

## Topic 1

1. Reproductive health is the total well being in all aspects of reproduction. It includes physical, emotional, behavioural and social well being. Lack of awareness among youth about unprotected sex, may lead to sexually transmitted diseases such as AIDS, syphilis, etc. and unwanted pregnancies. Hence, it is necessary to create awareness among people, especially the youth regarding various reproduction related aspects as the young individuals are the future of the country and they are most susceptible of acquiring sexually transmitted diseases. Creating awareness about the available birth control methods, sexually transmitted diseases and their preventive measures, and gender equality will help in bringing up a socially conscious healthy family. Spreading awareness regarding uncontrolled population growth and social evils among young individuals will help in building up a reproductively healthy society.

2. The aspects of reproductive health which need to be given special attention are :

(i) Introduction of sex education in schools to give right information to the young minds about reproductive organs, accessory organs of reproduction, secondary sexual characters, adolescence and related changes, safe and hygienic sexual practices, STDs, etc.

(ii) Providing knowledge about available birth control methods, care of pregnant mothers, post-natal care of the mother and child, importance of breast feeding, etc.

(iii) Creating awareness about consequences of uncontrolled population growth and social evils (sex abuses and sex-related crimes, use of drugs, tobacco and alcohol etc.) among young people.

3. The reproductive health in our country has improved in the last 50 years. Some areas of improvement are :

(i) Massive child immunisation.

(ii) Increasing use of contraceptives.

(iii) Better awareness about sex related matters.

(iv) Increased number of medically assisted deliveries and better post-natal care leading to decreased maternal and infant mortality rates.

(v) Increased number of couples with small families.

(vi) Better detection and cure of STDs and overall increased medical facilities for all sex related problems.

## Topic 2

1. Population in India is increasing at a very fast rate and such a growth necessitated intense use of contraceptive methods to bring all the fertile couples under its cover. It will help in bringing the birth rate down and consequently check the population growth. Therefore, the use of contraceptives is justified. It is essential to mention here that the selection of a suitable contraceptive method should be practiced in consultation with qualified doctors. The government provides these facilities free at the family planning centres. Contraceptives are given free or at nominal prices at these centres to the couples of reproductive age desirous of preventing conception.

2. Devices or other agents that are used in artificial methods of preventing pregnancy are known as contraceptives. An ideal contraceptive should be user-friendly, easily available, effective with least or no side effects, should not interfere with the sexual drive, desire or the sexual act of the user. It should also be reversible. But removal of gonads is an irreversible process and will lead to infertility in both male and female. Moreover gonads also produce hormones which are essential for the body. Thus, removal of gonads cannot be considered as a contraceptive option.

## Topic 3

1. Diseases or infections which are transmitted through sexual intercourse are collectively called sexually transmitted diseases (STDs) or reproductive tract infections (RTIs), *e.g.*, gonorrhoea, syphilis, genital herpes, AIDS, etc. The measures that one has to take to prevent from contracting STDs are :

(i) Avoid sex with unknown partners/multiple partners.

(ii) Use condoms during coitus.

(iii) In case of doubt, go to a qualified doctor for early detection and get complete treatment if diagnosed with disease.

## Topic 4

1. Some methods to assist infertile couples to have children are :

(i) Test tube babies – In this method, the fusion of ovum and sperm is done outside the body of woman to form a zygote which is allowed to divide to form an embryo. This embryo is then implanted in uterus where it develops into a fetus.

(ii) Artificial insemination technique (AIT)– In this, the semen collected either from husband or a healthy donor is artificially introduced either into the vagina or into the uterus (IUI – Intra Uterine Insemination) of the female.

(iii) Gamete intra fallopian transfer (GIFT)– This method is used in females who cannot produce ova but can provide suitable environment for fertilisation and further development of embryo in the oviducts. In this technique, both the sperms and unfertilised oocytes are transferred into the fallopian tubes. Fertilisation is then taking place *in vivo*, i.e., inside the body of the female.

(iv) Intra cytoplasmic sperm injection (ICSI)– This is another specialised technique to form an embryo in the laboratory in which a sperm is directly injected into the ovum placed in a nutrient broth.

(v) Zygote intra fallopian transfer (ZIFT)- The zygote or early embryo (with upto 8 blastomeres) is later transferred to fallopian tube of woman by ZIFT.

**2.** (a) True : One-third of all pregnancies abort spontaneously (called miscarriage) within four weeks of conception and abortion passes unrecognised with menses.

(b) False : Infertility is defined as the inability of the couple to produce viable offspring. It is due to abnormalities/defects in either male or female or both.

(c) True : Complete lactation is a natural method of contraception as during this period ovulation does not occur, but this is limited to a period of 6 months after parturition.

(d) True : Creating awareness in people about sex related aspects like right information about reproductive organs, accessory organs of reproduction, safe and hygienic sexual practices, birth control methods, care of pregnant women, post-natal care of mother and child, etc., can help in improving the reproductive health of people.

**3.** (a) Surgical methods of contraception prevent gamete transport and hence prevent fertilisation.

(b) Only few sexually transmitted diseases are completely curable if detected early and treated properly.

(c) Oral pills are very popular contraceptives among the educated urban women.

(d) In E.T techniques, 8 celled embryos are transferred into fallopian tubes and more than 8 celled embryos are transferred into the uterus.

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