

# Complete BIOLOGY

# NEET · CBSE eBOOKS CLASS 11&12th

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## CLASS 12<sup>th</sup>

### **Reproductive Health**

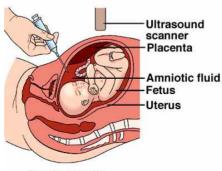


#### 01. Introduction

Reproductive health refers to healthy reproductive organs with normal functions. However, it has a broader perspective as it involves well-being reproductive health means well being in physical emotional behavioral and social aspects of reproduction. Therefore, reproductively, to a healthy society of people having physically and functionally normal reproductive organs and normal emotional and behavioral interactions and among them in all sex-related aspects.

#### **Reproductive Health Problems and Strategies**

- (i) Over population : The main problem of India is its excessive population is directly connected with reproductive health To achieve total reproductive health, some plans and programs were started Family planning program was started in 1951 in India and was periodically assessed over The major tasks carried out under these programs are to provide facilities and support for building up a reproductively healthy society.
- (ii) Awareness about reproduction : Audio-visual and print middle government and non-governmental agencies are doing a good job to create awareness among people about reproduction in humans.
- (iii) Sex Education : Sex education in schools should also be introduced and encouraged to provide right information about myths and misconceptions about sex-related aspects.
- (iv) knowledge of growth of reproductive organs and STDs : proper information about reproductive organs, adolescence (period of rapid growth between childhood and adulthood), safe and hygienic sexual practices sexually transmitted diseases (STDs), e.g., Aids etc., would help to lead a reproductively healthy life.
- (v) Birth control devices and care of mother and child : Fertile couples and people of marriageable age group should know about available birth control devices, care of pregnant mothers, postnatal (after birth) care of the mother and child, importance of breast feeding, equal importance for the male and female child, etc.
- (vi) **Prevention of sex abuse and sex related crimes :** Awareness of problems due to uncontrolled population growth, social evils like sex abuse and sex-related crimes, etc. need to be created so that people should think and take up necessary steps to prevent them and thereby build up a reproductively healthy society.
- (vii) Amniocentesis Meaning and use : Amniocentesis is a foetal sex and disorder determination test based on the chromosomal pattern of the embryo's cells in the amniotic fluid surrounding the developing embryo.



Amniocentesis



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**Procedure :** Amniotic fluid contains cells from the skin of the foetus and others sources. These cells can be used to determine the sex of the infant, to identify some abnormalities. in the number of chromosomes and to detect certain biochemicals and enzymatic abnormalities. If it is established that the child is likely to suffer from a serious incurable congenital defect, the mother should get the foetus aborted.

Misuse of Amniocentesis : it is being misused to know the sex of unborn baby followed by medical termination of foetus, in case its female.

- **NOTE** Recent studies have discovered that amniotic fluid can be a rich sources of multipotent mesenchymal, hematopoietic, neural, epithelial and endothelial stem cells.
  - (viii) A Research in reproductive health area : it should be encouraged and supported to find out new methods. "Saheli" a new oral contraceptive for the females was by our scientists at central Drug Research Institute (CDRI) in Lucknow, India.
  - (ix) Medical facilities : Better awareness about sex related problems, prenatal care of mother, medically assisted deliveries and post natal care of mother and infant decrease maternal and infant mortality. Small families, better detection and cure of sexually transmitted diseases (STDs) and increased medical facilities for sex-related problems, etc. indicate improved reproductive health of male and female individuals and children.

#### Measures to Control Over Population

- (a) Education : people, particularly those in the reproductive age group, should be educated about the advantage of a small family. Mass media and educational institutions can an play important role in this campaign.
- (b) Marriageable Age : Raising of the age of marriage is a more effective means to control the population (now marriageable age of female is 18 years and that of male is 21 years).
- (c) Incentives : Couples with small families should be given incentives.
- (d) Family planning : There are many birth control measures which can check birth rate.

#### 02. Human Population Growth

Human population growth is measured as the annual average growth rate which is calculated as follows:

Average annual growth rate (in percent) =  $\left[\frac{P_2 - P_1}{P_1 \times N}\right] \times 100$ 

where,  $P_1$  is population size in the previous census;  $P_2$  is population size in the present census: and

N is numbers of years between two census.



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