

Chapter: Reproductive Health

Exercise

Question 1: What do you think is the significance of reproductive health in society?

Answer: Reproductive health refers to the total well-being of all aspects of reproduction. It consists of physical, emotional, behavioral, and social well-being. In addition to maintaining a "satisfying and safe sex life," reproductive and sexual health includes the freedom and capacity to reproduce when and how one decides. The following are some of the most common reproductive health-related concerns:

- Population explosion
- Disfigurements
- Poor health of the pregnant mother and hence the poor health of baby's.
- Marriage before adolescence (10-19 years)
- Sexually transmitted diseases (STDs)
- The increased death rate of pregnant mothers and foetuses

It is essential to understand the significance of reproductive health since it prevents the spread of many sexually transmitted diseases including syphilis, AIDS (Acquired Immunodeficiency Syndrome) and gonorrhoea that is transmitted from one person to another through sexual contact. Rising awareness about sex education helps to keep the population under control, and thus preventing a population explosion. Hence, it is necessary to create awareness among people, especially adolescents, regarding various reproduction-related aspects, as these young individuals are the future of the country and they are most susceptible to acquiring sexually transmitted diseases. Creating awareness about methods of contraception, sexually transmitted diseases and preventative measures, and gender equality will contribute to the development of a socially conscious and healthy family. Raising awareness among adolescents about uncontrolled population growth and social evils will help in the development of a reproductively healthy society.

Question 2: Suggest the aspects of reproductive health which need to be given special attention in the present scenario.

Answer: Reproductive health refers to the total well-being of all aspects of reproduction. The aspects that must be given special attention in the present scenarios are: -

- Counselling and raising awareness among people, particularly adolescents, about various aspects of reproductive health, such as sexually transmitted diseases, available contraceptive methods, cases of pregnant mothers, unwanted pregnancies etc.,
- Providing support and facilities such as medical assistance to people during pregnancy, sexually transmitted diseases, abortions, contraceptives, infertility, postnatal care of child and mother etc. to build a reproductively healthy society is a priority.

Question 3: Is sex education necessary in schools? Why?

Answer: Yes, sex education in schools is necessary. It would provide the right information to young individuals at the right time about various aspects of reproductive health, such as reproductive organs, puberty and adolescence-related changes (sexual maturity), safe sexual practices, sexually transmitted diseases (STDs), etc. Adolescents and young people are more susceptible to getting sexually transmitted diseases. Hence, providing information to young individuals at the correct time can help them live a reproductively healthy life while also protecting them from sex-related myths and misconceptions.

Question 4: Do you think that reproductive health in our country has improved in the past 50 years? If yes, mention some such areas of improvement.

Answer: Yes, in the last 50 years, India's reproductive health has improved significantly. Some areas of improvement are as follows:

- A massive immunisation programme for children has resulted in a reduction in infant mortality rates.
- Maternal and infant mortality rates have dropped significantly as a result of improved postnatal care.
- Family planning has encouraged people to have smaller families.
- Sexually transmitted diseases and undesired pregnancies have decreased as a result of the utilization of contraceptives.

Question 5: What are the suggested reasons for population explosion?

Answer: The human population is increasing day by day, which leads to a population explosion. It is because of the following major reasons:

- Decreased death rates such as infant mortality rate (IMR) and maternal mortality rate (MMR).
- Increased birth rate and a longer life expectancy due to better medical facilities.
- Increase in the number of individuals of reproductive age.
- Due to illiteracy, people are unaware of birth control methods (contraceptive methods), which leads to unwanted pregnancies.
- Lack of female education and early marriages.

The death rate has declined during the last 50 years. The factors leading to a decreased death rate (mortality rate) and an increased birth rate (natality rate) are control of diseases, awareness and spread of education, improvement in medical facilities, ensured food supply in emergency situations, etc. As a result of all of this, an individual's life expectancy has increased.

Question 6: Is the use of contraceptives justified? Give reasons.

Answer: Yes, the use of contraceptives is absolutely justified. The human population is rapidly growing. As a result, regulating population growth by limiting reproduction has become a vital need

in current scenarios. Various contraceptive devices, such as condoms, contraceptive implants, oral contraceptive pills, etc., have been devised to reduce unwanted pregnancies, which helps in bringing down the increased birth rate and, hence, preventing the population explosion. Contraceptive methods provide a number of advantages other than their primary objective of pregnancy prevention. Use of contraceptive lowers the risk of pregnancy-related morbidity and mortality, decrease the chances of some reproductive cancers such as endometrial and ovarian cancer and protect against acute pelvic inflammatory disease and ectopic pregnancies, and can be used to treat a variety of menstrual symptoms and disorders. Using barrier methods like condoms, especially when combined with spermicides, protects the people involved in a sexual relationship from sexually transmitted diseases (STDs) like AIDS.

Question 7: Removal of gonads cannot be considered as a contraceptive option. Why?

Answer: Contraceptive devices are used to prevent unwanted pregnancy and the transmission of sexually transmitted diseases (STDs). There are a number of different ways to prevent unwanted pregnancy, including natural, barrier, oral, and surgical methods. However, the entire removal of gonads cannot be used as a contraceptive method since it would result in infertility and a lack of certain hormones necessary for the normal functioning of accessory reproductive organs. As a result, only those contraceptive techniques that prevent fertilization rather than make the person infertile for life can be employed.

Question 8: Amniocentesis for sex determination is banned in our country. Is this ban necessary? Comment.

Answer: Amniocentesis is a prenatal diagnostic method that uses chromosomal patterns to diagnose the sex and metabolic abnormalities of the growing foetus in the mother's uterus. This method was developed to identify any genetic disorders that may be present in the foetus. Unfortunately, this technique is being misused to discover a child's sex before birth, resulting in the abortion of a female foetus. Some of the reasons for female foeticide (practice of aborting a foetus) are preference of son over daughter, social and financial security associated with sons, low status of women, socio-cultural practices such as dowry and violence against women. The sex ratio in the Indian population is becoming adverse to women due to female foeticides. In 2020, India's total population had a sex ratio of 108.18 men per 100 females. As a result, it is important to prohibit the use of the amniocentesis technique for determining the sex of a child in order to prevent the rising number of female foeticides.

Question 9: Suggest some methods to assist infertile couples to have children.

Answer: Infertility is defined as a couple's inability to give birth to a child or conceive a child in spite of unprotected sexual cohabitation. In general, infertility is described as the inability to conceive (get pregnant) after one year (or more) of unprotected intercourse. Infertility can be due to innumerable reasons, like physical, congenital, diseases, drugs, immunological or even psychological. It could be caused by anomalies in either the male or female partner or even both of them. The following are some of the procedures used to help infertile couples conceive:

- **Test tube babies:** This involves in-vitro fertilization where the sperm and egg are fertilized outside of the female body. The zygote is then transferred into the uterus or fallopian tube of a normal female. The babies born as a result of this process are referred to as “test-tube babies”.

- **Gamete Intrafallopian Transfer (GIFT):** It is a procedure that involves the transfer of gametes (ovum) from a donor into the fallopian tube of a recipient female who is unable to produce eggs but can conceive and provide the proper conditions for the growth and development of an embryo.
- **Intracytoplasmic sperm injection (ICSI):** An intracytoplasmic sperm injection is a specialized form of In Vitro Fertilization (IVF) that involves the injection of a single sperm cell directly into the cytoplasm of an ovum (mature egg).
- **Artificial insemination:** Artificial insemination is the process of transferring sperm from a healthy male donor into the vaginal or uterine cavity of a female recipient. This method is used when the male partner is unable to inseminate the female or has poor sperm count.

Question 10: What are the measures one has to take to prevent from contracting STDs?

Answer: Sexually transmitted diseases (STDs) are transferred from one person to another through sexual contact with the infected. Adolescents and young individuals are at the greatest risk of acquiring these sexually transmitted diseases (STDS). As a result, raising awareness among young individuals and adolescents regarding the consequences can prevent them from contracting STDs. The use of contraceptives, such as condoms, contraceptive implants, etc., during intercourse, can prevent the spread of these diseases. Additionally, intercourse with unknown or several partners should be avoided because they may be infected. If in doubt, consult an expert as soon as possible to ensure early detection and cure of the disease.

Question 11: State True / False with explanation

- Abortions could happen spontaneously too. (True/False)**
- Infertility is defined as the inability to produce viable offspring and is always due to abnormalities/defects in the female partner. (True/False)**
- Complete lactation could help as a natural method of contraception. (True/False)**
- Creating awareness about sex-related aspects is an effective method to improve the reproductive health of people. (True/False)**

Answer:

- (a) Abortions could happen spontaneously too.**

True

Abortion, or the medical termination of a pregnancy, can happen spontaneously too. This may be due to the mother's bad health or the foetus's poor development. Sometimes abortion occurs when a mother's uterus is not adequately developed to sustain the pregnancy.

- (b) Infertility is defined as the inability to produce viable offspring and is always due to abnormalities/defects in the female partner.**

False

Infertility is defined as a couple's inability to conceive a child after unprotected sexual activity. It could be caused by anomalies in either the male or female partner or even both of them.

(c) Complete lactation could help as a natural method of contraception.

False

Lactational amenorrhea, or complete lactation, is a natural means of contraception. It is, however, limited to the lactation period, which lasts for six months after parturition.

(d) Creating awareness about sex-related aspects is an effective method to improve the reproductive health of people.

True

Creating awareness about sex-related aspects, methods of contraception, sexually transmitted diseases and preventative measures help to improve the reproductive health of people and contribute to the development of a socially conscious and healthy family.

Question 12: Correct the following statements:

- a. Surgical methods of contraception prevent gamete formation.**
- b. All sexually transmitted diseases are completely curable.**
- c. Oral pills are very popular contraceptives among rural women.**
- d. In E. T. techniques, embryos are always transferred into the uterus.**

Answer:

(a) Surgical methods of contraception prevent gamete formation.

Correction: Surgical contraception prevents the flow of gametes during sexual intercourse.

(b) All sexually transmitted diseases are completely curable.

Correction: If caught early and treated properly, several sexually transmitted diseases (STDs) can be cured. The majority of sexually transmitted diseases affect both men and women, although the health issues they cause are often more severe in women. If a pregnant woman has an STD, it can cause serious health-related issues for the baby. Antibiotics can treat sexually transmitted diseases caused by bacteria or parasites. Although there is no treatment for STDs caused by viruses, medicines can often help with symptoms and reduce the chance of spreading infection. AIDS (Acquired Immunodeficiency Syndrome) is still an incurable disease.

(c) Oral pills are very popular contraceptives among rural women.

Correction: Oral contraceptives pills are particularly popular among urban women.

(d) In E. T. techniques, embryos are always transferred into the uterus.

Correction: The embryo transfer method (E.T. techniques) involves transferring 8 celled embryos into the fallopian tube and more than 8 celled embryos into the uterus.