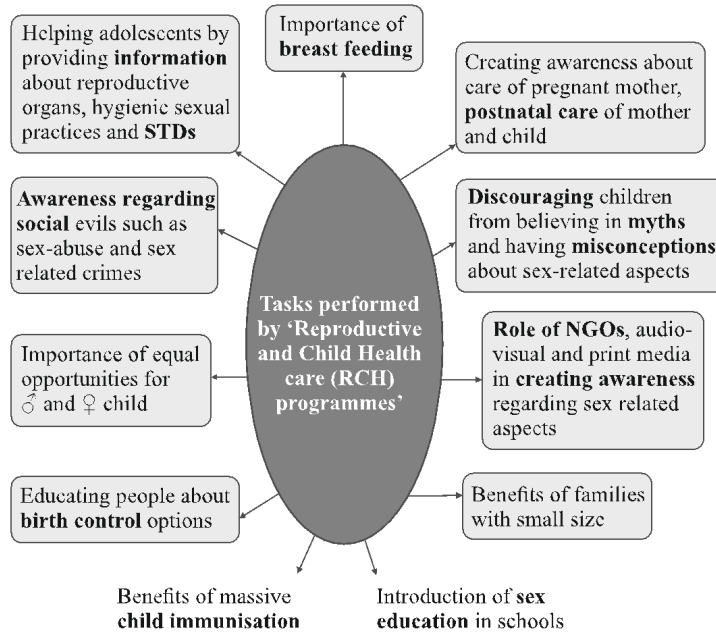


Reproductive Health

Introduction According to WHO, reproductive health means a total wellbeing in all aspects of reproduction i.e., physical, emotional, social and behavioural.

Problems and Strategies India was amongst the first countries in the world to initiate action plans at a national level to attain total reproductive health such as family planning programmes in 1951.



Population Stabilisation According to the 2001 census, our population growth rate was around 1.7 percent –17/1000/year.

Year Population	1900	1947	2000	2011
World	2 billion		6 billion	7.2 billion
India		approx: 350 million	close to 1 billion	crossed 1.2 billion

Reasons for Increase in Population Size:

- ❖ Decline in death rate.
- ❖ Rapid decline in maternal mortality rate (MMR)
- ❖ Decrease in infant mortality rate (IMR)
- ❖ Increase in the number of people in reproductive age.
- ❖ Increase in health facilities.

Measures Taken by Government to Check Population

- ❖ Motivate smaller families for using various contraceptive methods and by slogans “Hum do Hamare do”, in advertisements and posters.
- ❖ Urban couples adopting: “One child norm”.
- ❖ Statutory raising of marriageable age:
Female – 18 years
Male – 21 years
- ❖ Incentives given to couples with small families.

Birth Control/Contraception

Features of an ideal contraceptive:

- ❖ User-friendly
- ❖ Easily available
- ❖ Effective
- ❖ Reversible
- ❖ No/least side-effects.
- ❖ No interference with libido or act of coitus

Two principal methods of birth control:

- ❖ Natural methods
- ❖ Artificial methods

Natural/Traditional Methods

- ❖ Based on the principle of avoiding physical meeting of the egg and sperms.
- ❖ Chances of failure are high.



Periodic abstinence	Couples abstain from coitus from day 10 to 17 of the menstrual cycle i.e., fertile period.
Withdrawal method / Coitus interruptus	Insemination is avoided as the male partner withdraws his penis from the vagina just prior to ejaculation
Lactational amenorrhea	Absence of menstruation up to 6 months during period of intense lactation following parturition.

Artificial Methods

- ❖ Barrier methods
- ❖ Spermicidal jellies
- ❖ IUDs
- ❖ Oral pills
- ❖ Injections and implants
- ❖ Emergency contraceptives
- ❖ Surgical methods

I. Barrier Methods

- ❖ Prevent ovum and sperm from physically meeting.
(a) Condoms and its Types: Made up of rubber and latex sheath. Self-inserted and offer privacy to the user.

Parameter	Males	Females
Region covered	Penis	Vagina and cervix
Provides protection from STDs	Yes  Male condom (Nirodh)	Yes  Female condom

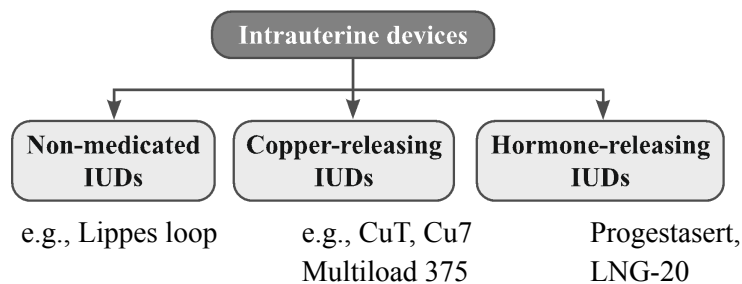
- (b) Diaphragms, cervical caps, vaults
- Rubber barriers that cover the cervix during coitus.
 - Reusable.
 - Do not protect from STDs.
 - Used by females only.

II. Spermicidal Jellies, Foams and Creams

- ❖ Kill the sperms by acidic pH.
- ❖ Used along with barrier methods to increase their efficiency.

III. Intra-uterine devices (IUDs)

- ❖ Inserted by doctors or expert nurses in the uterus.
- ❖ IUDs are one of the most widely accepted methods of contraception in India.



- ❖ Mechanism of action of IUDs: They increase phagocytosis of sperms within the uterus and the Cu ions released suppress sperm motility and the fertilising capacity of sperms. The hormone-releasing IUDs, in addition, make the uterus unsuitable for implantation and the cervix hostile to the sperms.

IV. Oral Contraceptive Pills (OCP) or Tablets

Parameter	Non-steroidal	Steroidal
Example of Composition	SAHELI (Centchroman)	Progestogens alone or combination of Progestogens and estrogens.
Mode of action	Interferes with implantation	Inhibit ovulation and implantation, also alter the quality of cervical mucus to retard entry of sperms.
Dosage	'Once a week' pill.	Pills have to be taken daily for a period of 21 days starting preferably within first 5 days of menstrual cycle
Effectiveness	High contraceptive value.	Pills are very effective with lesser side effects and well accepted by females
Saheli was developed at CDRI, Lucknow, Uttar Pradesh		

Medical Termination of Pregnancy (MTP)/Induced Abortion

- ❖ MTP: Intentional or voluntary termination of pregnancy before full term.
- ❖ MTP was legalized in India in 1971.
- ❖ 40–50 million MTPs are performed every year.
- ❖ 1/5th of the total number of conceived pregnancies.

When can MTP be Performed?

- ❖ Unwanted pregnancy due to rape, failure of contraception, casual unprotected intercourse.
- ❖ If continuation of pregnancy could harm the mother or foetus or both.
- ❖ Intention behind MTP amendment act 2017, (Government of India)
 - Reducing the incidence of illegal abortion.
 - Decrease consequent maternal mortality and morbidity.
 - MTPs are safe upto 12 weeks but riskier in 2nd trimester yet both are legal.
 - Amniocentesis and MTPs have been misused in context of female foeticide.

Amniocentesis

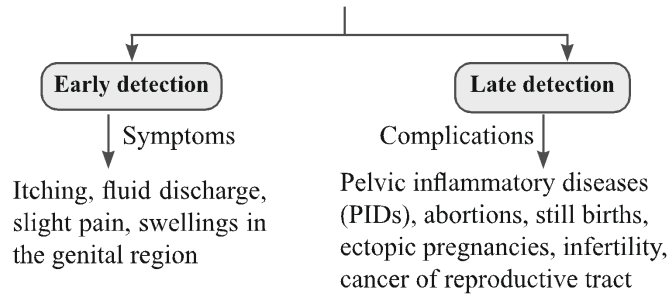
- ❖ Analyse foetal cells and dissolved substances from amniotic fluids.
- ❖ Technique used to check for genetic disorders such as Down's syndrome, sickle-cell anemia, etc.
- ❖ Statutory ban on this technique in India to prevent female foeticide.

Sexually Transmitted Diseases (STDs)

- ❖ Alternate names: Venereal diseases (VD) or reproductive tract infections (RTIs).
- ❖ High vulnerability/risk group: 15-24 years.
- ❖ Mode of transmission: Sexual intercourse.

Category	Disease
Bacterial	Gonorrhea, Syphilis, Chlamydia
Protozoan	Trichomoniasis
Viral	Genital herpes, Hepatitis-B, Genital warts, AIDS

- ❖ Bacterial and protozoan diseases are completely curable if detected early and treated properly.



❖ Mode of Transmission:

- Sharing of injection needles, surgical instruments with infected persons.
- Transfusion of blood.
- Unsafe sexual contact.
- From infected mother to foetus.

Infertility

Unable to produce children in spite of unprotected sexual cohabitation.

Reasons:

- ❖ Physical
 - * Diseases
- ❖ Psychological
 - * Congenital
- ❖ Immunological
 - * Abortions
- ❖ Infertility as a problem could be with either the male or female partner.
- ❖ In India, females are blamed more often than male for the couple being childless.

Assisted Reproductive Technologies (ART)

Parameter	In-vitro fertilization	In-vivo fertilization	Other details of ART involved:
Site of fertilization	Outside the body in simulated conditions in laboratory	In the female reproductive tract	❖ ICSI: Intra cytoplasmic sperm injection <ul style="list-style-type: none"> • Sperm injected directly into the egg. • Artificial Insemination (AI): • Semen introduced in vagina or uterus. • Low sperm count or inability of male to inseminate the female. • IUI: Intrauterine insemination • GIFT: Gamete intra fallopian transfer • Female can provide conditions for fertilization and further development
Embryo transfer	Yes	No	
Example of techniques	ZIFT, IUT, ICSI	GIFT, AI, IUI	

Site of Embryo Transfer (ET) based on number of blastomeres.

Parameter	Up to 8 blastomeres	More than 8 blastomeres
Location	In fallopian tube	In uterus
Technique	ZIFT: Zygote Intra fallopian transfer	IUT: Intrauterine transfer
Test tube baby programme involves techniques with in-vitro fertilization.		



PW Web/App - <https://smart.link/7wwosivoicgd4>

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