Contraception)

The regulation of conception by preventive methods or devices that limit the number of offspring is called birth control or contraception. An ideal contraceptive should be user-friendly, easily available, effective, reversible with no or least side effects and non-interfering with the sexual drive/desire and/or the sexual act of the user.

Methods of Birth Control

(i) **Natural/Traditional Methods** These are based on the principle of avoiding the chances of meeting of sperms and ovum, e.g. (a) Period abstinence (10-17th days of menstrual phase) (b) Coitus interruptus or withdrawal before ejaculation (c) Lactational amenorrhoea (absence of menstruation during lactation).

(ii) **Barrier Methods** These prevent sperms and ovum from physically meeting with each other in order to prevent fertilisation, e.g. condoms, cervical caps, diaphragms and vaults.

(iii) **Chemical Methods** Spermicides available in the form of cream, jellies and foams are usually used along with the above stated barriers to increase contraceptive efficiency. The spermicides include lactic acid, citric acid, boric acid, zinc sulphate and potassium permanganate.

(iv) **Intrauterine Devices (IUDs)** are a form of long reversible contraceptive methods. These are categorised as

(a) **Copper releasing IUDs**, e.g. Cu-T, Cu-7, Multiload-375 and Paragard.

Note Copper ions released from IUDs, suppress the motility and fertilisation capacity of sperms.

(b) **Hormone releasing IUDs**, e.g. Progestasert, LNG-20 and Mirena. These make uterus unsuitable for implantation and the cervix hostile to sperms.

(c) **Non-medicated IUDs**, e.g. Lippes loop.

(v) **Oral contraceptives** are preparations of hormones either progestogen or progestogenoestrogen combinations in the form of pills, e.g. **Saheli**. These pills inhibit ovulation and fertilisation. They also modify the quality of cervical mucus to prevent or retard the entry of sperms. The emergency contraceptives are taken within 3 days of intercourse to prevent unwanted pregnancy, e.g. i-pill, etc.

(vi) **Implants** These are surgically placed under skin. They act similar to oral contraceptives by blocking ovulation, e.g. nor plant is (synthetic progesterone.)

(vii) **Injection Contraceptives** These are injections which is given at every 3 months interval. It slowly releases hormone which prevents ovulation, e.g. Depo-Provera injections.

(viii) **Surgical methods** are irreversible methods used by male and female partner to prevent any more pregnancies. It is available in the form of tubectomy in women and vasectomy in men.

5. Medical Termination of Pregnancy (MTP)

MTP is intentional or voluntary termination or abortion of pregnancy before full term or before foetus becomes viable. Government of India legalised MTP in 1971 with some strict conditions to prevent misuse.

6. Sexually Transmitted Diseases (STDs)

These are the diseases that are mainly passed from one person to another during sexual activities. These are called as Venereal Diseases (VDs) or Reproductive Tract Infections (RTIs). These can be prevented by avoiding unprotected sexual intercourse. Some common STDs are genital herpes, syphilis, gonorrhoea, chlamydiasis, genital wart, hepatitis-B and AIDS. Early symptoms of STDs are swelling in genital regions, itching, fluid discharge, etc. STDs like Hepatitis-B and HIV can also be transmitted by the following ways

- (i) Sharing of contaminated injection needles, surgical instruments, etc., with infected persons.
- (ii) Transfusion of blood.
- (iii) From infected mother to foetus.

Preventive Measures for STDs

Prevention from STDs is possible and one could be free of these infections by following these simple principles.

- (i) Avoid sex with unknown/multiple partners.
- (ii) Always use condoms during coitus.
- (iii) Use sterilised needles and syringes.
- (iv) Awareness about STDs.
- (v) In case of doubt, consult a doctor as early as possible for early detection and get completely treated if diagnosed with disease.

7. Infertility

It is also one of the major aspects of reproductive health. It is mainly of two types

- (i) Primary infertility refers to those who never had children.

(ii) Secondary infertility refers to a situation, when a couple had children or achieved pregnancy previously but are unable to conceive the next time.

Some common causes of infertility in males are

- Low semen quality
- Oligospermia (low sperm count)
- Azospermia (absence of sperms)
- Sexual dysfunction and cryptochoridism

Some common causes of infertility in females are

- Polycystic ovarian syndrome
- Damage or blockage of Fallopian tube
- Age-related factors
- Uterine problems
- Previous tubal ligation.

8. Assisted Reproductive Technologies (ARTs)

ARTs include IVF, ICSI, ZIFT, etc., which now provide hope to many infertile couples.

(i) **In Vitro Fertilisation (IVF)** or Test Tube Baby Programme It is a technique of initiating the fertilisation process outside the female body. It is followed by embryo transfer in which the embryo is placed inside the uterus with the intention to establish pregnancy.

(ii) **ZIFT and IUT** When the 8-celled blastomere stage embryo obtained by in vitro fertilisation is transferred into the Fallopian tube, the process is termed as Zygote Intra Fallopian Transfer (ZIFT). If more than 8-celled blastomere stage is placed directly into the lining of uterus for further development is called Intrauterine Transfer (IUT).

(iii) **In Vivo Fertilisation** In this, embryos are formed when the fusion of the gametes takes place within the female body or surrogates. This method is used to assist those females who cannot conceive or maintain pregnancy to full term.

(iv) **Gamete Intra Fallopian Transfer (GIFT)** The ovum collected from donor is transferred to the Fallopian tube of another female, who cannot produce ova, but can

provide a suitable environment for fertilisation and further development. This is termed as Gamete Intra Fallopian Transfer (GIFT).

(v) **Intra Cytoplasmic Sperm Injection (ICSI)** In this, a single sperm is carefully injected into an egg using a microneedle. It is beneficial in case of male infertility, where sperm count is low. (vi) **Artificial Insemination (AI)** It is a technique in which semen is collected from husband or healthy donor and then artificially introduced into vagina or uterus (IUI-Intrauterine Insemination) of the female.

- Note**
- Amniocentesis is a medical procedure used in pre-natal diagnosis of chromosomal abnormalities and foetal infection.
 - Unfortunately this technique is being misused for sex-determination. If the sex determined comes out to be a girl, people undertake actions that lead to female foeticide. Thus, this procedure has certain legal restrictions in gender based countries.