

# Family planning & Contraception

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## **Definition of family planning:**

According to an expert committee of WHO (1971) family planning as “a way of thinking & 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”

## **Definition of contraception:**

Contraception is the prevention of conception by methods other than abstinence from coitus.

## **Objectives of family planning:**

- To avoid unwanted births
- To bring about wanted birth
- To regulate the interval between pregnancy
- To control the time at which birth occur in relation to the ages of the parents
- To determine the number of children in the family
- To reduce abortion
- To check over population
- To improve the economic condition of the country and eliminate poverty
- To improve the developmental activities of the country

## **Benefits of family planning:**

### *1. Benefits for the family:*

- Economic solvency – The economic condition of the family will be better. Land will be adequately divided between the members of the family.
- Housing will be better
- Education of the children will be better
- Brings harmony to the family
- Mother’s health will be protected
- Children’s health will be better

### *2. Benefits for the nation:*

- The overall developmental activity of the country will gain a momentum
- Economic solvency will be achieved
- Food problem, housing problem, unemployment problem will be eradicated
- Adequate health services will be offered
- Anti social activity will not be offered
- Political stability will be obtained.

## **Effects of over population**

1. *On nation:*
  - a. Food shortage
  - b. Poor economy
  - c. Poor socio-economic condition
  - d. Housing problem
  - e. Employment problem
  - f. Lack of proper sanitation
2. *On family:*
  - a. Poverty of the family
  - b. Housing problem
  - c. Education problem of the children
  - d. Family instability
  - e. Ill effect on parental health
3. *On mother:*
  - a. Poor health
  - b. More dependent on the mother
  - c. Increase mortality rate
4. *On children:*
  - a. Increased infant mortality rate
  - b. Educational problem
  - c. Food problem
  - d. All children not receive equal affection from their parents and hence it may bring about adverse effect on them.
  - e. Delinquency increases

## **Causes of high fertility in Bangladesh:**

1. Early marriage
2. Universal marriage including widow marriage
3. Poverty and poor economic condition
4. High dependence on agriculture
5. Illiteracy
6. Superstition
7. Religion binding
8. Less motivated people
9. Increased cost of contraceptives

### **Causes of low fertility rate:**

1. Raising marriageable age from 18 to 20 at least, best 25 years
2. Improvement of socio-economic condition
3. Urbanization and industrialization of the country
4. High literacy rate
5. High motivated people
6. Availability of contraceptives

### **Contraceptive methods**

**Contraceptive:** It includes all temporary and permanent measures designed to prevent pregnancy resulting from coitus.

**Contraceptive methods:** These are the preventive methods to help women avoid unwanted pregnancies

#### **Methods of contraception:**

##### **A. Spacing or temporary methods**

###### *1. Barrier methods*

###### a. Physical methods

- Condom
- Vaginal diaphragm
- Cervical cap

###### b. Chemical methods

- Foams, tablet
- Suppository
- Soluble films

###### c. Combined methods – condom with spermicidal jelly.

###### 2. Intrauterine contraceptive devices (IUCD)

##### **3. Hormonal methods**

###### a. Oral pill

- Combined pill- estrogen and progesterone
- Mini pill – progesterone only pill
- Sequential pill – 2weeks estrogen only and then 3 weeks both estrogen and progesterone
- Post coital pill – emergency pill 1 tablet within 72 hours after coitus
- Male pill – under research

- b. *Depot:*
  - Injectables: Depot provera
  - Subcutaneous implants: Norplant
  - Vaginal rings
- 4. *Post contraception methods (termination of pregnancy):*
  - Menstrual regulation (MR)
  - Menstrual induction (MI)
- 5. *Behavioral methods (traditional methods)*
  - Sexual abstinence
  - Incomplete coitus
  - Natural methods such safe period, basal body temperature method
- 6. Contraceptive immunization – birth control vaccine

**B. Terminal or permanent methods:**

- Male sterilization – Vasectomy
- Female sterilization - Tubal ligation or Tubectomy

**Features of contraceptive: It should be –**

- Effective
- Safe and free from any side effect
- Acceptable to all
- Inexpensive and easy of access
- Simple to administer
- Independent of coitus
- Reversible
- Long lasting to obviate frequent administration
- Require a little or no medical supervision

**Barrier methods:** It may be defined as contraceptive techniques that prevent sperm in the ejaculate from entering into the vagina or cervical os

*Types of barrier methods:*

1. Condom
  2. Diaphragm (Dutch cap)
  3. Cervical cap
  4. Vaginal sponge
- a. Advantages/ Benefits/ Merits of condom:**
- i. Simple, easily, available, effective
  - ii. Safe and inexpensive
  - iii. Easy to use, do not require medical supervision

- iv. No side effect
- v. Light compact and disposable
- vi. Provides protection not only pregnancy but also against other infections

**Disadvantages/Side effect/ Demerits:**

- i. Relatively expensive
- ii. Not 100% effective, but 85% effective
- iii. May slip off or tear during coitus
- iv. It is less pleasurable for both parties
- v. Can make vaginal entry more difficult
- vi. Prolonged use may produce mental stain and psychological problems

**Diaphragm:** It is a dome shape rubber cap with a flexible rim made of spring or meta. Size: It commonly used are 60, 65, 70, 75 and 80

**Contraindications:**

- Allergy to rubber, spermicidal jelly or cream
- Recurrent cystitis
- History of toxic shock syndrome
- Prior pregnancy while using the diaphragm

**Advantages/ Benefits/ Merits:**

- It is a safe mechanical method for the intelligent women
- It is easy to apply
- It is cheap
- It does not interfere with the natural coitus
- It allows women to control conception

**Disadvantages/ Side effects/ Demerits:**

- Not 100% effective, it is about 86%
- A trained person must be needed for insertion
- Produces psychological strain, disturbs sexual relationship
- Foul smell may be produced if the device is kept too long in place

**Intrauterine contraceptive devices (IUCDs):** It is a foreign object that is placed into the uterine cavity to prevent pregnancy.

**Types of IUCDs:**

- I. Inert IUCD such as lipes loop
- II. Copper IUCD such as Cut 380A, Cu7
- III. Hormone releasing IUCD such as progestasert

**Time for IUCD insertion:**

- The most appropriate time is during menstruation or within 10 days from the beginning of the menstrual period
- Post puerperal insertion (after delivery or abortion to 6 weeks)
- The insertion can be taken up immediately after delivery or abortion

**Contraindication of IUCD:**

1. *Absolute contraindications:*

- Active pelvic infection
- Pregnancy

2. *Relative contraindications:*

- i. Women having irregular and heavy periods, uterine fibroids or other pelvic disease
- ii. Present or past pelvic infection
- iii. Anatomical uterine anomaly
- iv. Nulliparaus women
- v. History of previous caesarean section or hysterectomy
- vi. Purulent cervicitis
- vii. Post partum endometritis
- viii. Recurrent sexually transmitted diseases
- ix. Multiple sexual partners
- x. History ectopic pregnancy
- xi. Impaired coagulation
- xii. Unconceptable side effects during previous trials

**Advantages/ Benefits/ Merits:**

- Semi-permanent, once inserted can be kept for 3-5 years
- Doses not require everyday use
- Simple, no complex produce, no hospitalization is required

- Higher fertility must be present if any one like to be conceive it may be possible within a few months of removal of that.

**Disadvantages/Side effects/Complications:**

- Fainting and collapse of the patient at the time of IUCD insertion
- Bleeding
- Pain
- Pelvic inflammatory diseases
- Cervical injury
- Perforation of the uterus
- Ectopic pregnancy
- Accidental pregnancy
- Spontaneous expulsion

**Oral hormonal contraceptives:**

***Types of oral contraceptives pills:***

- a. Combined pill
- b. Mini pill

**Combined pill:** these are combination of estrogen & progesterone

**Mechanism and action of combined pil:**

- Suppression of ovulation by altering the cyclical hypothalamic pituitary ovarian secretion of follicle stimulating hormone(FSH) and luteinizing hormone(LH)
- On cervical mucus and endometrium which lead to these tissues being unreceptive to spermatozoa as well as fertilized ovum.

**Action of Mini pill:**

- Mini pill makes the cervical mucus hostile to spermatozoa
- Change in the character of the endometrial lining to inhibit the implantation of the fertilized ovum.
- They may interfere with capacitation of spermatozoa and the function of the corpus luteum.

**Techniques of oral pill:** A full assessment of the woman before taking oral contraceptives to exclude contraindications and pelvic disease.

- I. **Combined pills:** One strip contains 28 tablets (21 white tablets and 7 brown iron tablets)
  - The woman is instructed to take one pill at the same time each day preferably at night and then 7 iron tablets one per day.
  - When taking is discontinued for two or more days, the course is repeated again after 7 tablets
- II. **Mini pill:** These are taken continuously. (One pill a day, throughout the cycle)

**Advantages/ Benefits/ Merits of oral pill:**

- This method is very simple for those women who have no serious side effect
- There is no interference with sexual act
- The woman enjoys a self-controlled regular menstrual cycle
- Most pill users experience a sense of well-being
- It is reversible
- Protect from ovarian and endometrial cancer
- Treatment for ovarian cysts
- Decrease in the incidence of benign breast masses
- Decrease in incidence of PID (pelvic inflammatory disease)

**Disadvantages/complications/ adverse effect/ demerits of oral pill:**

- I. *Most common side effects*
  - Bleeding disturbance
  - Weight gain
  - Skin changes
  - Breast tenderness or fullness
  - Depression or mood change
- II. *More serious but less common side effect:*
  - Hypertension
  - Stroke
  - Thrombotic disease
  - Gallstones
  - Cancer of breast, uterus etc
- III. *Temporary effects*
  - Nausea and vomiting
  - Migraine
  - Leukemia etc



## **Contraindication of oral pill:**

### *I. Absolute contraindication of oral pill:*

- History of thrombophlebitis
- Cerebrovascular disease
- Ischemic heart disease
- Breast cancer
- Liver disease
- Vaginal bleeding
- Pregnancy

### *II. Relatively contraindication*

- Headache
- Hypertension
- Diabetes
- Asthma
- Sickle cell disease
- Elective surgery