

CHAPTER-V

CONTRACEPTIVES USED FOR BIRTH CONTROL

As we have already seen that India was the country in the world to recognise family planning as an official programme at the national level since 1952. As the first Five Years Plans showed that the growth of population was much higher than anticipated a full-fledged department of family planning was established in 1966. The family planning programme in India started with a very cautious approach. The fundamental aim of family planning is to reduce the birth rate upto that level which the national economy can sustain and to create a suitable atmosphere for family welfare. It is, therefore, a matter of great urgency that the birth rate be controlled not only in the interest of socio-economic development but also to prevent the further lowering of standards of living. According to Gonsalves, E.P.¹ "Family Planning is a set of practices which help to avoid unwanted pregnancies, to bring about wanted births, to regulate the intervals between pregnancies and to determine the number children in the family."

It must be realised that family planning is not synonymous with birth control, and that the modern concept of family planning

1. Dr. Gonsalves, E.P. - "Preventive Medicine and Public Health", p. 557.

not only provides for the proper spacing and limitation of births but also for advice on such matters such as sterility, sex education etc.

Family planning means planned parenthood i.e. spacing the birth through methods birth control. It gives advice to married couples to remove sex infertility. It helps to the mother as repeated child births will cause strain to the health of the mother and maternal morbidity. It helps to the father, who is usually the earning member as more children, the finance of family will collapse. Thus family planning gives stress on avoidance of an unwanted pregnancy, to limit the size of family and to control the interval between two births in order to improve the health of the mother and child, by practicing various contraceptives of birth control.

The term contraceptive includes all temporary and permanent and natural as well as artificial measures designed to prevent pregnancy. The practice of artificial contraception has made much progress in the 19th and 20th centuries but it has an ancient beginning.

The oldest prescription for a pessary is found in the Peshi Papyrus² (1850 B.C.). This enjoins the insertion of a pessary made by mixing crocodile dung with honey in the vagina before coitus. The same prescription was popular in India with

2. Bahadur, K.P. - "Population Crisis in India", p. 57.

the variation that elephant dung was used.

In Vatsyana's 'Kam Sutra'³ avoidance of sexual intercourse from the first to the fourteenth day after the appearance of the menstrual flow or on the eight or fourteenth day of each fortnight is prescribed for fertility, which is called as 'safe period'.

In the second century Soranus of Ephesus got pessaries made of honey and Cedar Wool oil mixed with Pomegranate pulp or the inside of figs were used for birth control.

In the sixth century Aetius of Amida mentioned two pessaries for birth control one is to be inserted before coitus and other after menstruation.

In the ninth century, the famous Physician Rhazes of Baghdad wrote about Pessaries of Cabbage, Colocynth pulp, the inner skin of pomegranates, animals' ear wax, elephant's dung and white-wash to be used alone or in combination for birth control. In Persia Pessaries of rock salt mixed with oils were used for birth control. In Sumatra Pessaries prepared from local plants containing a large proportion of tannic acid were the fashion of birth control. All these old devices⁴ were a far cry from the modern pessary using effective chemicals like

4. Ibid, p. 58.

Alkylaryl Polyalkylene Ether Alcohol in combination with other substances.

The ideal contraceptive would be one that is safe period which is acceptable, inexpensive and simple to administer. But there is no single contraceptive as yet which meets these requirements. All available methods are for the individual to choose from according to his or her needs and wishes.

The term 'conventional contraceptive' is widely used to denote those methods that require action at the time of sexual intercourse. The methods of contraception may be conveniently grouped⁵ as follows :

I) Temporary Methods

(i) Behavioural methods

- a) Abstinence
- b) Coitus interruptus
- c) Safe period
- d) Natural family planning methods.

(ii) Chemical methods

- a) Foam tablets
- b) Jellies and pastes

5. Dr. Gonsalves, E.P., op.cit., p. 559.

(iii) Mechanical methods

- a) Condom
- b) Diaphragm and cervical cap
- c) IUD (Intrauterine Device)
e.g. Loop and Copper T.

II) Permanent methods

- a) Male-sterilization i.e. Vasectomy
- b) Female-sterilization i.e. Tubectomy.

In 1963, Raina, B.L.⁶ highlighted the need to strengthen the extension approach in place of clinic approach which involves the adoption of an educational approach to bring about changes in the knowledge, attitudes and behaviour of the people in regard to family planning. All available methods of contraception are offered to the people with the choice left them, in actual practice, it is found that each method of contraception has received varying emphasis at different times.

1) Abstinence :

The method implies periodical abstinence from sexual intercourse. It is difficult to practice and cannot be a method for general practice. There is no doubt that it is the best method, but is based on self control or self regulation, hence it is difficult to practice it.

6. Raina, B.L. "Family Planning Programme Report for 1962-63, New Delhi, Directorate General of Health Services, Ministry of Health, 1963, p. 46.

2) Coitus interruptus :

It implies the withdrawal of the male organ before ejaculation. But this method is risky for even a drop of sperm is sufficient to cause pregnancy. This method is very old and is probably the earliest form of birth control, but this method is not so much reliable.

3) Safe period :

The safe period which forms the basis of the rhythm method. In general, a week before and week after the menses is referred to as the safe period for birth control. This method is fairly reliable in women whose menses are regular. According Rock, J.⁷ "The rhythm method costs nothing and offers a satisfactory degree of protection against unwanted pregnancy to rigorously selected and carefully instructed wives who, with their husbands are intelligent and strongly motivated." Catholic Christian⁸ religion does not approve of anything but the rhythm method of family limitation. Women with irregular menstrual cycles cannot use this method.

4) Natural Family Planning :

The principles of the method of natural family planning is the pin-pointing of the date of ovulation. The pin-pointing

7. Rock, J. "The Time Has Come", London, 1963, Quoted by Bahadur K K.P., op.cit., p. 64.

8. Bhende A.A. and Kanitkar, "Principles of Population Studies," p. 283.

is based on the appearance of the cervical mucus or the body temperature. It has been found that the body temperature of a woman is quite low after the menstrual cycle and may fall still lower on the day of ovulation, after which it starts rising and remains high until a day or two before menstruation begins, and then drops again when menstruation begins. Sexual intercourse is allowed only during the post-ovulatory phase, if pregnancy is not desired. This method is no doubt reliable provided it is well understood. It is also called as 'Temperature Method' of birth control.

5) Foam Tablets :

The principle of this method is the generation of foam which interferes with the free movement of the sperm. One or two tablets dipped in clean water are introduced deep into vagina 5 to 10 minutes before sexual intercourse. The tablet contains a spermicidal agent. Foam tablets are cheap, safe and harmless but they may not dissolve properly and may also deteriorate under conditions of improper storage.

6) Jellies, pastes and cream :

These are chemicals introduced into the vagina before sexual intercourse. They destroy the sperms by chemical action and thus prevent pregnancy. In combination with mechanical devices, they are highly effective.

7) Condom (Nirodh) :

It is the most widely male used contraceptive device which is made from vulcanised rubber. They are electronically tested, so that the possibility of their being defective is strictly eliminated. The condom has without any side effect of any kind. The condom is most effective contraceptive method especially in developing countries where facilities for sterilization are at the moment limited and the pill has not made much headway. It has to be used in between the sex act. The condoms now being manufactured are subject to rigorous quality control and bear the date of expiry, after which they should not be used. It has been observed by Operations Research Group,⁹ Baroda that "consumer purchase of condom is growing more rapidly in medium and smaller towns and rural areas than in cities, thereby achieving one of the objectives of the programme."

8) Diaphragm and Cervical cap :

A diaphragm is a dome shaped cap made of fine latex with a thick rim containing a metal spring, which are of two types, (1) the flat spring type and (2) coiled spring type. The diaphragm can be used by women herself after being taught carefully. Hence it requires the services of the doctor to fit

9. Government of India, Ministry of Health and Planning
Family Welfare Planning in India, Year Book 1974-75,
p. 16.

the women with the correct sized diaphragm. Unless it is properly fitted over the cervix it is not likely to be sufficiently effective. The device should be used in combination with a spermicidal cream before sexual intercourse and retained at least six hours afterwards. The diaphragm is entirely harmless and has no side effects. This contraceptive is widely accepted by the western countries, but unsuitable in Indian situation.

9) IUD (Intra-Uterine Device) :

It is manufactured from a low density polythene. It is known as Lippes Loop. The loop can be introduced into the uterus by an insertor made of Teflon tubing which has a high degree of lubricity and flexibility. The advantage of the loop is that once it is in place no further action is required by the woman. It does not have to be inserted and taken out frequently. It permits unimpeded coitus, and if it proves persistently troublesome or if contraception is no longer required, it can simply be taken out. It is inexpensive and has lower failure rate than other methods. It provides an alternative for women who do not wish to adopt other methods. IUD is of two types, one of them is of English 'S' letter which is called as 'Lippes Loop' and other is of English 'T' letter surrounded by copper, hence it is called 'Copper T'.

10) The Pill :

The oral contraceptive popularly known as 'the Pill'. The pills are made from estrogen combined with progestins. Pills have to be taken regularly with very brief intervals in between and are expensive. If pills are missed the effect or result may be failure. Pill has some advantages e.g. it relieves dysmenorrhea, premenstrual tension, acne, decreases menstrual bleeding etc. But at the same time it has some disadvantages e.g. headaches, migraine, vaginal discharge, loss of hair, increase in weight and likely of thrombosis, blurred vision etc. The pill may be completely effective if it is taken regularly according to direction of doctor.

11) Abortion :

Although women have resorted to the practice of induced abortion to get rid of unwanted pregnancies, the large scale acceptance of this practice is a recent phenomenon. But strictly speaking induced abortion is not to be considered as a method of contraception, it needs to be considered in the context of family planning, because the need to terminate an unwanted pregnancy arises only when contraceptive measures have not been used at all or have not been correctly used. Abortion means the termination of the pregnancy before the twenty-eight week of gestation, when the foetus is not viable,

that is, when the foetus is not capable of independent existence outside its mother. Abortion may be either spontaneous (accidental) or induced. Religions and moral considerations militate against abortion. Though abortion is not considered by the Government of India as a family planning method, it needs to be considered alongwith other methods of family planning for a widespread acceptance because of abortion is known to have a dramatic impact on birth rates. If abortion is permitted women will become careless about using contraceptives and will depend largely on it. But it is difficult to imagine a women preferring abortion to contraception, because those, who are forced to take resort to abortion amongst the unmarried, are girls who have been raped or those who have become pregnant because of pre-marital sexual intercourse. Married women generally seek abortion when they fail in contraception. They feel that the only way to avoid birth is to destroy the pregnancy. When women, who desperately need abortion due to some social necessity or because they just can't afford to have 'one more baby' are refused to it, they are left with no other alternative than to go to unqualified persons or 'try something themselves'. India has considerably liberalized its abortion law known as 'Medical Termination of pregnancy Act of 1971' which was effective from April, 1972.

12) Sterilization :

Sterilization is a permanent type of contraceptive used for birth control mostly in under-developed and developing countries. Sterilization interrupts the passage of the sex cells, so that two cells i.e. sperm and egg, cannot meet to accomplish fertilization. But Guttmacher¹⁰ A.F. has differentiated between sterilisation and castration. According to him castration means the removal of the sex glands in the male and removal of the ovaries in the female, whereas sterilization means interruption of the passage of sperm and egg.

In the female sterilization, a road block is established in the Fallopian tube by tying off and then excising a small portion of each tube. The sperm can progress upward only as far as the road block, where as the egg can only descend downward as far as the road block. Thus there is absolutely no opportunity for the two to meet with each other. This female sterilization is called as 'Tubectomy'. Hospitalization is necessary for the female under all condition. The procedure of female sterilization is performed under anesthesia and a five day hospital is required after post-operation of sterilization. Currently most female sterilizations are done immediately

10. Guttmacher A.F., "The Place of Sterilization" Article in 'The Population Crisis and the use of World Resources' Edited by Mudd, S., pp. 268-273.

following delivery because it has great advantages i.e.

(i) the procedure is simple since the uterus is high up in the abdomen and the midline after delivery. The abdominal incision does not have to be as large to operate on the tubes. (ii) no additional hospital stay is imposed, because ordinarily patients stay in the hospital about five days after child-birth. Female sterilization performed shortly after delivery is called 'Puerperal sterilization'. Generally the operation is done between one and twenty-four hours after delivery. Female sterilization is considered as a major operation in comparison with male sterilization. A sterilised woman has no need to use any other contraceptives. She does not suffer from any after effects.

Male sterilization is called as 'Vasectomy'. It is a simple operation which involves tying, cutting and removing portions of the vas deferentia, the tubes which carry the sperms from the testes. Male sterilization is performed under local anaesthesia and recovery from the operation is generally quite rapid. The male sterilization operation consists of making a small incision on either side of the scrotum and severing the vas deferens through which the sperm passes at the time of ejaculation. To make the operation effective, one end of the severed vasdeferens is folded back and tied securely to prevent the ends from rejoining after a lapse of time.

Hence sterilization, of both female and male, is useful for couples who do not want any more children and once performed there is no need of any contraceptive. But the success of sterilization is depend upon how much male or female adopt sterilization measure. Hence Government of India motivates the concerned eligible couple to adopt sterilization by giving financial help to them. Special camps are organised at various places by the department of health and family planning throughout India. The first vasectomy¹¹ (male sterilization) camp in the world was organised by the Government of Maharashtra in 1961 for three days where 1,400 w men were sterilized. Sterilization may not be necessary in the distant future when there will be improvement in other effective contraceptives.

The decision to accept one or the other above mentioned contraceptive methods is left entirely to the discretion of the individual family. All types of contraceptives can be distributed free or at subsidised rates in rural areas. It has been decided that family planning services should form an intergral part of the medical health. Not even to that the family planning programme was re-named as the family welfare programme during the Janata Government to improve the quality of

11. 'Vasectomy Camps in Satara' Family Planning News, Vol. 5, No. 2, February, 1964, p. 20.

human life. The family planning and family welfare programme are developed as a peoples' programme with government assistance, seeking the cooperation of all parties and religious groups.