

REPRODUCTIVE HEALTH

According to WHO reproductive health means total well-being. in all aspects of reproduction i.e. physical, emotional, social and behavioral.

Reproductive Health; Problem, and Strategies

- To attain total reproductive health as a social goal, action plans and programs at a national level are initiated at national level. These programs are called family planning initiated in 1951.
- Proper information about reproductive organs, adolescence and related changes, safe and hygienic sexual practice, STD and AIDS- would help people to lead a reproductively healthy life.
- Amniocentesis is a foetal sex determination test based on chromosomal pattern in amniotic fluid surrounding the developing embryo.
- Better awareness about the sex-related matters, increased number of medically assisted deliveries and better post-natal care leading to decreased maternal and infant mortality rate, increased number of couples with smaller families, better detection and cure of STOs.

Population Explosion and Birth Control

- Rapid decline in death rate, MMR (maternal mortality rate) and IMR (infant mortality rate) along with increase in population of reproductive age is the main for population explosion.
- Steps to overcome population explosion-
 - Using various contraceptive methods.
 - Educating people about the demerits of large family.
 - Increasing the marriageable age of female and male.
 - Providing incentive to parents having less than 2 children.
- Contraceptive methods are used to prevent the unwanted pregnancy and modifying the menstrual cycle. An ideal contraceptive should be
 - 1 User friendly
 - Easily available
 - Effective
 - Reversible
 - 1 No side effects
 - 1 No way Interferes with sexual desire and sexual act

Contraceptive methods could be divided into following categories-

- Natural or traditional methods
- Barrier methods
- IUDs
- Oral contraceptive methods
- Injectable
- Implants
- Surgical methods.

- Withdrawal or coitus interruptus — male partner withdraws penis from vagina just before ejaculation,
- Lactational Amenorrhea — absence of menstruation after parturition and intense milk feeding and no ovulation in this period.

In Barrier methods, ovum and sperms are prevented from physical meeting with the help of barrier, Diaphragms, cervical cap and vaults are barrier made of rubber that is inserted into the female reproductive tract during coitus.

4. Intrauterine Devices - inserted by doctor or trained nurse into the female uterus through vagina. IUDs are of two types: "Mecor Loop" (copper) and "LNG-20" (hormonal). IUDs increase the phagocytosis of sperm in uterus and copper reduces the motility and fertility capacity of sperms. It is ideal for female that wants to delay pregnancy and spacing between two children.

• Oral Pills are progesterone or progesterone-estrogen combination used by females in form of tablets. They inhibit ovulation and implantation as well as prevent entry of sperms into cervix. Administration of progesterone or progesterone-estrogen combination within 72 hours of coitus is found to be very effective as emergency contraceptive.

Surgical method is used as terminal method of contraception in male and female to prevent any more pregnancy.

- Vasectomy is the surgical method in male; a small portion of vas deferens is removed or tied through a small incision in scrotum to prevent release of sperms.
- Tubectomy is the surgical method in females in which small part of fallopian tube is removed surgically.

Medical Termination of Pregnancy

- Voluntary termination of pregnancy before full term is called MTP (medical termination of pregnancy) or induced abortion. It plays important role in decreasing population by aborting unwanted pregnancy.
- In India, MTP is legalized in 1971 with some restriction to prevent its misuse such as indiscriminate and illegal Female Foeticides.
- MTP is used to get rid of unwanted pregnancy due to unprotected intercourse or failure of contraceptives used during coitus or rapes or when pregnancy continuation could be harmful or even fatal to mother or foetus.
- MTPs are considered relatively safe during first trimester or up to 12 months of pregnancy. Second trimester MTPs are much more riskier.

Sexually Transmitted Disease (STDs)

Diseases or infections which are transmitted through sexual intercourse are collectively called sexually transmitted disease or venereal disease (STD) or reproductive tract infection (RTI).

- Some common STDs are Gonorrhea, syphilis, genital herpes, chlamydia, genital warts, trichomoniasis, hepatitis-B and AIDS.
- Hepatitis-B and HIV is also transmitted by sharing of injection needles, surgical instruments with infected person, transfusion of blood, or from infected mother to foetus.

Except genital herpes, HIV and hepatitis-B are completely curable if detected earlier and treated properly.

Infections of STDs can be prevented by-

- a) Avoid sex with unknown partners/multiple partners.
- b) Always use condoms during coitus.

- c) **Go to** a qualified doctor in case of doubt for early detection and get 'complete treatment if diagnosed_

Infertility

Infertility may be due to physical, congenital, diseases, drugs, immunological or even physiological.

- Infertile couples can be assisted to have children through certain special techniques commonly called assisted reproductive technologies (ART). Which includes-
- **In vitro fertilization** - fertilization outside the body followed by embryo transfer, which is commonly called test tube baby program. The ovum from wife/donor and sperms from husband/donor are collected and induced to fertilize in laboratory conditions. The zygote or early Embryo (Blastocyst) could be transferred into fallopian tube called MT (zygote intra fallopian transfer) and embryo with more than a blastocyst (IVF) into the uterus to complete the further development.
- * **GIFT (gamete intra fallopian transfer)** — transfer of gametes collected from a donor into fallopian tube of another female who does not produce ovum.
- **Intra cytoplasmic sperm injection (ICSI)** - specialized procedure to form an embryo in laboratory in which sperm is directly injected into ovum.
- **Artificial Insemination**- infertility cases in which male partner is unable to produce healthy sperms are treated by this technique in which semen collected from donor is artificially introduced into vagina or into uterus. **IUI (Intra uterine Insemination)** of the female.

All these techniques require extremely high precision handling by specialized professional and expensive instruments. Therefore their benefits are limited to certain countries and people. Emotional, religious and social factors also prevent the adaptation of these methods.