

EXPERIMENT-10

Aim: To study the family planning devices.

Theory:

Family planning or birth control is the process to prevent fertilization of ovum and sperm and thereby avoid pregnancy using various devices or medicines. Looking at long term effect with minimum side effects use of devices is more common over consumption of medicines,

The various family planning devices are as follows:

1. Barrier devices
2. Intrauterine devices (IUDs)
3. Implants

Barrier Devices

These devices are designed to prevent access of sperms to the female reproductive tract

(a) Male Barrier Devices:

Male Condom

The condom is the most widely used device by the males. It is a non-porous elastic rubber sheath worn over the erected penis prior to start of physical intercourse which physically blocks ejaculated sperm from entering the female reproductive tract. In addition, it gives the protection against sexually transmitted diseases (STDs) like AIDS, syphilis and gonorrhoea. It is very cheap and highly effective contraceptive device.

Female barriers devices:

1. Diaphragm: It is the rubber dome structure which is fitted over the cervix by the female with or without spermicidal jelly. It is made from latex, silicone, or natural rubber. It works either by blocking access of sperms to cervix or by killing them with spermicide.

2. Female Condom: It is also called as vaginal pouch and made up of two flexible rings connected by nitrile, latex or polyurethane sheath. One ring lying inside the sheath is inserted to fit in the cervix and other ring remains outside the vagina and covers the external genitals. Use of appropriate creams, jellies, foams, suppositories, etc. in the female before intercourse, may be combined with barriers.

3. Sponge: It is a soft foam containing spermicide which is inserted into the vagina to cover the cervix. It must be moistened with water to activate spermicide that kills sperms and prevent their entry into cervix. It should not be kept in vagina more than 30 hrs.

4. Cervical Cap: It is made up of silicone which fits over the cervix and blocks sperm from entering the uterus through the external orifice of the uterus.

Intrauterine Devices (IUDs):

IUD is made up of either plastic or metal that is placed in the uterus. IUDs are of two types viz. non-hormonal copper IUDs and hormonal IUDs. Copper IUDs (E.g. Copper T) work by disruptsperm motility and damaging sperms by its spermicidal action. The hormonal IUDs contain progesterone which act by blocking the endometrial proliferation making it unsuitable for fertilization and preventing the sperm penetration by increasing the viscosity of cervical mucus. IUDs have a major advantage of long term use (6-10 years) with flexibility to remove when desired.

Implants: These are small tubes which are placed under the skin of upper arm. Hormones from these tubes prevent sperms from approaching egg and inhibit release of egg.

Observation: In this experiment, We have studied about family planning device