Training Manual

INSERVICE TRAINING PROGRAMME FOR
PRIMARY HEALTH CENTRE MEDICAL OFFICERS

FAMILY PLANNING

QUALITY OF CARE

DEPARTMENT OF HEALTH & FAMILY WELFARE
GOVERNMENT OF HIMACHAL PRADESH
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INSERVICE TRAINING PROGRAMME
FOR
PRIMARY HEALTH CENTRE MEDICAL OFFICERS

FAMILY PLANNING - QUALITY OF CARE
Training Manual

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PREFACE

Himachal Pradesh is a progressive North Indian State. The 1991 census figures for Himachal Pradesh revealed a literacy rate of 56.7% for women, sex ratio of 936 female/1000 males, death rate of 8 per 1000, Infant Mortality Rate of 74 per 1000 and a birth rate of 27.6 per thousand. The achievements on the health front are considerably better than the national average.

The National Family Health Survey (1993) has confirmed that the family planning coverage in Himachal Pradesh has been good with a Contraceptive Prevalence Rate of 58%. Of the total 54% using modern methods -45% use terminal and 9% use spacing methods.

In order to maintain and further improve the acceptance of family planning in Himachal Pradesh, it is essential that greater attention is paid to Quality of Care in family planning. A wider choice of quality family methods must be made available to the clients.

The Government of Himachal Pradesh has taken a number of steps to further improve maternal and child survival and reduce fertility in all 12 districts of Himachal Pradesh. This includes training of health and allied personnel in child survival and safe motherhood initiatives, prevention of HIV/AIDS and Quality of Care in family planning. It also includes improved service delivery protocols, equipment and infrastructure, Management Information and Systems, Information Education and Communication activities. The United Nations Population Fund under its Area Project is supporting the Government of Himachal Pradesh in its efforts.

The training module has been developed by PSS in collaboration with representatives of the Department of Health & Family Welfare, Himachal Pradesh, with help from UNFPA. The framework for this module was laid out in February 1993 in the First Working Group Meeting of national experts. The draft module was developed and then pretested, before being reviewed in the second National Working Group meeting held in July 1994. The module has been reviewed several times in consultation with project & health personnel of HP, in order to tailor it to the specific needs of medical officers of primary health centres.

The training course covers four broad areas aimed at ensuring better quality of Family Planning services - the link between family planning and safe motherhood - child survival interventions; skills for effective counselling; clinical skills; managerial & evaluation skills. Government of India "standards for sterilisation", standard guidelines for other contraceptive procedures, the MTP Act as well as international reference materials have been utilized in preparing this module.

The training module comprises 3 books: a Facilitator's guide for the use by trainees , a Training

Manual to be used by trainees during & after the course as well as by trainees, and a Client Education Booklet to be used by medical officers during family planning counselling.

Although the training module has been prepared for Himachal Pradesh, it has been based on the National Family Welfare Programme. Use or adaptation by Governments or voluntary agencies of other states of India will therefore be welcomed. Although a lot of effort has been invested in making it fully accurate, errors and omissions are possible & we encourage users to bring these to our notice.

It has been our endeavor to provide relevant and comprehensive information on all aspects of family planning. We hope that this training will enable Medical Officers of Primary Health Centres to perform effectively, thereby resulting in improved acceptance of family planning.

Parivar Seva Sanstha

March 1995 New Delhi

FOREWORD

The National Family Health Survey (NFHS 1992) has reported a birth rate of 28.2 per 1000 live births in Himachal Pradesh. The infant mortality rate has declined to 56 per 1000 live births - this is linked to increasing immunisation coverages, as borne out by the fact that no case of polio has been reported in the state for the last three years. Along with high literacy in the state (74.6% and 52.5% for men and women, respectively - Census 1991), there is a high degree of awareness, on health and family welfare issues. Knowledge of family planning on part of married women is nearly universal (99.1%), with 58.4% of them currently using contraception. There is however, a significant gap between knowledge or desire, and use of family planning services, especially for spacing methods. Although 41.6% women do not desire a child for the next two years or longer, only 8.6% are current users of modern, temporary methods. This is apart from 4.1% couples who rely on traditional methods such as periodic abstinence and withdrawal. The large unmet need for Family Planning services would imply that in order to further increase and sustain contraceptive coverage, it will be necessary to improve the quality of family planning services.

The International Conference on Population and Development (Cairo, 1994) has emphasized that the aim of family planning is to enable individuals and couples to decide freely and responsibly, the number and spacing of their children. For this the Plan of Action endorsed by all countries including India, recommends continuing efforts to satisfy unmet need, through improvements in the quality of reproductive health and family planning counselling, services and IEC (information, education & communication). One of the key interventions recommended by the Conference, is to expand and upgrade training in reproductive health care and family planning, for all health care providers, managers and educators. Such training should cover counselling and interpersonal communication, apart from improving technical skills.

Against this backdrop, the Government of Himachal Pradesh has launched, as part of the UNFPA assisted Family Welfare Area Project, an in-service training programme on Family Planning: Quality of Care, for medical officers, health workers and supervisors of the Department of Health and Family Welfare. Quality services require that service providers treat clients with respect and compassion, provide them full information on family planning, and ensure appropriate follow up care, including treatment of side effects of contraceptive use. All service staff must encourage clients to use services continuously, rather than just initially accept them. In the process we must ensure adherence to standard technical protocols and guidelines, and also monitor improvements in quality. This training module has been specially developed to cover these areas.

The transformation to universally available quality services cannot occur overnight. It will be gradual, step by step process requiring untiring efforts on part of programme managers and service personnel. I am confident that all programme officers, doctors and paramedics of the Health & Family Welfare Department will translate this training programme into action, by making quality services widely accessible to individuals and couples who wish to plan their families. With the goal of providing the best possible facilities to the people of the state, the Government of Himachal Pradesh is committed to continuously improving the quality of health and family welfare services.

(J P Negi)

Commissioner & Secretary (Health & Family Welfare)

Government of Himachal Pradesh, Shimla.

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Chapter 1

FAMILY PLANNING, SAFE MOTHERHOOD AND CHILD SURVIVAL

1.1

Introduction

The maternal mortality rate (MMR) in India is estimated at 4-5 per 1000 live births i.e. one woman dies for every 200-250 live births. For a woman in the developing world, the average lifetime risk of dying of a pregnancy related cause is 1 in 15 to 50, compared with an average lifetime risk of 1 in 4,000 to 10,000 in developed countries. This 200 fold increase in risk is reflected in the fact that developing nations account for 86% of the world's population but 99% of the maternal deaths. In India, for every one woman who dies due to child birth, 10 -15 women suffer from chronic ill-health after pregnancy in the form of anemia, pelvic inflammation, sterility, genital tract fistulae etc. When a mother dies, infant survival at the end of one year drops from 90% to 20%. India loses about 100,000 women every year due to pregnancy and its related complications. For a woman or family, is this not too high a price to pay, in order to experience motherhood?

Even though the National Family Planning Programme began in India in 1951, it has not succeeded to the desired extent in different parts of the country, either in stabilising population or in satisfying health needs of the family. A substantial proportion of couples have not adopted family planning, resulting in uncontrolled fertility. An important reason for this is the fact that the family planning programme is seen as a separate programme having few linkages with other programmes. This has grave consequences for the health of the mother and the child. Pregnancies that occur too early or too late, too close or are too many, contribute to a great extent to high maternal and infant mortality. Therefore, any programme on safe motherhood or child health care must be integrated with family planning service delivery. The sexual and reproductive health concerns of women and men need to be addressed through a comprehensive programme of reproductive health including family planning, sexuality, antenatal, intranatal and postnatal care, Sexually Transmitted Diseases (STDs) including HIV/AIDS and gynaecological services.

The link between fertility and maternal mortality

Females have a low status in the family. Girls are often undernourished and their health is a low priority. They are married off at an early age and become mothers at a young age as they are pressurised to prove their fertility early. In the quest for a son, they are forced to bear many children. Their lack of access to services leads to poor spacing of births. Many women die in the

vicious cycle of uncontrolled fertility and maternal mortality. One way to analyse this link between fertility and maternal mortality, is to look at major causes of maternal deaths.

1. **Haemorrhage :** This is one of the main causes of maternal death. Bleeding may occur in early pregnancy due to spontaneous abortion. It may also be the result of illegal induced abortions performed by quacks in unlicensed places. Bleeding in late pregnancy (antepartum haemorrhage) is more common with high maternal age and grand multiparas who have borne children in quick succession. Haemorrhage may also occur after delivery (postpartum haemorrhage or PPH). PPH is more likely among women undergoing difficult labour or when pregnancies are in quick succession. It is also more likely in case of teenage pregnancies in whom the pelvis has not fully developed. Tears in genital tract also cause PPH. Among women who have delivered earlier many times along with anaemia, there is the added factor of an osteomalacic pelvis. As these women have already delivered vaginally earlier, doctors tend to forget that because of uterine atonicity caused by repeated deliveries, these are the very women who may have obstructed labour, ruptured uterus and PPH.

2. **Toxaemia of pregnancy :** This is more common in teenage pregnancies and in pregnancies occurring at a late age, frequently after many children. Toxaemia is also more common in the lower socioeconomic strata. The problem is aggravated by lack of antenatal care. Pre-eclampsia may progress to eclampsia (hypertension with convulsions) with grave prognosis for the mother and foetus, which generally does not survive. Anaemia due to either malnutrition (in the young or with short birth interval or among multigravidae) frequently goes hand in hand with toxaemia.

3. **Sepsis :** Sepsis may result from illegal abortions or from deliveries conducted in unhygienic surroundings or by untrained midwives. Women often risk their lives to terminate an unwanted pregnancy - they seek the help of quacks rather than licensed institutions, due to the shame and guilt associated with abortion. Many of these women end up as cases of septic shock in hospitals. About 12 per cent of maternal mortality in India results from induced abortions. Anaemia increases a woman's susceptibility to sepsis.

4. **Obstructed labour :** Cephalopelvic disproportion is higher in teenage and multiparous pregnancies occurring in quick succession, as the pelvis is either not fully developed or the bones have become soft and pelvic diameters reduced. The foetus may be normal or big sized, but the mother cannot deliver vaginally - labour becomes prolonged and difficult. Forceps/ vacuum delivery or caesarean section may be required, or uterine rupture may occur. This may result in perinatal mortality or morbidity.

The quality of neonatal/infant care has a direct effect on maternal mortality. If the child's survival is not assured due to lack of good neonatal and infant care, parents opt for more children at short intervals, in the hope that some may survive. Small birth intervals are in turn associated with higher maternal and infant mortality.

Given all the above problems in pregnancy, the mother and infant may yet be saved if emergency medical care is available in time. Good antenatal care reduces the risk, but does not eliminate it. Factors arising de novo in labour can be handled by a well equipped essential obstetric care unit. In hilly or scattered terrain, transportation and distance will play a very important part if maternal lives are to be saved.

Effect of uncontrolled fertility on the child

Infant mortality in India ranges from 17 to 126 per 1000 live births. Wherever Infant Mortality Rate (IMR) is high, the birth rate is also high as the insurance effect of child survival is unpredictable. This leads to larger families, and also takes a toll on mothers' health. On the other hand, uncontrolled fertility may lead to the birth of children with physical and mental problems. Babies may be born preterm or have low birth weight. This increases their chances of acquiring childhood infections and may result in infant deaths.

Birth Interval : When birth interval is less than 2 years, the risk of death is twice as compared to birth interval of more than 2 years. Spacing of at least 2 years prevents 1 in every 5 infant deaths. The older sibling preceding a short birth interval is one and half times more likely to die due to early weaning, decreased immunity from breast milk, increased food depletion and decreased maternal attention.

Birth Order : The subsequent order are more prone to illness because they may be undernourished or suffer from childhood infections, death in the womb in the last 2 months of pregnancy and death during the 1st week after birth is more than quadrupled.

Maternal Age : Infant and under five mortality is also directly related to maternal age. Sudden infant death syndrome is higher in teenage pregnancies. Low birth weight babies are born to very young mothers and there is increased risk of physical and other (mental) handicaps. There is increased risk of still births and congenital defects when pregnancy occurs at a late age.

Care by the mother : Children under five have higher risk of childhood diseases and succumb to them in the absence of good quality medical care. Most of these illnesses can be prevented by immunisation, improved personal hygiene and nutritional practices which are largely dependent on the presence of the mother, apart from availability of services. Maternal death due to whatever cause, predisposes to the death of young children, particularly infants. The common thread that emerges from the above analysis, is that many women and children die due to the effects of uncontrolled fertility - babies born too early, too many, too close and too late. If pregnancy can be planned using a range of contraceptive methods, maternal risk of death can be reduced by one third. If women are given the choice to decide the number and timing of babies, morbidity and mortality will reduce.

Benefits of family planning

Benefits to the woman

1. Family Planning decreases the incidence of high risk pregnancies.
2. It decreases deaths due to high birth order and advanced age.
3. It decreases deaths due to illegal abortion for unwanted pregnancy.
4. Benefits from use of contraceptives, to women's reproductive health.
   i. Condoms - prevent STDs, AIDS and decrease risk of Pelvic Inflammatory Diseases (PID) arising due to STDs - notably gonorrhoea and chlamydia. They also reduce risk of cervical dysplasia, which is associated with malignancy.
   ii Oral contraceptives - reduce the incidence of ovarian and endometrial cancer, fibroids, benign breast diseases and pelvic inflammation. They help in menstrual problems like menorrhagia and dysmenorrhoea, anaemia due to heavy menstrual flow, dysfunctional uterine bleeding, pre-menstrual syndrome.

Benefits to the child

1. Increases birth interval and thus child survival. Maternal depletion is corrected, hence better infant growth and survival is a direct benefit. Older siblings also benefit from spacing.
2. Infant and childhood problems like low birth weight (including Intra Uterine Growth Retardation) and risk of certain congenital malformations reduce if pregnancies occurring either too early or too late are avoided.
3. The number of pregnancies and births will reduce with improved health of the mother and child. Hence parents would not opt for too many children in the hope that some will survive.

Benefits to the couple

1. A happier, tension free sex life as the fear of unwanted pregnancy is eliminated. There is more time to devote to each other and to the family.
2. Couples can achieve higher educational and economic goals if fewer children are born when desired. Level of literacy and standard of living improve.
3. There are reduced chances of STDs and AIDS with the use of condoms. Transmission of STDs to the spouse can be prevented.

The role of induced abortion

All contraceptive methods, even if used properly, have a failure rate. In the event of contraceptive

failure, a couple or client can exercise the option to terminate a pregnancy. However, such an induced abortion as a method of contraception is only a back up for failed contraception, and is not a method of family planning. When family planning acceptance increases, the need for induced abortions as a method of contraception declines. Despite the fact that abortion has been legal for over 20 years, quality Medical Termination of Pregnancy (MTP) services have not been freely available. Nearly 15% of maternal deaths are related to illegal, septic or mismanaged abortions, therefore, safe abortion services constitute a maternal health care measure.

Medical termination of pregnancy services must be provided with empathy, privacy, confidentiality, and using the proper technical procedure. The community should be made aware that quality MTP services are accessible and that such services are culturally acceptable. It is possible that women in a particular community tend to favour unlicensed practitioners despite knowledge of licensed government institutions in the area. Since this might be related to a lack of confidence in the MTP services currently available at government institutions, the reasons for poor utilisation should be investigated and remedial measures such as improvement of quality of services undertaken.

Programme Managers should be clear about the fact that MTPs conducted following contraceptive failure are done with just cause. However, if a significant proportion of MTPs have to be conducted because contraceptives are not readily available to women, it reflects a failure of the family planning services in the area. Apart from providing MTP to the clients, such a situation needs to be addressed in the long term by improving awareness, access and quality of outreach family planning services. To summarise, whereas contraceptive failure following reasonably correct use is a justified indication, for a programme manager contraceptive lack is not a justified indication for carrying out MTPs on a regular basis. If contraceptive lack is the major indication for substantial numbers of MTP, the quality of the family programme (in the area) is questionable. The morbidity, mortality and psychological sequelae related to induced abortion should be kept in mind in this context.

Quality of care in family planning

An important feature of family planning services as provided to clients is that quality considerations have not been accorded priority over the years. Family Planning performance is measured in terms of contraceptive methods initiated or distributed and births averted, rather than in terms of the impact it has on family or women's health. If family planning is to be provided as a health rather than as a population control measure, quality of services will have to improve.

People may accept and use contraceptive methods, but if there is lack of contraceptive supply or when choice of method is dictated by the provider, the user is not likely to continue with the method for long. Each method has its limitations which should be well understood by the provider and the user. In order to ensure quality of care, family planning services should be convenient and

accessible; there should be adequate supplies, equipment and technically skilled personnel. Service providers should be able to counsel or communicate effectively and should give complete information to clients, so as to enable them to exercise choice in adopting a method. After adopting a family planning method, continuing users should be followed up over time.

The goal of this training programme is to improve the quality of family planning services. Thereby, the aim of family planning to ensure safe motherhood, child survival and family well being would be achieved with optimum utilisation of resources. The module covers relevant counselling, clinical, managerial and evaluation skills for Primary Health Centre (PHC) level Medical Officers, in order to upgrade service quality. Since quality cannot be improved if quality cannot be measured, the evaluation of quality of family planning care is covered under the section on "evaluation skills".

Chapter 2

COUNSELLING SKILLS

2.1

Introduction

A major factor contributing to high mortality and morbidity of women and children in India is high fertility. Family Planning is an important intervention in reducing this. However the acceptance of family planning is largely dependent on the quality of services provided and an informed choice as provided to clients. It has been found that counselling in family planning helps to effectively increase acceptance.

Why is counselling essential in family planning ?

Counselling helps the client sort out issues related to reproductive health viz. sexuality, pregnancy, responsible parenthood, abortion, STDs and HIV/AIDS. These are issues that are frequently not discussed because of embarrassment. However, these are issues that have an important bearing on our lives.

Counselling is an integral part of family planning because it

- enables people to decide on whether to adopt family planning and if so, then how to do it
- helps decide which method is most suitable for a client
- increases continuation rates
- promotes user-satisfaction
- emphasises spacing methods rather than permanent methods
- addresses other reproductive health concerns such as STDs
- fits family planning into the client's lifestyle.

Common reasons for rejection of family planning methods

To be able to effectively counsel clients and to enable them to use family planning techniques, it is important to know why some people do not use or reject these techniques. Some possible reasons are:

1. Aversion to the idea of birth control: Birth control is seen as unnatural.

2. Birth control is seen as intrusion: Using a method such as condoms or an IUD is also seen as interference in the sex act and as a deterrent to intimacy.
3. Embarrassment and guilt: There is embarrassment and guilt over obtaining supplies or seeking information regarding family planning methods.
4. Lack of information: Inadequate or wrong information discourages people from using family planning.
5. Infrequent sexual activity: Irregular sexual activity for some leads to the feeling that there is no need to adopt a family planning method.
6. Social pressures: Social pressures of having a child within the first few years of marriage or of having a son prevent some from using family planning.
7. The option of abortion: Sometimes people do not use contraception because they feel that they have the option of abortion in case they have an unwanted pregnancy.
8. Obtaining supplies: Obtaining supplies of a contraceptive method may be difficult because of lack of availability, cost or embarrassment.
9. Coercion by health personnel : In cases where clients have been forced into using a method that later proved to be unsuitable, the clients would be understandably hesitant to return to the provider for another method.

2.2

What is counselling ?

Counselling is a specialised process of communication, enabling a person to make an informed choice regarding a course of action. People, throughout their lives are faced with choices. A counsellor is a trained person who uses certain techniques to help people make decisions. Counselling is not merely advice giving or motivation . The element of persuading or coercing a client is absent in counselling.

It is a helping relationship, a relationship that helps people to grow, to change and to be capable of making their own decisions. Each person knows his/her own situation and is best equipped to choose between various alternatives. However there are times when it is difficult to decide on what to do, especially when decisions have far reaching consequences on their lives. Counselling helps in such situations. A Counsellor never makes decisions on behalf of the client (the person who is seeking help) but simply steers the discussion in such a way that the client is able to take a decision.

Definition

Counselling is an interactive relationship between two individuals (Counsellor and Client) whereby the counsellor helps the client to better understand him/herself with respect to his/her relationship to his/her present and future problems/ situations. Counselling in family planning is an interactive relationship between the M.O./Health Paramedic and a client which helps the client to decide whether to adopt a family planning method and if so, to make an informed choice of a particular family planning method. Counselling is also defined as face-to-face communication in which one person helps another make decisions and act on them.

Counselling and health education

Though counselling and health education have much in common, they are not the same.

Similarities between Counselling and Health Education -

- Both aim at changing behaviours in order to reduce risk.
- Both use two-way interactions between provider and client.
- Both rely heavily on communication skills.

Differences between Counselling and Health Education -

1. Counselling is usually initiated by a client in need of help while health education is usually initiated by the educator. e.g., when a MO or Health Worker decides to persuade a client to adopt family planning, the process is one of motivation or health education. But when a person himself / herself or a couple requests help from a Medical Officer or Health Worker about spacing, limited births etc., the stage is set for counselling.
2. Counselling is primarily a coping process in which the client is helped to make a decision regarding a problem situation or make a choice.
3. Counselling aims to reduce stress by means of a dialogue with the client whereas health education aims at the dissemination of information via discussion.
4. Counselling is usually done in a one-to-one situation or in very small groups while health education is usually for a small group or larger audience. e.g.. When a client or couple approaches the medical officer to decide or choose a method of family planning, it is a counselling situation. However when a Lady Health Visitor (LHV) or Multi-purpose Worker (MPW) holds a talk in a village about sanitation, nutrition or reproduction, she is giving health education.

Counselling and motivation

Counselling is more effective than motivation as it is initiated by the client while motivation means the M.O./Health Worker initiates the conversation. A motivator highlights the advantages

while a counsellor talks of both the advantages and disadvantages. The motivator often makes the decision while the counsellor facilitates the client to take a decision. There is an element of pressure in motivation. Family planning counselling does not imply that the counsellor persuades or coerces the client to accept a particular method. It merely facilitates the client to decide which method to adopt. It also dispels the myths and beliefs as well as attitudes that the client may be harbouring within him/her, towards the various contraceptive methods. The primary advantage of counselling is that of gaining the active participation of the client on the course of action which is eventually decided upon. A client who has chosen a particular family planning method after considering all the information and implications is more likely to be a satisfied and a long term user of that method.

Why counselling is not mere information giving

Family planning decisions are made by individuals who live within families and societies. Therefore, such decisions are complicated by family and social pressures in addition to the person's own fears and apprehensions. Information about services available is also inadequate. Men and women come to know of family planning techniques from their friends or relatives who themselves may be misinformed.

Merely providing factual information in an educational way is not enough. Potential users of family planning services benefit by discussing their anxieties, fears and doubts. In a counselling situation, these negative feelings are resolved. This obviously takes more time and effort of the M.O. or health worker than an information giving exercise, but it yields many advantages and leads to satisfied and long term use. If the client decides on the method to be adopted after understanding its implications, the responsibility of action is also with him/her. After all, the effects of the choice are going to be felt by the client, not the M.O. or health worker. It is unethical to push the client to accept a method that the client is uncomfortable with.

2.3

Counselling skills

Counselling, as mentioned earlier, is a specialised process of communication. It is a skill that develops and grows with practice. Certain techniques are used during counselling in order to make the client comfortable so that communication is facilitated. Before starting the counselling process, it is necessary to ensure that the physical setting is conducive to counselling.

The physical setting for counselling

The physical setting should be -

i) **Private** : to assure the client of confidentiality. Counselling is most effective when it is done in a separate room/chamber where the couple/client feels free to bring up personal matters such as family planning. In a Primary Health Centre this can be the MO's room or the family planning room, provided these are not being used for registration etc. and frequent interruptions by other clients/staff do not take place. Privacy has physical and social dimensions. Physical privacy is ensured by restricting the entry of others in the room, shutting doors, using curtains etc. Social privacy or confidentiality is ensured by not sharing a client's experience with anyone else (not even the spouse, unless the client agrees), keeping records secret, and not even talking so loudly in a clinic that everyone outside can hear.

   Privacy is important because unless the client is assured of confidentiality, it is likely that counselling will be incomplete and method rejection higher. Sometimes counselling may take place in the open e.g. when the Medical Officer sits out in the sun during winters. Such situations reduce confidentiality and few clients can feel comfortable discussing family planning or other reproductive health issues. It is likely that counselling in such settings will be inadequate.

ii) **Comfortable** : with adequate seating space. The physical setting of the room should provide for a friendly atmosphere where the client can speak freely. The M.O. should also keep visual aids and literature such as pamphlets, sample charts, leaflets, contraceptive samples etc. in the room to explain various family planning techniques to the client.

Counselling skills

There are several skills that the M.O. should use during counselling for family planning.

1. **Active Listening** : Listening is the most important skill a service provider must possess. The M.O. should pay total attention to what is being said, observe non-verbal messages the client is sending and encourage the client to talk by nodding the head and saying "go on".

   Some counselling behaviours representative of active listening skills are -

   - good eye contact
   - head nodding at relevant places
   - saying "hmmm"
   - saying " go on"
   - not rushing the client during pauses while the client may be finding words to express oneself

- not interrupting when the client is talking
- ask questions to facilitate conversation

2. **Summarising and Paraphrasing** : This means restating by the service provider in her/his own words what the client has said so far to check whether it has been correctly understood. This indicates to the client that the provider has been following and understanding what has been said by the client.

3. **Empathy** : In empathising with a client, the M.O. is able to leave aside his/her own frame of reference, and, for the time being adopt the frame of reference of the client. The M.O. can then appreciate how the client experiences the events in his/her world. For example, with empathy, the M.O. can appreciate the awkwardness a young man may feel in using a condom during his first sexual experience.

   The service provider experiences the client's feelings as if they are one's own. This "as if" quality is extremely important to keep some distance between the provider and client, to ensure professionalism and to prevent the provider from being overwhelmed by the client's feelings. For empathy to have an impact, it is essential that the health personnel must communicate or reflect back to the client that the client's feelings are being understood and his/her emotional state is important. The client must feel understood. Empathy may be communicated verbally, nonverbally or by a mixture of both.

   It is necessary to distinguish between sympathy & empathy. Empathy involves the power of understanding and imaginatively entering into another person's feelings. There is more involvement in this situation than in sympathy, where one shares or experiences an affinity with the emotions of another. When a woman describes the problems she faces with the IUD, a sympathetic M.O. shares the problem but is not involved. On the other hand, an empathetic M.O. will understand her feelings as if they were his/her own. Empathy implies a position of equity between the counsellor/M.O. and client. In case of sympathy, the M.O. will be assuming a position of superiority.

4. **Positive Regard for the Client :** The M.O. relates to the client as a person of equal status and accepts that the client has a right to accept or reject family planning. Confidentiality is also a part of showing respect for the client and his problem. The M.O. assures the client that no one else will be told about the client's problem.

   Also, the M.O. behaves in a non-judgemental and non-threatening manner. Very often, we feel that an illiterate woman will not listen to instructions or understand them and so we don't give complete information. We also tend to judge people, if their sex lives don't fit in with our ideas of what is acceptable. This is particularly true with regard to premarital sex

or extra marital relations. The M.O. should be non-judgemental while counselling for family planning, even if his/her values differ from those of the clients.

Frequently, a client is offered a method of family planning with a condition. For example, "You can have an IUD inserted now as I have the time. Otherwise you will have to come next week.", "Immunisation of the child will be done if the mother accepts a family planning method". Such situations make the client feel threatened and even if a method is accepted, the rate of rejection is likely to be much higher. Along with respect for the client, comes respect for the decisions that the client makes.

5. **Giving Correct Information in a Simple Manner** : Information about various methods, their advantages and disadvantages is to be given in a comprehensible, unbiased manner. All information relevant to the client's situation must be given. The M.O. should make certain that the client has understood the information and its implications. It is incumbent on the M.O. to provide the clients information so that they can accept or reject family planning.

6. **Analysing Each Option with the Client :** The service provider uses the problem solving technique, which is a non-directive approach to help the client adopt a suitable family planning method. Along with giving information, the implications of using the method are explored and the costs to the client are calculated. Costs are in terms of money spent, time spent in using the method, intrusiveness into sexual and other activities, degree of comfort with the method and side effects experienced. The information includes possible adverse reactions/failures and ways to tackle them. Obviously, the method with the least cost and maximum benefits to the client will be the method chosen by the client.

   The client must be actively involved in this process of checking out the gains and costs of various methods. The techniques mentioned earlier are useful in establishing a relationship in which problem solving can effectively happen.

Six steps for family planning counselling

So far we have discussed the techniques of counselling and the skills necessary for counselling. The following six steps may be used while counselling a client for Family Planning.

There are six steps that may be remembered with the English word **"GATHER"** where each letter stands for a step or stage in counselling. Remember, each client is an individual and the techniques you use must suit the client. Also, all the stages do not have to come in strict sequence.

G Greet clients

A Ask clients about themselves.

T Tell clients about family planning methods

H Help clients choose a method.

E Explain how to use a method.

R Return for follow-up

Greet clients

- As soon as you meet clients, give them your full attention.
- Be polite: greet them, introduce yourself, and offer them seats to make them feel comfortable.
- Use attending behaviour and positive gestures to indicate interest and attention.

The next 4 sections Ask, Tell, Help and Explain are essential for informing the client to enable him or her to make a correct choice.

Ask clients about themselves

- Ask questions to elicit information in a non-confronting way.
- Help clients to talk about their needs, wants and any doubts, concerns or questions they have about family planning.
- Use "open ended questions". These are questions that draw out more information from the client and cannot be answered merely by "Yes" or "No". e.g. How do you feel about using condoms? What have you planned about having another baby ?
- Ask your clients what information they have about the methods that interest them. You may learn that a client has wrong information. It is important to gently correct the mistake and dispel all myths.
- If the client is new, obtain a history. Write down client's

(1) age
(2) marital status
(3) number of pregnancies
(4) number of live births
(5) number of living children
(6) family planning methods used presently and in the past.
(7) relevant information on general and reproductive health (major chronic illness, reproductive tract infection etc.)

Explain that you are asking this information to help them choose the best family planning method. Keep questions simple and brief and look at your clients as you speak to them.

Tell clients about family planning methods

All clients need to know about the family planning methods that are available. How much they need to know depends on which methods interest them and on what information they already have.

- Tell your new clients which methods are available and where.
- Do not forget to include natural family planning methods. In some situations, this may be the best method of choice.
- Address any anxieties or myths that the client may have about any particular family planning method.
- Briefly describe each method that the client wants to know about. Talk about :

(1) how it works

(2) advantages and benefits

(3) disadvantages and possible side effects.

(4) Impact of each method on health.

Help clients choose a method

- Ask clients if there is any particular method they would like to use. Some would have already decided what they want and others will need help analysing their choices.
- To help clients, ask them about their family circumstances and their reproductive intentions. e.g. Till when does the client wish to delay pregnancy? How frequently does the couple have sexual contact?
- Ask the clients which method their sex partner would prefer. Some methods are not safe for some clients. When a method is not safe, tell the client so and explain clearly. Then help the client choose another method.
- Ask clients if there is anything they do not understand. Repeat information if necessary.
- Confirm whether the client has made a clear decision. Ask 'Have you decided to adopt a contraceptive method. If yes, which one?'

Explain how to use a method

After the client has chosen a method:

- Explain how to use the method. Show them samples of condoms. pills and IUDs. Demonstrate how a condom is used and ask for a return demonstration.
- Give her or him supplies, if appropriate.

- If the method cannot be given immediately, tell the client how, when, and where it will be provided. Remember, contraceptive supplies are widely available through the Social Marketing programme (details available on page 96).
- For some methods, such as voluntary sterilisation, the client may have to sign a consent form. Help the client understand and fill the consent form.
- Describe any possible side effects and warning signs. Clearly tell the client what to do if these occur.
- Ask the client to repeat the instructions, listen carefully to make sure she or he remembers and understands.
- If possible, give the client printed material about the method to take home.
- Tell the client when to come back for a follow-up visit.
- Tell the client to come back sooner if she or he wishes or if side effects or warning signs occur.

Referral : When the problems presented by the client are beyond the scope of the M.O. to handle, the client should be referred for further information or consultation/investigation. If a particular method (such as vasectomy or tubectomy) is not available at the PHC, the client should be referred to a hospital or camp.

Return for follow-up

Good follow up is essential for maintaining continuity of use of family planning method.

At the follow-up visit:

- Ask the client if she or he is still using the method.
- If yes, ask the client if she or he is satisfied with the method or has any problems with the method.
- Ask how the client is using the method. Check to see that it is being used correctly.
- Ask if the client is having any side effects, actually mentioning them one at a time.
- If so, find out how severe they are. Reassure clients with minor side effects that they are not dangerous. Suggest what they can do to relieve them. If side effects are severe, refer for further treatment. Do not deny the problem even if it appears to be unlikely.
- If the client is still dissatisfied about continuing to use the method, counsel him or her about switching to another method.
- Ask if the client has any questions.

Counselling the continuing client

When counselling a continuing client, it is important to check correct usage, time for procuring supplies of condoms, change of IUD/implant, time for the next shot of injectable.

A client who is having problems with a particular family planning method will need to talk about his/her problem. Such clients, if they feel their problems are being understood, are open to using other family planning methods. In many cases, the problem may be with the client not having fully understood how the method works in actual practice or that some side effects are expected and are no cause for undue alarm. Patient listening and reassurance go a long way in dealing with such clients.

If a client wants to try out another method (Method Switching) :

Tell the client about other methods again and help the client to choose another suitable method. Remember changing methods is not bad and is normal. No one really can decide on a method without trying it. Also a person's situation may change, whereby another method may become more suitable.

If a client wants to have a child, help her to stop the method she is currently using. As an M.O. it is your responsibility to arrange for antenatal care as and when she gets pregnant.

Even if the client is not satisfied with a particular method, he/she should be able to return to the same service provider for another method. To make this possible, the provider must be seen as someone who is approachable, who will not be "disappointed" or "angry" that the client has not continued with the initially decided on method.

Specific counselling situations

There are times when special situations arise during counselling in a family planning set up. These situations are also dealt with using the techniques already mentioned. However, there are some special considerations. These are elaborated below:

Counselling the client for termination of pregnancy

Induced abortion or Medical Termination of Pregnancy (MTP) is a legal procedure in India, if performed within 20 weeks of gestation. In competent and proper hands, it is safe. However, there is a stigma attached to MTP. Also, MTP is used by some in lieu of a contraceptive method whereas it should in fact be used when a contraceptive technique has failed.

When clients come in for a MTP, counselling involves dealing with their fears about the procedure, expectations of pain and guilt at terminating a pregnancy. The M.O. must be sensitive to religious sentiments and value systems, however different and unusual they may seem. The

M.O. must also assure the client of complete confidentiality. The client has a right to expect the M.O. to not disclose the fact of MTP, even to the husband or close family member. She should be helped to choose a method of contraception and told that the chances of conception immediately after abortion are higher. It is however unethical to force a woman to accept any or a particular mode of contraception with MTP.

Spending a few extra minutes with the client, explaining the procedure and answering questions helps the client feel more in control of the situation. It is also important to make sure that the client is adequately informed about contraceptive techniques to be used after the MTP.

The M.O. needs to be particularly sensitive and tactful when dealing with unmarried women or single, even married (abandoned/widows)who come for an MTP. They should not be judgemental about the client's behaviour.

Counselling adolescents and youth

The M.O. may have adolescent clients occasionally. Adolescents need a special approach as this is the period when they are discovering their sexuality, feel curious and at the same time embarassed about many areas of sexual function. They need accurate information about the reproductive system, function of various organs and changes due to puberty. They have misconceptions about menstruation, masturbation and nocturnal emissions, all of which are natural processes. In many cases, their only source of information are their peers, who are likely to be misinformed.

It is necessary to be approachable, non-judgemental and non-threatening when dealing with adolescents. The M.O. should not be moralistic with adolescents, as in that case they will never return and will lose their only way of obtaining accurate information that would enable them to practice safer behaviours.

It is important to clarify to adolescents facts such as :

- Girls should wipe the perineum from the front to the back and boys should retract the foreskin of the penis to avoid the collection of smegma.
- Premenstrual cramps, backache, pain in the limbs, headache, breast tenderness or pimples are normal and mild painkillers can be used for discomfort. Hygiene and cleanliness including bathing everyday during menstruation is necessary. Isolation is not necessary during menstruation. The tradition of preventing a menstruating girl or woman from performing certain domestic functions has no scientific basis. The more normal and active one is, the fewer the problems. There are no diet restrictions during menses including sour and spicy foods. Menstrual hygiene including changing soaked pads is important and that soaked sanitary pads should be disposed off properly. If cloth is being reused, it must be washed and

dried in the sun.

- Masturbation is not harmful and does not lead to acne, insanity, impotence, dark circles or weakness. However it is not a means to dissipating tension for which physical exercise is best. Masturbation does not lead to curvature of the penis.
- Nocturnal emissions are the result of spontaneous erections and do not represent loss of manhood or sexual weakness.
- The size of the penis is not important for a satisfactory sex life. Similarly in girls, size of the breasts are not an indicator of feminity.
- An intact hymen is not an indicator of virginity as it might be absent or may rupture during exercise. It is not necessary for a woman to bleed during the first intercourse.

The M.O. might encounter adolescents who are contemplating or are already sexually active. It is particularly important to counsel adolescents about delaying or avoiding intercourse as sexual behaviour also implies responsible behaviour. The M.O. should help the adolescent clarify his/her values regarding sexual behaviour so that he/she can understand that sexual behaviour is a matter of responsibility and not image. If the adolescent is sexually active, the M.O. should discuss the use of condoms and pills with the adolescent, if necessary.

In the instance of early marriage involving an adolescent girl, the M.O. should counsel the couple and family to delay the first pregnancy. The consequences of teenage pregnancy and the hazards to mother's health should be explained.

In case the adolescent is not married, the M.O. can point out the problems, social and medical, arising from unplanned motherhood and emphasize the need to practice safe sex.

Chapter 3

CLINICAL SKILLS

3.1

The female reproductive system

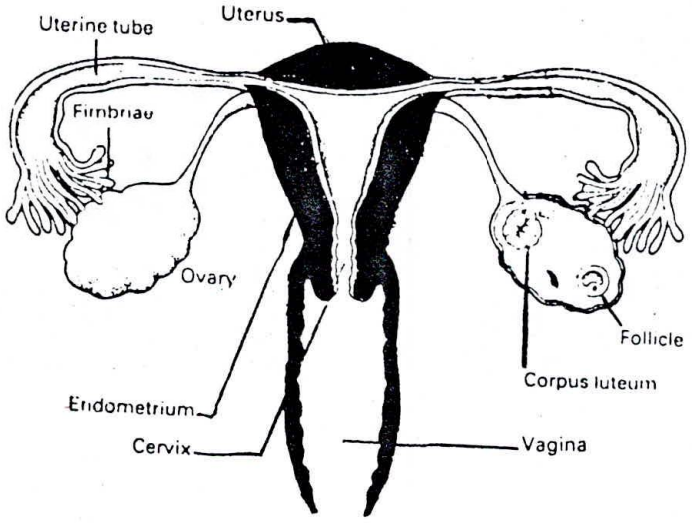
External Genitalia

The outer part of the female reproductive system is called the **Vulva** and consists of the **mons veneris** , the **labia majora** or outer lips, the **labia minora** or inner lips, the **clitoris** , the **urethral opening** and the **vaginal opening** covered by the **hymen**.

The mons veneris consists of soft fatty tissue and is covered with hair. The labia majora are folds of skin containing fat covered with hair and containing sweat glands. The labia minora comprise folds of delicate and sensitive skin meeting at the front to form a protective hood over the clitoris. It surrounds and protects the opening into the vagina. The clitoris is the female equivalent of the male penis. Covered with skin, it consists of tissue richly supplied with nerves, which become engorged with blood and erect when the women is aroused, thus making it one of the most erotically sensitive part of a woman's body. Only the extreme tip or glans is normally visible.

Anatomy of the Female Reproductive Tract

The female gonads or **Ovaries** are two almond-shaped bodies about 3.5 cm long which lie on either side of the pelvis.



Female Reproductive System

The ovaries lie one on each side of the **uterus** or womb in which the embryo develops.The lining of the uterus is called the **endometrium**. The uterus is about 8cm long and connects at the top, also called **fundus** with the **fallopian tubes** . These are long narrow ducts about 10 cm long. Their wide open ends are finger-shaped called **fimbraie** and open near the ovaries. At the lower end of the uterus is the **Cervix** or neck, which is a narrow opening and projects into the **vagina** - the wide channel which connects the female reproductive system with the outside of the body.

Physiology of the Menstrual Cycle

During the reproductive part of a woman's life, baseline levels of all the sex hormones are continuously produced. In addition to these levels, there are fluctuations which establish the menstrual cycle.

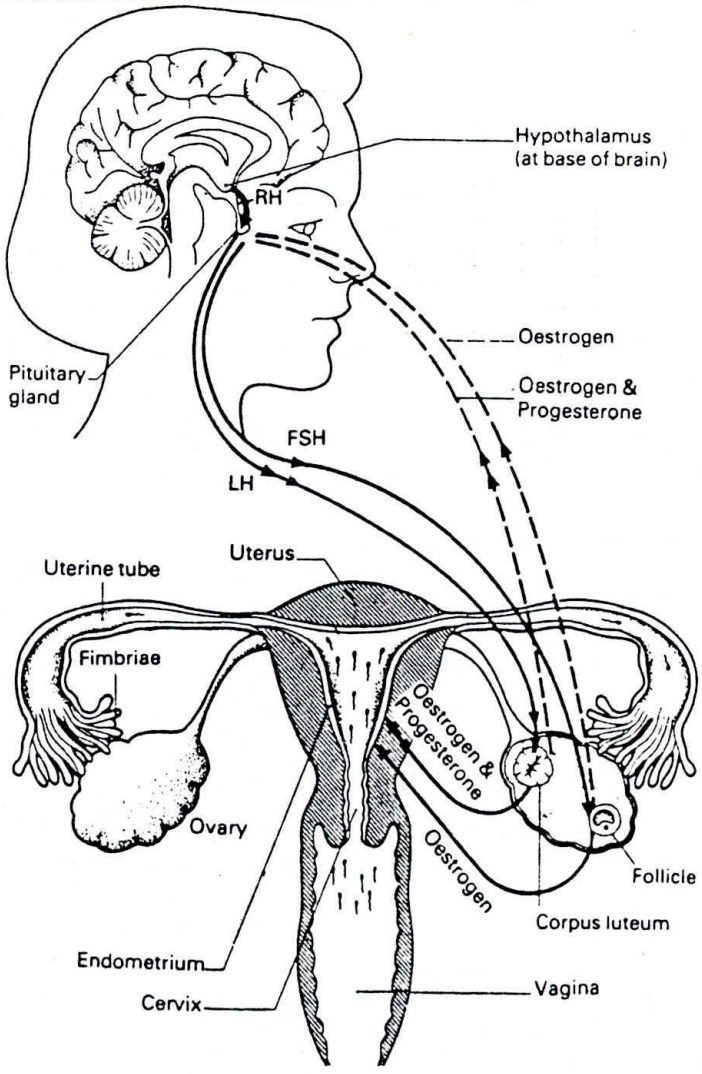
The hypothalamus is sensitive to the fluctuating levels of hormones produced by the ovaries. When the level of oestrogens primarily oestradiol beta 17, drop below a certain level, the hypothalamus releases GNRH, gonadotropic releasing hormone. This stimulates the pituitary to release FSH, follicle stimulating hormone. This triggers the growth of ten to twenty of the ovarian follicles . Only one of these will mature fully, the others will start to degenerate sometime before ovulation. The ones that degenerate are called atretic follicles.

As the follicles grow, they secrete oestrogen in increasing amounts. The oestrogens affect the uterine endometrium, signaling it to grow, or proliferate **(proliferative phase)**.

When the egg inside the maturing follicle is ready to be released (**ovulation**) the GNRH signals the pituitary to release a surge of luteinising hormone or LH and this surge signals the follicle to release the egg. The follicle with egg released, now changes its function.It is now called the corpus luteum and its cells secrete both oestrogen and progesterone. The progesterone influences the oestrogen-primed endometrium to secrete fluids which will nourish the egg if it is fertilised **(secretory phase)**.

If the egg is fertilised, the corpus luteum continues to secrete oestrogen and progesterone to maintain the pregnancy.

If the egg is not fertilised, the corpus luteum degenerates and is called the corpus albicans. The levels of oestrogen and progesterone produced decline, and the uterine endometrium cannot be maintained and is shed which leads to menstruation and the start of another cycle.



Physiology of the Menstrual Cycle

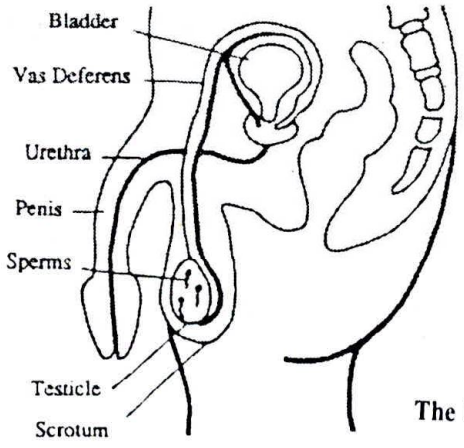
The male reproductive system

Most of the male genitals, or sex organs, are located externally outside the body.

The **penis** is an organ made of spongy tissue, located at the front lower end of the body, with the urethra passing down its whole length to the outside. Behind the penis is a sac-like pouch of skin, the **scrotum**, which contains two oval sex glands known as testicles or **testes**. These glands are composed almost entirely of tiny tubules lined on the inside with special cells known as **interstitial cells**.

The **epidydimis** is attached by connective tissue to the testes and the **sperms** manufactured in the testes undergo maturation here before being transported to a larger conducting tube known as the **vas deferens**. This empties into a small storage sac called the **seminal vesicle**, which in turn empties into the **urethra** - a tube extending all the way from the urinary bladder, down the whole length of the penis, to the outside. The male not only urinates through this tube, but also discharges sperm cells through it at different times.

At puberty, the pituitary gland starts to release a Interstitial Cell Stimulating Hormone (ICSH) which causes the interstitial cells to divide rapidly and produce large numbers of sperm cells. These mature in the epididymis and then pass up through the vas and are stored in the seminal vesicles. At the time of sexual stimulation, the sperms collected in the seminal vesicles mix with a fluid from the **prostate gland** and the **semen** is ejaculated through the erect penis. If discharged into a woman's vagina during intercourse a large number of them make their way through the cervix into the uterus and hence into the fallopian tube. If ovulation has occurred at this time, one of the sperms fertilises the ovum and forms the embryo-the start of a new human being.



The Male Reproductive System

3.2

Family planning methods

Family planning methods may be classified as:-

a) Spacing or reversible or temporary

b) Permanent or irreversible

Spacing methods

1) Natural Family Planning Methods.

   a) Abstinence including Periodic Abstinence with the Calender, Basal Body Temperature and Cervical Mucus Methods.

   b) Lactation Amenorrhoea Method (LAM) and Post-partum Contraception.

   c) Withdrawal.

2) Barrier Methods

   a) Spermicides (female barrier methods)

   b) Condoms (male barrier method)

3) Intra-uterine Device (IUD)

4) Oral Contraceptive Methods

   a) Hormonal - Oral Contraceptive Pills (OCP)

   b) Non-hormonal — Centchroman or Saheli

5) Other Hormonal Methods

   a) Injectables

   b) Implants

Permanent methods

1) Female Sterilisation

2) Male Sterilisation

Special categories

Post-coital contraception.

Effectiveness of contraceptive methods

Theoretical effectiveness (T.E.) or biological effectiveness is the effectiveness of a contraceptive method when used under ideal conditions. It excludes error in use or failures to use the method.

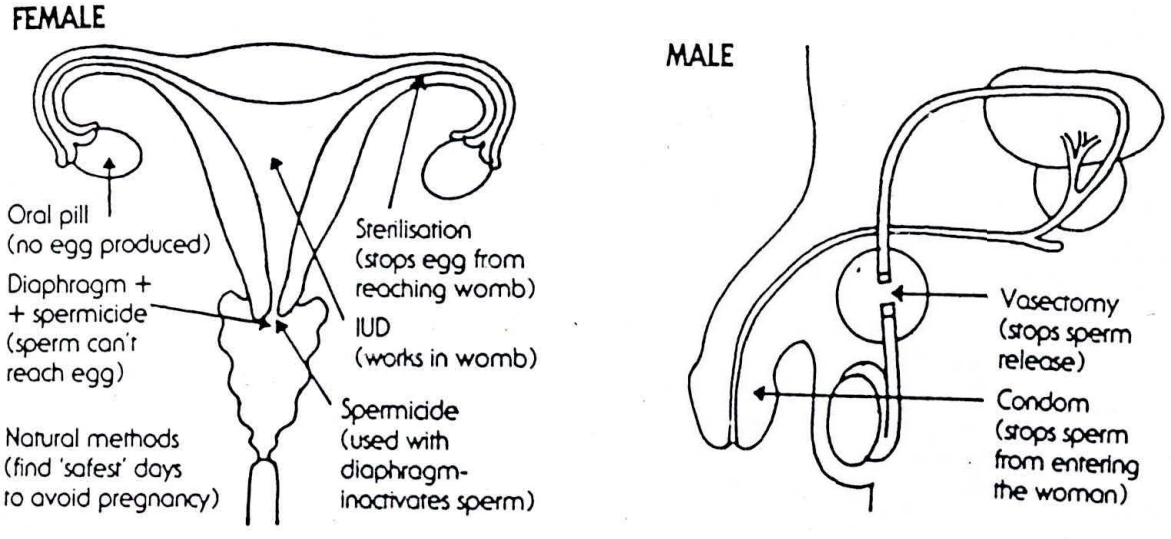
User effectiveness (U.E.) is the effectiveness of the method in real life situations and includes failures of omission or mistakes in use.

Given below are the rates of theoretical effectiveness (T.E.) and user effectiveness (U.E.) for different methods.

	T.E.	**U.E.**
SAFE PERIOD	90%	78 %
COITUS INTERRUPTUS	90%	82 %
SPERMICIDES	97%	78 %
CONDOMS	97%	90 %
IUD	98%	90 %
OCP	100%	99 %
INJECTABLES	100%	99.5%

When the quality of family planning service delivery improves, contraceptives will be used more effectively and this will result in :-

- Fewer method failures
- Increased continuation of contraception
- Fewer unwanted pregnancies



How and Where Methods Work

3.3

NATURAL FAMILY PLANNING METHODS

ABSTINENCE

Abstinence from sexual intercourse during part of the menstrual cycle has been practised throughout history because of religious observance or taboo, or in a haphazard attempt to avoid conception. A number of customs and traditions increase the likelihood of abstinence in society. Some of these are:

- Virginity prior to marriage
- During the menstrual period
- During religious festivals
- Postpartum abstinence

PERIODIC ABSTINENCE

Periodic abstinence based on scientific criteria began only in 1929 when the physiology of the menstrual cycle was understood.

Failure rate : 22% in first year of use.

Method : The woman determines the time of ovulation either by -

a) **Calender method :** This is popularly called the **"Rhythm Method"** and it is based on the fact that ovulation occurs 14 days before the start of the next menstrual bleeding and also that the ovum can be fertilised for 24 hours and that the sperms can live for 72 hours. There is therefore a period of about 8-10 days mid-cycle when theoretically, fertilisation can occur after unprotected intercourse. This period is called the 'fertile period'. The remaining days, about 8-10 days, (counting the 1st day of the period as day 1) immediately after the periods and about 7-8 days before the start of the next menstrual period constitute the safe period because unprotected intercourse during this time will not result in pregnancy.

An easy way to apply this information is as follows:

The length of 6 consecutive cycles is determined and the formula used is :

Shortest cycle - 20 = first fertile day

Longest cycle - 10 = last fertile day.

If all the cycles are of 28 days duration the first fertile day is 28-20 = 8th day of cycle and the last fertile day is 28-10 =18th day of cycle. This means that in this case the couple can safely have unprotected intercourse upto the 7th day after her period and from the 19th day until the start of the menses.

b) **Basal Body Temperature and the Cervical Mucus method** : These methods are not really practical as they need intensive training by the provider and diligent monitoring by the acceptor.

Advantages

- Safe, no side effects

- Reversible
- No cost method

Disadvantages

- High failure rate
- Related to sex act-needs periodic abstinence or use of barrier method.

LACTATION AMENORRHOEA METHOD (LAM)

Lactation Amenorrhoea Method or LAM is postpartum breast feeding and is 98% successful as a contraceptive method if -

- the woman is fully breast-feeding day and night and
- the woman is amenorrhoeic, and
- the woman is less than six months post-partum

When the mother gives her infant other foods/liquids or when her menses return, or at six months post-partum **whichever comes first**, she should begin a complementary method of family planning for continued protection.

Advantages

- Provides optimal infant nutrition and enhances immunity
- Prevents formula-related illness
- No cost, always available method
- No medical intervention is necessary
- No disposal problems
- Empowers women by putting them in control
- Gives women time to choose and be motivated for a method to use later on
- Helps in mother-infant bonding
- Some role in preventing future breast carcinoma in mothers

Disadvantages

- Not reliable if not consistently and properly used

- Not reliable if baby sleeps through the night and is therefore not fed
- The client may not breast feed if she has retracted or sore, cracked nipples or if there is breast engorgement or a breast abscess.
- HIV infection may be transmitted if the mother is infected. However, WHO advises the continuation of breast feeding in infected mothers in developing countries, as the infant morbidity and mortality rates are greater with artificially fed infants than due to any perceived result of HIV transmission.

POST - PARTUM CONTRACEPTION

As already stated, the Lactation Amenohorrea Method is the most effective post-partum contraceptive method.

If however a client is unable to use LAM or has discontinued it, any of the methods discussed in the manual may be used. Certain contraindications for some of the methods are listed below:

Condoms & Spermicides : There is no effect on breast feeding and these methods are effective if used correctly. There is no risk to mother or child. Condoms also offer protection against STDs (including AIDS). Spermicides may also provide some protection.

Calendar method with periodic abstinence : This is effective only when the menstrual cycle is established and regular.

IUDs : No effect on breast feeding. Should be inserted within 72 hours post-partum, or after 6 weeks, as there are greater risks of perforation if inserted after 72 hours and before 6 weeks postpartum.

OCPs : They are very effective but the oestrogens may reduce milk supply (a decrease of 1% in volume). But if LAM is not being used and the infant has been weaned or is 6 months old, OCPs may be used as there is no evidence of harmful effects on the infant through hormones in the breast milk.

Terminal Methods : If the post-partum client desires no more children, terminal methods of contraception are recommended and can be done immediately post- partum, or at any suitable time in the post-partum period, as there is no effect on breast feeding.

WITHDRAWAL OR COITUS INTERRUPTUS

Failure rate : 18% in first year of use

Mode of action : In this method, the penis is withdrawn from the vagina just before ejaculation. This prevents semen from entering the vagina.

Advantages

- Free of cost
- Simple to use
- Reversible
- Involves male responsiblity
- No supplies needed, hence may be used in any emergency

Disadvantages

- Interference with sexual act, may reduce pleasure
- Not reliable – some semen may escape before ejaculation
- Needs self-control.

3.4

SPACING METHODS

SPERMICIDES

Spermicides are available in the form of creams, gels, foam, foaming tablets or suppositories. They inactivate the sperms. The protection begins 10 - 15 minutes after insertion and they remain effective for about one hour. The usual spermicide used is Nonoxynol - 9. The creams and gels can be used with condoms and diaphragms to increase effectiveness.

In India "Delfen" - a cream, and "Today" - a foaming tablet, are the only spermicides available in the market.

Client selection

This method is appropriate for women who -

- are at risk of exposure to STDs including AIDS.
- are unwilling to use or have contraindications to other methods.

- need a back-up method (since a condom may tear or slip off, or a woman may forget to take pills).
- are breast feeding.

Advantages

- Easy to use
- Reversible
- No medical intervention
- Helps protection against STDs
- No need of prescription
- Serves as lubricant during intercourse
- No systemic effects
- Very effective with condoms
- May be used as emergency, if condom breaks or tears.

Disadvantages

- May interrupt sexual intercourse and needs privacy as it is to inserted 10 minutes before the act
- Effective for a short period - 1 hour only
- Must be used before each act of sexual intercourse
- Some women may be sensitive to the spermicide and develop irritation
- Suppositories may fail to melt or foam in the vagina.

Contraindications for the use of spermicides

- Women unable to consistently obtain or use spermicide either due to cost, convenience, privacy and need for partner cooperation
- Women or partners allergic to Nonoxynol - 9.

Instructions to clients

When to use

- The cream or tablet should be inserted deep into the vagina just before intercourse.

- If more than 1 hour passes before intercourse, a second dose of spermicide will be needed.
- If the client has intercourse more than once, a fresh supply of the cream or tablet should be inserted.

How to insert

(a) **Tablet**

- Hands should be washed before insertion.
- Two fingers should be used to push the tablet deep into vagina 10-15 minutes before intercourse. It should be pushed deep enough to touch the cervix.

(b) **Cream**

- The applicator should be used to insert the cream.
- The applicator should be inserted high in the vagina, then the plunger should be pushed in so that the cream goes deep into the vagina.

Follow up

- The client should be advised to return for supplies.
- The client should return if dissatisfied with the method so that informed choice can be given for another method.

CONDOMS

What are condoms?

They are sheaths usually made of latex and are to be placed over the erect penis before coitus. They act as barriers to the transmission of semen into the vagina and protect both partners against STDs (including AIDS).

They may be : plain or lubricated.
thick or thin.
plain or teat-ended.
smooth or ribbed.
with or without spermicides.
coloured.
flavoured.

Failure rate : 10% Effectiveness improves if spermicides are used.

Client selection

- Any client at risk of exposure to or transmission of STDs including AIDS.
- As a back-up method.(e.g. forgetting to take a pill).
- A couple who has contraindications to or is unwilling to use other methods (e.g. IUD, pill).
- A woman who is breast feeding and needs a contraceptive.

Counselling

Give the client general information of condoms in a culturally appropriate way. Give samples to examine. Inform clients about different brands available.

Advantages

- Cheap, easily available
- No medical intervention needed, no clinic setting required.
- No harmful side effects.
- Reversible, may be used by newly weds for delaying pregnancy.
- Encourages male responsibility
- Useful in treatment of premature ejaculation.
- Avoids messy postcoital discharge of semen from the vagina.
- Lubricated condoms reduce mechanical friction and irritation of the penis or the vagina.
- Can be used as a backup if pills are forgotten .
- Protects against STDs including AIDS.

Disadvantages

- Interferes with sexual act: reduces glans sensitivity.
- May slip off or tear. It is estimated that the breakage rate for Nirodh is about 1 break for every 160 acts of intercourse.
- Careful and consistent use essential.
- Needs to be used before each act.
- Difficulty of disposal, especially in rural areas.
- Allergy to latex.
- Problems of storage as it must be stored away from heat and light.
- Male partner may be irresponsible.

Instructions to client

When to use : Condoms should be used at each act of intercourse.

How to use :

- The condom should be rolled over the erect penis before the penis is in the vagina.
- The rim of the condom should be rolled all the way to the bottom of the penis, leaving half-inch of empty space at the top by pinching the top of the condom as it is rolled over the penis.No air should be left in the tip of the condom.
- After intercourse, the condom should be held at the rim as the penis is being withdrawn, so that no semen is spilt anywhere near the opening of the vagina.
- The penis should be withdrawn soon after ejaculation because once the penis returns to its flaccid state, the condom can slip off and pregnancy may result.
- If using spermicides, it should be applied to the outside of the condom.
- The condom should be checked before being thrown away to see whether it is torn or not. If torn, the woman should use a spermicidal tablet or cream, if available;otherwise a postcoital pill or an IUD should be used.
- A condom should be used once only.

Disposal

The condom should be knotted on itself after removal to prevent messy spillage. In rural areas, it should preferably be buried. Otherwise it should be wrapped in paper and disposed off along with the garbage.

The client should be advised not to use any oils or petroleum jelly as lubricants as they can cause deterioration of the condom.

All clients should be given three months supply and addresses of nearest distribution point and/ or shop.

Storage

It should be stored in a cool dark place. Condoms usually last three years.

Steps for return visit (advice to client) :

- The client should be advised to return for resupply or obtain supplies from nearest distribution point.
- Three months supply should be given to the client.
- The client should return to the clinic if dissatisfied with the method. If the client is dissatisfied,the provider should help the client make an informed choice about another method.

Common brands of condoms available in India

Condoms are freely available in the Indian market. They may be bought at the chemists, grocers, panwallahs, cosmetic stores and at all Family Planning counters where Nirodh is available free of cost.

Brands under Contraceptive Social Marketing Programme

BRAND	PCS/ PACK	OWNER	PRICE/PACK(in Rs.)
Nirodh	3's	GOI	0.50
Nirodh Deluxe	5's	GOI	1.50
Nirodh Super Deluxe	4's	GOI	3.00
Sawan	4's	PSS	3.00
Sawan	10's	PSS	6.00

BRAND	PCS/ PACK	OWNER	PRICE/PACK(in Rs.)
Bliss	4's	PSS	6.00
Masti	4's	PSI	6.00
Masti	10's	PSI	7.00

[PSI - Population Services International, PSS -Parivar Seva Sanstha, GOI - Government of India.]

For more information about Contraceptive Social Marketing, please also refer chapter under Managerial Skills pages no. 94 - 99.

Commercial brands

BRAND	PCS/PACK	OWNER	PRICE/PACK
Kohinoor	3's	LRC	4.00
Kohinoor	10's	LRC	10.00
Kohinoor Luxury	3's	LRC	6.00
Moods	3's	HLL	6.00
Moods	10's	HLL	12.00
Kamasutra	3's	JKC	6.00
Kamasutra	6's	JKC	12.00
Scented	3's	JKC	8.00
Adam	3's	PLL	5.00
Adam	10's	PLL	16.00

[LRC : London Rubber Company, HLL : Hindustan Latex Limited
JKC : J.K. Chemicals Limited, PLL : Polar Latex Limited]

3.5

Intra Uterine Devices (IUDs)

What are IUDs?

These are devices made of polyethylene which are inserted into the uterine cavity. They are impregnated with Barium sulphate so as to render them radio-opaque.

IUDs available in India today

CuT 200

This is a T shaped device and is 36 mm. in length and 32 mm. in width. Two nylon threads are attached at the lower end of the vertical stem. A total of 200 mm. copper wire is wound round the vertical stem.

CuT 380 A

This is similar to CuT 200, the difference being that 314 mm. copper wire is wound round the vertical stem with two 33 mm additional copper sleeves on each transverse arm. (total 380mm)

Nova T

This has 200 mm copper wire with a silver core wrapped around the stem but its shape is slightly different.

Multiload-250

It is made of polyethylene with two flexible arms with spurs. It has 250 mm copper wire on the stem.

Mode of action

- They stimulate a foreign body reaction in the endometrium which is potentiated by the addition of copper. This prevents implantation of the fertilized ovum.
- They alter or inhibit sperm migration in the uterine cavity or tubes, of fertilisation and of ovum transport.

Advantages

- Low cost, one-time method.
- Can be inserted immediately post-partum and after an abortion
- Does not interfere with sexual intercourse.
- 80 - 93% women who have IUD removed for spacing, conceive within one year.
- After insertion, little care is needed - no resupply problems or no disposal problems.
- Provides continuous protection (3-5 years). Another IUD can be inserted immediately after the first one is removed.
- Can be used by lactating mothers.
- Acts as post-coital contraceptive if used within 5 days of unprotected intercourse.

Disadvantages

- Needs access to trained health personnel with appropriate equipment and facilities.
- Need to screen for reproductive tract infections (PS & PV examination) before insertion.
- Side effects of pain, bleeding and perforation.
- Risk of pelvic inflammatory disease (PID) especially in users exposed to STDs including AIDS (the woman or husband having multiple sex partners).
- Lost strings - client has to have access to medical facility where it can be evaluated.
- Pregnancy may occur with IUD in place and may lead to septic abortion.
- Method needs intensive counselling and instruction.

Screening of clients for IUDs

Client Selection

IUDs may be used by women who -

- cannot use another method e.g. barrier methods or oral pills.
- where partner will not use a condom.
- do not want any more children or want to wait for some time before having another child. The IUD can be used till menopause or till the women decides on adopting a permanent method.
- are in long lasting, mutually faithful sexual relationships.
- are smokers.
- are breast feeding.
- have successfully used an IUD before.

Contraindications

a) On history and/or physical examination

- history of multiple sex partners of either client or spouse.
- nulliparity.
- severe dysmenorrhoea.
- heavy menstrual flow.
- severe anaemia.
- heart disease as the client may be susceptible to subacute bacterial endocarditis.

b) **On vaginal or speculum examination**

- vaginal discharge.
- cervical discharge (may be due to salpingitis or gonorrhoea).
- bleeding from any part of the genital tract of unknown origin (may be indicative of tumours, either benign or malignant).
- cervix with marked erosion or laceration.
- tenderness on bimanual examination.
- uterine enlargement due to pregnancy or tumour.
- tubo-ovarian mass (indicative of pelvic inflammatory disease)

Facility for IUD insertion

Only at places where adequate facilities like privacy for consultation, examination and insertion are available. Facilities to ensure asepsis during insertion should be available. In a Primary Health Centre, the IUD should be inserted in the operation theatre or any other room where asepsis can be maintained irrespective of whether the insertion is performed by a medical officer or by paramedical staff.

When to Insert IUD

A trained medical officer or paramedical staff may insert an IUD in the following situations:

(a male doctor should always examine a female client in the presence of a female attendant)

- Preferably on the 5th day of the menstrual cycle as bleeding associated with the insertion is likely to cause less anxiety.
- any time convenient to the client, provided it can be confirmed that she is not pregnant.
- immediately after a first trimester spontaneous or legally induced abortion, preferably with antibiotic cover.
- immediately postpartum (within 72 hours) or, if not possible, at the six weeks post natal check up visit. (There is a greater risk of perforation if insertion of IUD is done between 3-40 days post partum)
- during lactation, if pregnancy can be ruled out by bimanual examination or by a pregnancy test

When not to insert an IUD ?

The client should not have an IUD inserted but should be counselled to use another contraceptive method if she answers 'Yes' to the following questions:-

- Are you still awaiting to have your first child?
- Have you missed your recent period?
- Do you now have or have you recently had fever, chills, lower abdominal pain or unusual discharge?
- Have you ever been told that you have pelvic infection?
- Have you ever been anaemic?
- Have you recently had heavy bleeding, spotting or bleeding?
- Have you ever had a pregnancy outside the uterus i.e. ectopic pregnancy?
- Do you or your husband or sex partner have other sex partners?
  (If the client answers "yes", she may be at risk for AIDS and other STDs. She should consider using condoms and contraceptive foam instead of an IUD).

Insertion techniques for CuT

After counselling and selecting the client as suitable for an IUD insertion, explain to the client where and how the IUD is inserted.

After a physical examination of the client, the MO should

- Wash hands and put on sterilised gloves.
- Do a bimanual/speculum examination with all aseptic precautions.
- Remove gloves and wash hands again.
- Put on a fresh pair of gloves.
- Clean external genitalia/vagina with antiseptic solution.
- Put cuscos/sims speculum in the vagins.
- Clean cervix/cervical canal with antiseptic solution.
- Hold anterior lip of cervix/cervical canal with allis forceps and maintain gentle traction.
- Sound the uterus gently. Note direction/length of uterine cavity.
- Prepare CuT for insertion using no touch technique.
- Adjust distance between flange and tip according to the uterine length.

- Introduce threads of CuT first into inserter tube, followed by vertical arm.
- Grasp tips of transverse arms. Bend the tips downward and push them into the inserter.
- Introduce the plunger till it touches the lowest part of vertical arm.
- Position flange so that it is parallel to the transverse arm of CuT.
- Now introduce inserter tube with the plunger into cervical canal till it reaches the fundus.
- Hold plunger. Withdraw inserter tube. Then remove the plunger.
- Remove allis forceps. Swab the cervix.
- Remove speculum. Decontaminate instruments.
- Ask the client to feel the thread.
- Put sterile pad on the vulva and ask the client to stay for 30 minutes.

Counselling a new client

Show a sample CuT and explain :

- when, where and how it will be inserted.
- the common side effects such as cramps and bleeding.
- slight chances of expulsion or unintended pregnancy.
- warning signs.
- time of replacement and where it can be removed and replaced, if necessary.
- need for return for follow-up - after one month and six monthly thereafter. Also if she has any of the warning signs.

Inform the client that :

- Normal work can be resumed immediately after insertion.
- She can have sex immediately after insertion, unless she has just had a child. During the first 3 days after insertion, bleeding may occur which is not a matter of worry.
- Her partner will not feel the IUD. However,if he has pain during sex, it may mean the IUD strings are too long or the IUD is beginning to come out of the uterus. She should then return to the clinic as the strings can be cut and pushed behind the cervix or the IUD replaced.

Counselling a continuing client

- Clients may need advice regarding side effects or lost strings.
- Regular contact benefits and reassures clients.

Instructions to clients

- IUD is effective immediately after insertion.
- The strings should be checked frequently, after washing hands.
- The client should squat and reach into the vagina with two fingers and try to locate the strings. She should not pull on the strings. If the strings are not felt, she should come to the clinic for a check-up. She should be advised to check the strings several times in the first month after insertion, then after each menstrual period.
- The client should return for a check-up if there is severe pain in the lower part of the abdomen, abnormal bleeding, bleeding or pain after intercourse, lengthening of the string, or if the IUD can be felt in the vagina.
- The client should be asked to check pads and the toilet during menstruation as expulsion occurs mostly at this time. If the IUD is found to be expelled, she should return to the clinic for advice. She should be counselled that some pain and/or heavy bleeding during periods is to be expected in the first few months after insertion of the IUD.
- If there are no problems she should return for check-up after one month and six monthly thereafter.
- She should return to the clinic if dissatisfied with the method for any reason.
- The IUD (CuT 200B) is usually effective for 3 years depending on the type used. The client should be informed of this so that she can return for a fresh insertion if needed.

Followup

- Ask the client if she and her partner are satisfied with the method.
- If not, ask if there are any complaints or problems.
- Take a full history, and perform a speculum and bimanual examination as a routine followup.
- Manage side effects, if any.
- If any contraindications or side effects develop which the client finds unacceptable, or if the client is dissatisfied with the method, remove the IUD and help the client make an informed choice about another method.
- If the client is satisfied and there are no contraindications to continued use, give the client a date for follow-up and remind her to return if there are any warning signs.

SIDE EFFECTS AND MANAGEMENT

Side effect	Management
BLEEDING :	
Some bleeding on insertion, or the first few cycles are heavier than normal or there may be spotting or intermenstrual bleeding	Iron and/or calcium may be tried for 2 cycles. Remove the IUD in the PHC if bleeding continues or is severe. Advise another contraceptive method.(C.M.)
Irregular or heavy bleeding	Check Hb, if < 8 Gms. treat the anaemia, remove the IUD and suggest another C.M. Do a speculum and PV examination to rule out genital tract pathology. If in doubt, refer to a gynaecologist.
PAIN :	
Uterine cramps or low backache may occur soon after insertion and may persist for the first few weeks.	Analgesics may be given.
Intermittent pain may be present during the first few weeks--psychological and cultural factors affect this reaction.	Counsel that the pain will subside. If severe, she should return to the PHC. If the pain is associated with discharge and /or bleeding, the IUD may be removed. Always keep

ectopic pregnancy and PID in mind when evaluating pain.

INFECTION :

The client may have fever, low backache and vaginal bleeding. 2% women develop PID during the Ist year of use of IUD following insertion under aseptic conditions. The figure is likely to be higher whenever technical and aseptic standards are not maintained.

Proper screening of women (with respect to susceptibility to STDs) is essential. Do not treat PID with the IUD in place, unless it is very mild for which 100 mgs doxycycline may be tried for two weeks. If the client improves, the IUD may be left in place. If infection is severe, treat with antibiotics after removing the IUD.

PREGNANCY :

Amenorrhoea with IUD in place

Ask the client when she had her last menstrual period (LMP) and when she last felt the strings.

Rule out pregnancy by a pelvic examination followed by a pregnancy test (if available). If tenderness is elicited on PV, there may be an ectopic pregnancy. Refer to a higher facility.

If the strings are seen and the client is pregnant, remove the IUD immediately in the PHC.

MTP is advisable.

If the client insists on continuing the pregnancy, she should be informed that spontaneous abortion, premature labour and still birth are more common in pregnancy with an IUD in situ. Also that congenital abnormalities are common.

Ectopic pregnancy should always be kept in mind in any client with IUD and pregnancy.

MISSING STRINGS :

Ask the client if she knows that the IUD has been expelled. Ask her when she last felt the strings and when she had her last menstrual periods.

Do a pelvic examination. If the IUD is lying in the vagina and the client is not pregnant, reinsert another IUD if the client so desires.

If the string is not felt and the client is not pregnant, an X-Ray with an uterine sound inserted may be needed to confirm that the IUD is in the uterus.

If the IUD is visualised, and is properly placed in the uterus, no further action needs to be taken. Remember that removal of an IUD may need a hook and the client should be referred to a higher facility for removal.

If in doubt or the IUD is not visualised, refer to a higher facility.

EXPULSION :

Spontaneous expulsion may occur especially after post-partum insertion. The client reports that she has seen the IUD expelled.

Care should be taken while inserting that the device is entirely within uterine cavity. Reinsertion may be done provided pregnancy is excluded.

PERFORATION :

This occurs usually at the time of post partum insertion and during lactation. This is recognised when the uterine sound goes a long way inside the uterus. The client may complain of abdominal pain, missing strings, bleeding or she may be asymptomatic.

Refer to a higer facility as it may necessitate a laparoscopy or laparotomy.

Warning signs

The client should be asked to report to the PHC immediately, if she has any of the following signs:

P = Period late, abnormal spotting or bleeding.

A = Abdominal pain severe, pain on intercourse.

I = Infection - exposure to STDs, abnormal discharge.

N = Not feeling well, fever, chills.

S = String missing, shorter or longer.

3.6

ORAL CONTRACEPTIVE PILLS (OCPs)

The oral pill is a simple, safe and sure method of contraception and over 150 million women have used this method. Current users are estimated to be 50-60 million women. The use failure rate after one year of use is 1%.

What are OCPs ?

They are a combination of the female sex hormones-oestrogen and progestogen. The doses of the hormones have been progressively reduced over the last two decades to the very minimum needed to prevent pregnancy.

Types of OCPs

There are two kinds of OCPs available in India today:

Combined : These contain fixed doses of oestrogen and progestogen in each pill. In the early 60's, the pill contained very high doses of hormones. This has now been reduced to the lowest dose required to prevent pregnancy and these pills are called "Low-dose Pills". They contain Norgestrel 0.3 mgms and Ethinyl oestradiol 0.03 mgms. All pills such as Mala D, Ecroz, Pearl are low dose pills. The guidelines of this training programme refer to low dose pills only. There also are some pills which are commercially available which contain Norogestrel 0.5mgm. These are mainly used for gynaecological problems and are not to be advised for contraception.

Phasic : In this, the doses of the hormones vary during different phases of the menstrual cycle.

Mode of action

- OCPs suppress ovulation.
- They alter the endometrial lining, making implantation of the fertilised egg difficult, if not impossible.
- They thicken the cervical mucus making a barrier to the passage of sperm into the uterus.

Advantages

(a) **Contraceptive benefits :**

- Useful in nulliparas.
- May be used immediately after a spontaneous abortion.
- Useful for women wanting to postpone sterilisation procedure.

(b) **Menstrual cycle benefits :**

- Decreased menstrual cramps.
- Decreased blood loss during periods thus decreased anaemia.
- Regular menstrual cycles.

(c) **Other benefits:**

- Decreased benign breast disease.
- Decreased risk of ectopic pregnancy and cancer of the ovary.
- Decreased risk of endometrial cancer.
- Some protection against Pelvic Inflammatory Disease (PID).
- Some protection against rheumatoid arthritis.
- There is no adverse effect on children born after the pill is discontinued. Also, if inadvertently the client continues to take the pill during a pregnancy, there is no evidence of congenital abnormality in the child.

Disadvantages

- Must be taken daily.
- No significant protection against STDs and AIDS.
- Cardiovascular risks, if the clients are not selected carefully.
- Other temporary side effects.

Client selection

- Specially suitable for young, newly married or unmarried women.
- Age is no bar. Pills can be started as soon as regular cycles are established after puberty, and even over age 35, if there are no medical contraindications or the client is not a smoker.

- For spacing of pregnancies, especially if the client does not wish to use an IUD or the husband will not use a condom.
- Interval period - while waiting to accept a terminal method.
- Post abortal - immediately after a spontaneous complete abortion or a MTP.
- Post coital contraception - Four tablets of a low-dose pill within 72 hours of unprotected intercourse followed by four more tablets 12 hours later.
- Postponement of periods - continuous taking of hormonal only pills without break as long as postponement is required.
- Suitable for clients who cannot use an IUD due to dysmenorrhoea/menorrhagia or who has history of ectopic pregnancy.

Contraindications

The Medical Officer should screen the clients and not advice the OCP under the following circumstances:

- if a woman has known or suspected pregnancy.
- has unexplained vaginal bleeding.
- has acute liver or gall bladder disease or unexplained enlargement of the liver.
- has a lump in the breast.
- has a history of stroke, thrombophlebitis, angina, myocardial infarct or any cardiovascular disease.
- is following the Lactation Amenorrhoea Method of contraception.
- is over 35 and a smoker.
- has hypertension (systolic BP over 140mm.of Hg. and diastolic over 90mm.of Hg. on at least three consecutive visits).
- has diabetes.
- has migraine headaches.
- needs elective major surgery or surgery needing immobilisation for at least four weeks.
- has a leg injury needing plaster cast.

- if taking drugs like Rifampicin. Phenobarbitol or anticoagulants.

Side effects

These are hardly ever seen with the low dose pills and are limited to the first 2-3 cycles. The clients need to be reassured and advised to continue to use the pill. As the action of the oral pills is to mimic pregnancy, the symptoms are the same as in the early months of pregnancy,

- Nausea.
- Sore breasts.
- Breakthrough bleeding.
- Weight gain, but this is reversible.

Physical exam check list for users of OCPs

(Please note that although it is **desirable** for a doctor to see a client on OCPs, it is not **essential**).

Look for the abnormalities listed below	**If the response is "YES", follow the instructions below**
Is blood pressure greater than 140/90 mmHg.on three successive visits or the diastolic pressure is 110 mmHg on a single visit?	DO NOT give OCPs. Give an informed choice of a non-hormonal method.
Is the pulse greater than 100 or highly irregular ? or Is cyanosis observed? or Is extreme shortness of breath observed?	If the answer is "yes" to any one of these questions, the client may have serious heart disease. Help the client make an informed choice of a non-hormonal method. Treat the condition.
Is she jaundiced? or Does she have enlarged tender liver ?	If the answer is "yes" to either one of these, it may be a sign of active liver disease. Help the client to make an informed choice of a non-hormonal method. Treat the condition.
Does she have severe, tender varicose veins or thrombophlebitis ? or	May indicate high risk of blood clot. Help the client make or an informed choice of

Does she have a lump in the breast?	Do not give OCP but help the client make an informed choice of a non- hormonal method.

If the client has any of the abnormalities listed above, she should be treated/referred for them, apart from being given an informed choice of another method.

Pelvic exam checklist for users of OCPs (where facilities for P.V. are available)

Look for the abnormalities listed below	**If the responses is "YES", follow the instructions below**
Does she have an enlarged smooth, soft uterus ?	Pregnancy is likely. Refer to a prenatal clinic. DO NOT give OCPs.
Does she have an adnexal mass?	May have an ovarian cyst, an ectopic pregnancy, a tumour of the ovaries or tubal infection. Refer to a gynaecologist. Advise the client to use condoms and/or spermicides for protection against STDs, including AIDs. Treat the condition.
Does she have marked tenderness of cervix adnexa, or uterus? or abnormal cervical discharge ?	Any one of these findings may indicate sexually transmitted disease. Give OCPs but also advise the client to use condoms and / or spermicides for protection against STDs, including AIDS.

[Adapted from: INTRAH - guidelines for Clinical Procedures in Family Planning and Sexually Transmitted Diseases, 1989]

Counselling

- Has she ever used oral pills?
- How did she use them?
- Any side effects?
- Did they work for her?

- Did they work for her?
- Why discontinued?

If never used -

- Has she discussed this method with her partner?
- Will partner disapprove?
- Will she make the decision to use it?
- Will she remember to take the pills every day?

Show the client a sample packet of pills and give information and instructions for use in a culturally appropriate way. Let her ask any questions and clear her doubts. Give two cycles to start with and then, as and when required. The client should always have a spare packet in case there is a delay in resupply.

Inform her that pill taking should continue even if her husband is away. If the pills are to be discontinued for any reason, the packet or cycle should be completed before stopping pill-taking.

Instructions for use

The pills should be started on the 5th day of the period, counting the first day of bleeding as day 1, with the pill marked "start" on the pack.

One pill should be taken daily, preferably at the same time each day, in the direction of the arrows.

In a 28 day pill pack, the next pill cycle should be started after the last pill in the first cycle. In a 21 day pill pack,after the last pill, a new cycle should be started after a wait of 7 days.

Missed pills

If one pill is forgotten, it may be taken as soon as the client remembers, or she may take 2 pills the next day. If two or more pills are forgotten, it is advisable to use a back up method of contraception for that cycle, e.g. condoms or abstinence. Meanwhile, the pill-taking should continue, 2 pills should be taken together on the first two successive days, and then one pill a day as usual.

Early pill danger signs

The client should be asked to report to PHC immediately,if she has any of the following signs :

A - Abdominal pain (severe)

C - Chest Pain (severe); shortness of breath.

H - Headache (severe); dizziness, weakness or numbness.

E - Eye problem (blurring of vision).

S - Severe leg pain (calf or thigh).

What to do if client has vomiting or diarrhoea ?

- If vomiting starts more than 3 hours after the client has taken the pill, no action is needed.
- If vomiting starts less than 3 hours, a further pill should be taken from another packet.
- If vomiting continues, a back-up method should be used for that cycle.
- If diarrhoea starts more than 12 hours after the last pill, no action is needed.
- If diarrhoea starts less than 12 hours, an extra pill should be taken from another packet.
- If diarrhoea continues, a back-up method should be used for that cycle.

3.7

NON-HORMONAL ORAL CONTRACEPTIVES

CENTCHROMAN OR SAHELI

Centchroman or Saheli, is a non-steroidal oral contraceptive developed in India by the CDRI, (Central Drug Research Institute) Lucknow.It combines weak oestrogenic with potent antioestrogenic property.

Mode of action

It inhibits uterine preparation for ovum implantation and acclerates ovum transport.

How to take Centchroman

It is to be started on the 1st day of the menstrual cycle. It should be taken twice a week, three days apart for three months. After this, it has to be taken once weekly (on the same day each week). It is not essential for a client to see a doctor before starting centchroman.

Contraindications

- Recent history of jaundice/liver disease.
- Polycystic ovarian disease.
- Cervical hyperplasia or chronic cervicitis.
- Severe allergic conditions.
- Chronic illness e.g. T.B. renal disease.
- Nursing mothers during first six months.

Missed tablets

In case a dose is missed by 2 or more days but less than 7 days, the normal schedule should be continued and a back-up method such as condoms should be used till the next menstrual period.

INJECTABLES AND IMPLANTS

INJECTABLES

Injectables contain progestogens only, to avoid undesirable oestrogen related side-effects. These injections are available worldwide. In India, they have only recently been introduced in the market.They are given intramuscular, deep into the deltoid or gluteal muscle.

Two brands of injectables that are available are :

DMPA - Depot medroxy progesterone accetate - Dose 150 mgms every 3 months.

NET-EN - Norethindrone enanthate - Dose 200mgs every two months.

Advantages

- Highly effective, failure rate is very low (DMPA 0.3%, NET-EN 0.4%.)
- Not related to sex act.
- No need to keep supplies at home.
- Decreases pain and bleeding during menses.
- Does not affect lactation.
- Reduces incidence of sickle cell crisis in clients with sickle cell anaemia.
- Long - acting, provides protection for several weeks.

Disadvandages

- About 50 % of clients experience spotting/irregular periods in the first few cycles of use
- 50 % of clients get amenorrhoea after one year of use
- There is delayed return of fertility of about 6-9 months after the last injection.
- No protection against STD/AIDS.

IMPLANTS

Norplant

This consists of 6 slender flexible capsules containing 38 levonorgestrel which are inserted under the skin under local anaesthesia. It is effective for five years and the effect can be reversed whenever desired, by removing the capsules. This is not available in the market as trials are still going on.

Advantages

- Highly effective,failure rate 0.2% in first year of use.
- Long-lasting.
- Not related to intercourse.
- Reversible.
- No oestrogen-related side effects.

Disadvantages

- Site may be slightly visible .
- Higher initial cost.
- Trained doctor is essential to insert and remove implant.
- No protection against STD/AIDS.
- Menstrual irregularities and amenorrhoea : Over 50% clients experience some disturbance of the menstrual cycle during the first year of use.

EMERGENCY CONTRACEPTION (POST - COITAL CONTRACEPTION)

Sexual experiences especially in adolescence are sometimes unprotected and there may be a need for an emergency form of contraception to prevent an unwanted pregnancy. Post-coital contraception is important also in the management of rape in a woman, as also for those couples who have missed pills or have contraceptive accidents such as condom rupture. One of the following regimens may be used in such cases as an emergency:

OCPs - 4 tablets of a low dose formulation OCP should be taken within 72 hours of unprotected intercourse followed by 4 more tablets 12 hours later.

IUD - An IUD can be inserted upto 5 days after unprotected intercourse.

RU 486 - This is not yet available in India. It can be used either in a single dose of 600 mgms on day 27 of the cycle or in a dose of 200 mgms per day from day 23 to day 27.

3.8

PERMANENT METHODS

STERILISATION

Sterilisation is a permanent method of contraception whereby the person is rendered infertile. It involves blocking the duct that carries the egg (ovum) or the sperm. Thus the ovum and sperm cannot meet, so fertilisation does not occur and there is no pregnancy.

Certain conditions stipulated by the Government of India must be satisfied before the procedures

of sterilisation can be performed. These conditions are meant to minimise complications and improve the quality of care.

Physical requirements for sterilisation in a PHC

(Adapted from Standards for Male and Female Sterilisation, Ministry of Health & Family Welfare, Government of India, 1992)

Facilities

PHCs performing voluntary sterilisation procedures under the National Family Welfare Programme must meet the following requirements :

- The clinic facility should be well ventilated and flyproof, with a concrete or tile floor that can be cleaned thoroughly.
- There must be running water.
- There must be an electricity supply with a standby generator and other light source.
- Adequate space must be provided for the various programme activities. Separate areas should be earmarked for the following :

1. **Waiting area**
2. **Laboratory** with facilities for blood and urine examination.
3. **Physical examination rooms** : A single room can be used, if one client is examined at a time. But privacy at the time of examination must be maintained at all times. Follow up may be carried out in this room.

   Pre-operative preparation room : The room should have facilities for shaving, washing, changing clothes and pre-medication. This may be done in the ward after ensuring privacy.
4. **Operation theatre (OT) complex**

   Hand washing - scrubbing area - an ante-room near the OT: The area must be equipped with elbow or foot operated taps.

   Sterilisation rooms : This is required for autoclaving, washing and cleaning equipment and preparation of sterile packs. Ideally this should be near the OT. (The scrubbing area and sterilisation room can be in one room, if space permits).

   Operation room : This should be isolated and away from the general thoroughfare of the clinic. The OT should be large enough to allow operating staff to move freely and to accommodate all the necessary equipment. Lighting should be adequate. The room should be easy to enter and leave, in case of an emergency. The room should have swing doors and the surrounding corridors and space should be locked when not in use. The OT should be

fumigated at least once per week. Storage area must not be in the OT.

Recovery room or ward : This area must be spacious and well ventilated. The number of beds will be determined by the available space. This room should be situated adjacent to the OT.

Follow-up room : As follow up is emphasised in the sterilisation programme, designated space should be allocated on the clinic premises. This may be the same as the examination room. However in a PHC, this can be done in the ward or the Doctors room after routine surgery is over.

5. **Adequate toilets :** A sufficient number of sanitary type toilets with running water must be available for the clients and staff.

Eligibility criteria (For male and female sterilisation)

- The client should be married and the spouse must be living.
- The male client must be below age 50 years, his wife must be below age 45 years.
- The number of children must not be a criterion for determining the eligibility for sterilisation acceptors.
- The client or spouse must not have undergone previous sterilisation. (This condition may be waived in case of failure of the previous operation.)
- The client must be in the proper state of mind to understand the full implications of the sterilisation surgery.

Contraindications : (For male and female)

There are no absolute contraindications. However, sterilisation should not be performed in a PHC or mobile camp under the following circumstances. The Medical Officer must rule out the following :-

Mental illness : The client is unable to provide informed consent.

Physical illness :

- Acute febrile illness
- Jaundice or other chronic liver disease.
- Anaemia with haemoglobin less than 8 mg%.
- Chronic systemic diseases including tuberculosis, bronchial asthma, blood dyscrasias, heart disease, uncontrolled diabetes, hypertension and thyrotoxicosis.
- Bleeding disorders.

- Severe nutritional deficiency such as hypoproteinaemia and vitamin deficiency.
- Skin conditions involving the operative site, such as thickening, infection or oedema, local skin infections or genital tract infections making surgery difficult. These must be treated before the operation is performed.
- Allergies to local anesthesia.
- Malignancy

Contraindications for male clients

- Local genital conditions, including large varicocele, hydrocele, inguinal hernia, filariasis (elephantiasis), scar tissue, cryptochordism, previous scrotal surgery and intra-scrotal mass.

Contraindications for female clients

- Pelvic infection, adhesions, or mass
- Continuing pregnancy
- Obesity that would make surgery difficult under local anesthesia.
- Contraindications for post-partum clients. Voluntary sterilisation may have to be deferred to the interval period if any of the following conditions are present.
- Puerperal fever
- Prolonged rupture of membranes
- Pre-eclampsia or eclampsia in the antenatal period
- Ante-partum and post-partum haemorrhage
- Trauma to the genital tract - injury to cervix and/or vagina or perineum
- History of post partum psychosis.

VASECTOMY (MALE STERILISATION)

Success rate : *almost 100%*

Before we understand more about vasectomy, it is important to know the composition of semen. About 30% of semen consists of sperms and the remaining 70% is made up of secretions/fluid from the prostate and seminal vesicles which are glands through which the vas passes. As vasectomy involves ligation of the vas- the duct which carriers the sperm from the testes to the ejaculatory duct, the semen after vasectomy does not have sperms, but is made up only of prostatic and seminal secretions.

Client screening

(a) Personal information :

The following information is required : age, marital status, occupation,religion, education, number of living children, and age of youngest child.

(b) Medical history

(i) History of illnesses and other medical conditions, including hypertension, anaemia, convulsions, respiratory problems, heart disease, diabetes, bleeding disorders, psychiatric conditions, scrotal or inguinal surgery, genitourinary infection, sexual impairment or sexual abnormality, and allergies to medications.

(ii) Immunisation status of man (for tetanus), of children for six killer diseases : tetanus, tuberculosis, diptheria, pertussis, poliomyelitis, and measles.

(iii) Addictions (alcohol, smoking, and drugs).

(iv) Current medications.

(v) Last contraceptive used by client or his wife.

(c) Physical examination

Pulse and blood pressure; body weight; temperature; general condition and nutritional status; auscultation of heart and lungs; examination of abdomen, penis, testicles, and scrotum; and other examinations as indicated by client's medical history or general physical examination.

(d) Laboratory examination

Blood test for haemoglobin, urinalysis for sugar and albumin, and any other laboratory examination as indicated.

Instructions before vasectomy

- The client must receive a clear description of what will happen prior to and during the sterilisation, including a description of the examination, laboratory tests and surgery.
- The client must bathe and wear loose clothing to the OT.
- The client should have a light meal on the morning of the surgery.
- Before entering the OT, he must empty his bladder.
- Before entering the OT, he must remove any eyeglasses, contact lenses and dentures.
- Someone must be available to accompany the client home after the surgery.
- He must receive instructions on his post-operative self-care, incision care, when he can resume coitus, and when and where he is to return for follow-up visits.

- He must receive instructions on where to go if complications such as infection, swelling of the scrotum, fever, increasing pain or bleeding from the incision arise.
- He must receive instructions on how to use the medication prescribed after the surgery.
- The client must understand that he is not sterile immediately and that he or his wife will have to use another method of contraception for at least 20 ejaculations and until two semen examinations have shown absence of sperms.

Vasectomy procedure

Pre-operative tetanus toxoid should be given as required.

In conventional vasectomy, local anesthesia is given at the proposed point of incision. This is just the point in the scrotum where the vas is palpable as a thick cord above the testis. A small nick is made and a portion of the vas is cut and the two cuts ends are tied. The incision is then stitched. The same procedure is repeated on the opposite side on the other vas.

Some surgeons prefer a single central midline approach for both the vas. What is gained in a single incision can be lost, if infection occurs as it will affect both the scrotal sacs.

Non scalpel vasectomy (NSV)

This is a new surgical technique of vasectomy that does not involve an incision in the scrotum. A very fine, sharp, pointed forcep is used to puncture the skin at the point where the vas is palpated. Through this puncture, the vas is delivered and ligated as before. As there is no incision there is no suturing. Chances of haematoma are practically nil. It requires skill and minimizes dissection.

In Delhi, the training for this procedure can be obtained at Lok Nayak Jai Prakash Narayan Hospital (LNJPN) and the National Institute of Health and Family Welfare (NIHFW). This training may be acquired by graduate doctors from certified trainers in Himachal Pradesh. A certain minimum number of NSVs have to be performed by the trainee under the trainer's supervision.

Post-operative instructions remain the same as in conventional vasectomy.

Complications

Intra-operative complications

Although the incidence is rare, the following may be encountered during the procedure.

- **Transient drop in blood pressure or dizziness** - This may be due to a vasovagal attack. In such cases, the procedure should be delayed and the patient be allowed to rest; his face should be wiped with cold water and his head lowered. The injection of IM atropine may be of assistance in correcting this problem.

- **Convulsion and toxic reactions to local anesthesia** - In such cases, injection of diazepam 5-10 mg IV and oxygen inhalation may be used. Administration of IV fluids is not generally required, but may be needed on occasion. Surgery should be stopped and the patient allowed to recover. Further surgery should be performed at a centre with full range of services.
- **Injury to testicular artery** - This complication is very rare, but if it does occur, both ends of the artery must be ligated.

Immediate post-operative complications

- **Swelling of the scrotal tissue, bruising, and pain** - These short-term minor complications often disappear without treatment within 24-48 hours. Ice packs, scrotal support, and simple analgesics may provide relief.
- **Haematoma** - If small, it can be treated by scrotal support, analgesics, and antibiotics. A large haematoma may, in addition, need evacuation, antibiotics, and further treatment. If a haematoma is detected early, it is desirable to cut the stitches, remove the clots, and look for the bleeding or oozing points, which should be tied. Referral should be considered.

Infection

- **Stitch abscess** - Must be treated with removal of stitch, drainage and application of dressings.
- **Wound sepsis** - In case of severe sepsis, the wound should be opened and pus drained. Further treatment should include application of dressings and administration of antibiotics and analgesics.
- **Orchitis** - Cases of severe orchitis may need hospitalization. Cases must be treated with antibiotics, analgesics, support and bed rest.

Tetanus

- A rare complication. If tetanus is detected, the patient must be transferred to a proper centre for treatment immediately.

Delayed complications

Sperm granuloma

- Can occur either at the site of vas occlusion or at the site of epididymis. The majority of these are symptomless and respond to analgesics and anti-inflammatory drugs. Very occasionally a persistent and painful granuloma may necessitate surgical intervention.

Psychological problems

- Uncommon, but discussion of the problem, clarification of the role of sterilisation, and answering questions are important. Appropriate referral should be offered to the client if necessary.

Failure of vasectomy

- Incidence is quite low, but failure may occur because of technical deficiencies in the surgical procedure or there may be spontaneous recanalisation. The client's wife should be offered MTP or be medically supported throughout pregnancy. The client should be offered repeat surgery.

Instructions after vasectomy

Client should be advised to :

- Rest for the remainder of the day of operation and resume light work after 48 hours.
- Resume normal diet.
- Take analgesics as needed and antibiotics for 5-7 days, where asepsis may be compromised.
- Wear a scrotal support so that the testes do not hang down. This relieves raw feeling after the procedure.
- Keep the incision area clean and dry. Bathe after 24 hours keeping the area dry.
- Avoid strenuous activity and heavy exercise, specially cycling for 7 days.
- Resume sexual activity after 2 weeks, but with adequate contraceptive back up.
- Return for stitch removal after 7 days.
- Report earlier if there is bleeding, high fever, severe pain or swelling at the site of surgery, fainting or increase in scotal size.

Important : The client must use a contraceptive method for at least 20 ejaculations after surgery. This is important so that the sperms distal to the site of ligation are ejaculated. Ideally two semen tests confirming the absence of sperms would prove the success of the surgery. If this simple instruction is not given, the partner is likely to conceive because of stored sperms. This will lead to social and medico-legal problems which are totally avoidable. Two semen analysis reports should show azoospermia before coitus can be resumed without use of any other contraceptive method.

Follow up procedures

- First follow-up after 7 days for stitch removal and wound inspection for pus, swelling and redness.
- Second follow-up after 3 months/20 ejaculations for semen analysis.
- Emergency follow-up any time, if required.
- Subsequent follow-up for any complications or questions.

3.8.1

FEMALE STERILISATION

This is a method of permanent contraception. It is ideal for a woman who does not desire further children as it has a very low failure rate. In this procedure the fallopian tube (where the ovum and the sperm meet and fertilisation occurs) is blocked. The following methods are accepted world wide :

Surgical methods :

- Minilaparotomy.
- Laparoscopic tube ligation.

Medical methods :

- Chemical sterilisation by using Quinacrine instillation with a modified IUD inserter.

Client screening

(a) Personal information

The following information is required : age, marital status, occupation, religion, education, number of living children, and age of youngest child.

(b) Medical history

(i) History of illnesses and other medical conditions including hypertension, anaemia, convulsions, respiratory problems, heart disease, diabetes, bleeding disorders, psychiatric conditions, pelvic or abdominal surgery, pelvic inflammatory disease, vaginal discharges and urinary tract infections, and allergies to medications.

(ii) Immunisation status of woman (for tetanus), of children for six killer diseases : tetanus, tuberculosis, diptheria, pertussis, poliomyelitis, and measles.

(iii) Addictions (alcohol, smoking, and drugs).

(iv) Current medications.

(v) Last contraceptive used.

(vi) Menstrual history : date of last menstrual period; current pregnancy status (if pregnant, how many weeks?)

(vii) Obstetric history : Number of pregnancies, deliveries (live births and stillborn), abortions (spontaneous and induced), living children of each sex, age of youngest child.

(c) Physical examination

Pulse and blood pressure, temperature, body weight, general condition and nutritional status; auscultation of heart and lungs; pelvic examination, and other examinations as indicated by client's medical history or general physical examination.

(d) Laboratory examination

Blood test for haemoglobin, urinalysis for sugar and albumin, and other laboratory examination as indicated.

Pre-operative instructions

- The client must receive a clear description of what will happen prior to and during the sterilisation, including a description of the examination, laboratory tests and surgery.
- The client must bathe and wear clean and loose clothing to the OT.
- The client must fast after midnight on the day before surgery.
- On the morning of the surgery, she must empty her bowels, and before entering the OT, empty her bladder.
- The client must not wear any jewellery, nail polish or hairpins to the OT.
- Before entering the OT she must remove eye glasses, contact lenses and dentures.
- Someone must be available to accompany the client home after surgery.
- She must receive instructions on her post-operative self-care, incision care, when she can resume coitus, when and where to return for follow-up visits.
- She must receive instructions on where to go if complications such as infection, fever, increasing pain, bleeding from the vagina and suspected pregnancy arise.

- She must receive instructions on how to use the medications prescribed after surgery.

Surgical methods

A. Minilaparotomy

Anesthesia

- Local with sedation
- Spinal
- Short general anesthesia.

Timing

Only the level of the incision varies depending on palpation of the uterine fundus.

- Interval
- Post MTP (along with MTP)
- Post-partum

Procedure

Here the abdomen is opened by a mini incision and the tubes identified. A loop of the tube is made and it is ligated. The loop above the ligation is cut. After the ligation is done on both sides, the abdomen is closed. The procedure usually takes about 15-20 minutes.

The client should be hospitalised overnight. If the surgeon is satisfied, she can be discharged after 4-6 hours.

Advantages

- It is a simple procedure.
- Specialisation in gynaecology is not required. Every MBBS doctor can be trained to do it, hence it does not require a visiting team to organise a camp. Since the PHC M.O. can provide this service, sterilisation can be performed throughout the year. The need for organising camps towards the end of the year is reduced. Clients have better access to regular service and quality of care in a fixed facility than in a camp.
- Equipment required is not hi-tech.
- Very low failure rate, lower than laparoscopy.

Disadvantages

- Reversal of sterilisation is not very successful as a large part of the tube is removed.
- A longer period of hospitalisation is required compared to laparoscopy.

B. *Laparoscopic sterilisation*

Anesthesia

- Local with sedation
- Short general anesthesia (rarely)

Timing

- Interval
- Post MTP : along with first trimester MTP or 24 hours after spontaneous abortion.

Procedure

This is a quick procedure and largely favoured for camps. Sophisticated equipment and specialised training (post graduate surgeon/gynaecologist) is needed.

The abdomen is distended by passing carbon dioxide or air through a special needle (Verres) which is passed below the umbilicus (navel). This is needed to push back the intestines and enable a clear view of the pelvic organs. A small nick is made again sub-umbilically where the needle is passed. A special piece of equipment called cannula (outer hollow sleeve) and trocar (sharp cutting long cylindical instrument which passes through the cannula) is passed through the incision. It makes for easy passage of the laparoscope by cutting all abdominal layers. The trocar is removed and a long telescope like instrument, the laparascope, is passed. It has an attachment for the light source (fibre-optic cable of light) and a pair of tongs at its tip which catch the tube.

The uterus is manipulated from below by a special manipulator or a dilator or sound to bring the tube within vision of the laparoscope. The operator identifies the tube and the tongs are passed towards it. The tube is caught about 2 cm from the isthmus and the loop of the tube is drawn in the laparoscope. During this procedure, small silastic bands called Yoon's ring or Falope ring pass over the tubal loop like a rubber band. The tongs are again moved out and the ligated loop is released from it. The tongs are withdrawn and procedure repeated on the other tube and all instruments withdrawn. The incision is closed by a single stitch after removing the gas.

Bipolar diathermy can be used instead of Yoon's rings to coagulate the tubes instead of forming a loop.

Advantages

- Operating time is very short and varies from 2-5 minutes or longer depending on the operator's experience.
- The abdomen is not opened as in a minilap.
- Hospitalisation is not necessary and it can be treated as an out patient procedure.
- Reversal of sterilisation is easier as a longer length of the tube is available for recanalisation.

Disadvantages

- Laparoscopy should be done only by a post graduate doctor with specialised training - this means laparoscopy is not readily available at PHC level except by organising periodic camps.
- Sophisticated equipment is required.
- The failure rate is greater compared to a minilap.
- It cannot be performed immediately post-partum or along with second trimester MTP.
- Where the tube is somewhat thickened, a satisfactory ligation is not possible with Falope ring.

Operative care :

Monitoring : Medical records are to be maintained relating to anaesthetic events.

(i) Preoperatively :

- Pulse, respiration and blood pressure should be taken prior to any pre-medication.
- Pulse, respiration and blood pressure should be taken every 30 minutes after pre-medication.
- The drugs given, the dosage and the time when they were administered should be recorded.

(ii) Intraoperatively :

- Pulse and respiration should be monitored every five minutes and blood pressure after every 15 minutes.
- The drugs given, the dosage and the time when they were administered should be recorded.

(iii) Postoperatively :

- Pulse, respiration and blood pressure should be monitored and recorded every 15 minutes for one hour following surgery or longer, if the client is unstable or not awake. The client should then be monitored three times every hour and again at the time of discharge.

COMPLICATIONS

Intra-operative complications

- Injuries to uterus, cervix, viscera or blood vessels.
- Respiratory arrest or depression.
- Cardiac arrest.
- Cardio respiratory embarrassment or pneumothorax.
- Gas or air embolism.
- Vaso vagal attack.
- Drug reactions and convulsions.

Post-operative complications

A. Immediate

- Peritonitis, paralytic symptoms and intestinal obstruction.
- Haematoma of the wound.
- Sepsis of the wound.
- Tetanus.

B. Delayed

- Menstrual irregularities are possible but not proven.
- Incisional hernia
- Chronic pelvic inflammatory diseases.
- Psychological problems.
- Failure of method leading to pregnancy.

Discharge

The client may be discharged, when the following conditions are met :

- More than six hours after the procedure has elapsed.
- The client is alert and ambulatory.
- The client's vital signs are stable and normal.
- The client has been seen, evaluated and discharged by a physician. Whenever necessary, the client should be kept overnight.

- The client must be accompanied by someone when she is discharged.
- Written and verbal instructions are to be given to the client before discharge.
- Analgesics and antibiotics must be provided as required. Any other drugs needed are to be provided and prescribed prior to discharge.
- The acceptor is to be provided with an identity card, indicating date and type of surgery, method used, name of the institution and date and place of followup.
- Complications arising during surgery or post-surgery including major and minor events, are to be reported as indicated.

Post operative instructions

Client should be advised to :

- Return home after discharge and rest for the remainder of the day. Take adequate rest and limit strenuous activity for the next seven days.
- Resume only light work after 48 hours and return to normal activity two weeks after surgery.
- Take medicines as advised by the doctor, including multi vitamins and iron twice daily for 10 days and analgesics, as prescribed.
- Take a normal diet as soon as possible.
- Keep the incision area clean and dry. The bandage or dressings should not be disturbed or opened.
- Bathe 24 hours after the surgery. When bathing, the incision area should be kept dry. If the dressings becomes wet, it should be changed.
- Not to have intercourse until two weeks after the surgery. Sterilisation procedures do not interfere with sexual pleasure, ability or performance.
- Contact the doctor or clinic, if there is excessive pain, vomiting, fever, bleeding or pus discharge from the incision.
- Return to the clinic for removal of stitches and post operation check-up in seven days.
- Contact the health personnel or doctor at any time, if any problems arise.

Follow up procedures

- First follow up for stitch removal and wound inspection after seven days.
- Second follow up after 4 weeks or after the first menstrual period whichever is earlier. This will pick up an early pregnancy in case of failure.

- Emergency follow up anytime.
- Subsequent follow up in case of complications or questions.

Sterilisation is still the most commonly followed method of contraception in India, where women complete their child bearing early and have many years to go before menopause. Sterilisation has almost the lowest failure rate amongst contraceptives and is a ONE TIME PROCEDURE.

RECANALISATION

Recanalisation after sterilisation may be requested in the case of death of an issue. This involves major surgery. The success rate of the procedure varies from 30-60%. Recanalisation means opening up of the closed tubes and joining the two ends together again. The places where recanalisation is done are :

- Indira Gandhi Medical College, Shimla
- PGIMER, Chandigarh

The success rate is higher in cases of recanalisation following laparoscopic sterilisation compared to mini-lap. Success depends upon :

- Length of the tube available.
- Associated infection or damage in the pelvic area.
- State of the tube.
- Skill of the operating surgeon.
- Macro or micro surgery (Micro surgery with the help of an operating microscope has a higher success rate).

Hence, the decision for sterilisation should not be taken lightly.

3.9

MEDICAL TERMINATION OF PREGNANCY (MTP)

Removal of the products of conception before the age of viability is called Medical Termination of Pregnancy (MTP). MTP was legalised in India in 1971 to reduce mortality and morbidity due to septic abortions. There are certain conditions that must be satisfied before MTP can be performed.

Pre requisites for performong a MTP

(According to MTP Act 1971)

I. Indication/Criteria

MTP can be performed only :-

- If continuation of pregnancy would involve a risk to the life of the mother or grave injury to her physical or mental health. For example, in the case of contraceptive failure, rape, or poor socio-economic conditions, when pregnancy would cause trauma to mental health.
- There is a substantial risk that if the child is born, it would suffer from such physical or mental abnormality as to be seriously handicapped.

This is spelt out in section 3(2) of the Act and covers the following grounds:-

- Where the continuation of pregnancy might endanger the life of the pregnant women, or cause grave injury to her physical or mental health.
- Where there is substantial risk of the child being born with serious handicaps due to physical or mental abnormalities.
- Where pregnancy may be caused by rape.
- Pregnancy due to failure of any contraceptive device or method used by a married woman or her husband for the purpose of limiting the number of children.

This amounts to MTP on demand according to the 1977 amendment of the MTP law. Acceptance of a family planning method is not a prior condition for performing a MTP. However, family planning should be encouraged after an MTP, as repeated MTPs affect the health of the women.

II. Place

The facility or place where a MTP can be performed is a hospital/facility maintained by the Government or a place approved by the Government. It should have the following facilities :

- There should be an operation table and instruments for gynaecological/abdominal surgery.
- Equipment for anesthesia, resuscitation and sterilisation should be available.
- Drugs and parenteral fluids for emergency should be available.
- Certificate of approval of the place must be displayed at the clinic.

III. Person/Provider

Personnel who can perform MTP should have any of the following qualifications :

- Medical Practitioner registered in a State Medical Register on or after the date of commencement of the Act.

And one of the following :

- He/She should have completed atleast a 6 months house job in Obstetrics and Gynaecology.

or

- He/She should have experience of one year in the practice of Obstetrics and Gynaecology at any hospital.

or

- He/She should have assisted a Registered Medical Practitioner in performing 25 cases of MTP in a Hospital/Institute approved or maintained for this purpose by the Government.

or

- He/She should have a post graduate Degree/Diploma in Obstetrics and Gynecology registered with the State Medical Register.
- If He/She was registered before the commencement of the Act a period of three years practice in Obstetrics & Gynecology is necessary.

IV. Consent

Of provider -

- Written consent of one doctor certifying the indication and medical fitness of the client for the procedure, in case the pregnancy is upto 12 weeks. However, consent of two doctors is a must for terminating pregnancy between 13-20 weeks.

Of client -

- Free informed written consent of the client, if major, and consent of a guardian/parent, if minor.

V. Duration

Gestational age should be upto 20 weeks.

VI. Medical fitness

Pre-operative requisites :

- The client must be medically fit for the procedure. Haemoglobin examination is a must for second trimester MTP.
- Anaemic women with Hb less than 10 gm% are at a higher risk, so it is absolutely necessary in such a situation that blood should be available and the procedure done in a facility where a hysterectomy can be performed, if necessary.
- A blood group estimation should always be done before a MTP and in Rh negative cases, anti-

D should be given before the MTP or during or just after the MTP. A dose of 100 micro grams minimum in the first trimester and 200 micrograms in the second trimester is recommended. In a PHC if these facilities are not available, MTP should not be performed.

Contraindications to MTP

In case MTP is necessary for clients with the following indications, they must be referred to a higher facility with all provisions for major surgery.

- Hb less than 8gm%.
- Presence of infection - systemic or local or chronic infection such as TB. She should be treated first, then the evaluation be repeated and then MTP performed.
- History of prior manipulation of the genital tract by an unlicensed person.
- Severe hypertension, diabetes, heart disease, history of a bleeding disorder.

Counselling in MTP

Always counsel a client before a MTP and help her choose a family planning method best suited to her needs.

Post MTP family planning

An IUD can be safely inserted soon after a first trimester MTP, if the doctor is satisfied with the procedure. Oral contraceptive pills similarly can be started on the same day just after the procedure. Sterilisation can be done with first trimester MTP at the same sitting.

After a second trimester MTP, it is better to wait for 15 days before an IUD insertion, so that the uterus can involute. Oral contraceptive pills can be started after the next period. Sterilisation can be done at the same sitting if minilap is being done. For laparoscopic sterilisation, the uterus should involute, so a gap of 15 days is needed.

Maintenance of records

All notes pertaining to the MTP must be complete and records maintained for 5 years.

- An admission register must be maintained of all MTP procedures done at the facility.
- All information, about MTP is SECRET. The consent form and its details are confidential and must not be disclosed to any person.
- Post MTP instructions must be complete and explained to the client.

Procedure

A. MTP in first trimester (upto12 weeks)

Asepsis - The procedure should be performed under all aseptic precautions as in any surgical procedure (Refer to chapter on asepsis)

1. Suction evacuation :

This uses the principle of suction to suck out the products of conception. Negative pressure is created in the suction machine and a tube connects this machine to a long plastic cannula which is inserted in the uterus. The contents of the pregnant uterus are sucked out. This is followed by curettage of the uterus by a sharp curette.

However, as the plastic cannula (Karmans cannuala) has a cut surface which acts like a curette, the metal curette is not required. This reduces the risk of perforation and injury to the uterus. For suction, prior dilation of the cervix by plastic or metal dilators should be done gently so that a cannula can be inserted. MTP for a 10 week pregnancy can be easily done with No. 7 or No. 8 or at times with a No. 6 cannula. For analgesia or anesthesia, local anesthesia is good and effective. Only if the client is very apprehensive or the cervix is rigid, general anesthesia may be required.

Suction is the method of choice for MTP in first trimester

2. Menstrual regulation (MR)

By definition, menstrual regulation is evacuation of the uterine contents upto 42 days after the last menstrual period, using a special syringe called Menstrual Regulation (MR) syringe. However, MTP even upto 6-10 weeks can be done by a MR syringe. This is very handy and utilises the principle of negative pressure. Moreover, it is hand operated and simple. So in places where electricity supply is uncertain, this has a definite advantage over the electrically operated conventional suction machine.

3. Dilation and curettage (D & C)

Here the cervix is dilated by metal dilators and a curette used to remove the products of conception. It is more traumatic than suction and the chances of injury to the uterus and cervix are greater. Blood loss is also more. It is an old method and is not used now. It is not used in modern teaching institutions and has been replaced by suction.

4. Prostaglandins

These are drugs that cause contraction of uterus and expulsion of the products of conception. However, they are very rarely used in first trimester.

Future trends

5. Anti progestins

There is a new drug called RU 486 that is now being used in some countries. It is an anti progestational agent. It competes with progesterone for the receptors in the uterus, so the progesterone is displaced, the pregnancy cannot be sustained and an abortion starts. The process is helped by using a prostaglandin after RU 486 is taken. This causes powerful uterine contraction and helps to complete the abortion. In India, RU 486 is not yet marketed. Adequate trials are going on. However, it is more effective only upto 6 weeks of pregnancy. It is like having a prolonged and delayed period. Back up facilities to complete the abortion must be available. Success rate is claimed to be 90% or more.

B. *Methods used for MTP in second trimester (upto 20 weeks)*

1. Extra amniotic emcredil

A dye called ethainidine lactate (Emcredil) is inserted into the extra-amniotic space. It acts by contracting the uterus and abortion occurs as in a delivery.

2. Intra - amniotic saline

20% hypertonic saline is infused into the amniotic sac at the rate of 10 ml per week of gestation. Saline causes foetal death and acts by release of prostaglandins causing uterine contractions and abortion occurs. It should be used only in an institutional setting.

3. Prostaglandins

They are commonly used now a days intramuscularly. Prostaglandin F2 alpha (PG F2 alpha) in ampoules of 250 micro gms per ampoule under the trade name of Prostodin are available. They must be kept under refrigeration. PGF2 is given intramuscularly 1c (that is 1 ampoule) 2 hourly until the patient aborts. A maximum of 10 cc (10 ampoules) only must be used. If contractions are severe and the cervix does not dilate there can be rupture of the uterus or abortion may occur forcibly causing tears of the cervix. It is not a drug to be used in the PHC.

4. D & E (Aspirotomy)

Cervix is dilated by osmotic dilators (like Laminaria tents) on the day before the MTP. Osmotic dilators cause slow dilatation of the cervix. The next day they are removed and the MTP performed by using a special forceps. However, it requires a very high degree of technical skill and must not be performed in the PHC.

5. Hysterotomy

This is like a mini caesarean section when the foetus is delivered per abdomen after cutting open the uterus. This method should not be done in a PHC. Sterilisation should be performed simultaneously as far as possible, whenever hysterotomy is resorted to.

Complications of MTP

These can be divided into :

(1) Early

(2) Late complications.

Early complications

- During anaesthesia/sedation
- During procedure
- Post-operative.

(i) During anaesthesia

Local anaesthesia with verbal reassurance is best. However, if sedation or short general anaesthesia is used, there may be respiratory or cardiac complications which should be attended to by trained personnel.

(ii) During procedure

- Bleeding
- Pain
- Injury to cervix or uterus including perforation of viscera

(iii) Post Operative

- Pain and vomiting
- Bleeding
- Aspiration syndrome
- Sepsis

Late complications

- Incomplete abortion
- Failed abortion
- PID
- Infertility
- Ectopic pregnancy may be missed if the MTP is performed very early.

All complications should be referred to a higher facility where a gynaecologist is available. A nearby centre must be identified which has facilities for referral of complicated cases. There should be a written agreement between the clinic and the referral facility for transfer of complicated cases.

Post MTP instructions

A prescription should be given to the client and a list of instructions including an emergency number and address should be given. A follow up should be performed after 2 weeks. The client must report to the PHC earlier under the following circumstances.

- Heavy prolonged bleeding.
- Severe cramps or pain in abdomen.
- Fainting attacks.
- Fever and chills.
- Foul smelling vaginal discharge.
- If menstruation does not resume within 5 weeks of the MTP, the client should be checked medically for pregnancy due to failure of the MTP.

POINTS TO REMEMBER

- **First trimester MTP are safer than second trimester MTP.**
- **There are increased chances of conception just after a MTP.**
- **Post MTP family planning must be encouraged but should not be a precondition for the MTP.**
- **MTP must be performed by a trained person in an approved facility under aseptic conditions.**

3.10

ASEPSIS ISSUES (PREVENTION OF INFECTION)

Guiding principles

Meticulous aseptic technique is mandatory in gynaecological procedures (e.g. bimanual examination, IUD insertion, MR/MTP, female sterilisation) and male sterilisation. This must be stressed in training programmes for monitoring, and supervision. Aseptic technique is required at all times without compromise, before, during and after surgery.

These guidelines apply to aseptic procedures to be used prior to all gynaecological examinations/ procedures e.g. IUD, MR, MTP, female sterilisation and male sterilisation.

Purpose

- To minimise infection due to micro-organisms.
- To prevent transmission of hepatitis B, STD/AIDS.

Definition

- **Micro-organisms** are the causative agents of infection. They include bacteria, viruses, fungi and parasites.
- **Asepsis** is the attempt to prevent entry of micro-organism in any area of the body where they may cause an infection. They reduce or eliminate the micro-organism on skin surfaces or surgical instruments.
- **Decontamination** is the process whereby objects are made safer so that they can be handled by staff, especially cleaning personnel, before cleaning. These may include operating/ examination tables, surgical instruments and gloves contaminated with blood or body fluids during or after surgical procedures.
- **Cleaning** is the process that removes all visible blood, body fluids or any other foreign material from skin and other inanimate objects.
- **Disinfection** is the process that removes most of the disease causing micro-organisms. High level disinfection (HLD) by boiling or use of chemicals eliminates all micro-organisms except some endospores e.g. tetanus.
- **Sterilisation** is the process that eliminates all micro organisms including endospores from inanimate objects.

Universal precautions

- These precautions are to be taken by all health personnel during any surgical procedure.
- Use barriers such as gloves, gowns, aprons, and masks.
- Hands must be washed immediately if contaminated and after removing gloves.
- Health personnel should take extra care to avoid injury by sharp instruments.
  - Gloves should not be punctured.
  - Needles should not be bent.
- Mouth to mouth resuscitation must be minimized to avoid infection.

some measure of protection).

- Strict aseptic techniques combined with proper disinfection and sterilization of equipment are the most appropriate methods for preventing tetanus. The following points are essential:
  - All procedures outlined here must be followed.
  - Staff must perform standard autoclave testing.
  - Personnel who are responsible for disinfecting, sterilising and using the autoclave must be supervised routinely.

Post-operative care

- After the operative procedure, an ordinary sterile dressing should be applied.
- Incisions should be kept clean and dry, and the client should not bathe for 24 hours following surgery.
- Routine use of prophylactic antibiotics is not necessary.
- Every client should receive clear simple instructions for post-operative care, written as well as oral. All clients undergoing vasectomy or tubectomy should be instructed on how to care for their wound and dressing, what side effects to expect, when to resume normal activities, and what to do and where to go if a complication should develop.
- Removal of sutches must be done under proper aseptic conditions.

Antisepsis

Washing hands and cleaning the client's cervix/vagina/skin with antiseptic solution prior to any procedure minimises the chance of infection by micro-organisms on the skin or the vagina of the client.

The following antiseptic solutions may be used:

- Methylated spirit
- Alcohol based solutions of iodine or chlorhexidine (not on mucous membranes e.g. vagina)
- Cetrimide (Savlon)
- Chlorhexidine gluconate (Hibitane)
- Parachlormetaxylenol (Dettol)
- Iodophors (Betadine)

Antiseptic solutions should be used for skin/vaginal/cervix preparation prior to IUD insertion/

removal, laparoscopy/laparotomy MTP and vasectomy.

Procedure for asepsis in all gynaecological examinations/procedures

Hand washing

This may be the single most important procedure in preventing infection.

It should be done before -

- examining a client
- putting on HLD or sterile gloves for IUD insertion, removal, MTP/Sterilisation.

It should be done after -

- handling soiled instruments/other items
- touching mucous membranes/blood/body fluids
- removing gloves

Hand washing should be done for 15-30 seconds with a plain or medicated soap followed by rinsing in fresh water.

Gloves should be worn by all staff prior to contact with blood and body fluids from any client. A separate pair should be used for each client. Gloves may be disposable or reusable. If the latter, they can be washed and sterilised by autoclaving or they may be washed and high-level-disinfected by boiling.

Skin preparation

- The client's skin or external genital areas should be thoroughly cleaned with savlon.
- Antiseptic solution should be applied to the skin/genital area.
- The skin should be cleansed with disinfected forceps with cotton soaked in antiseptic; the disinfection should be done from the operative site outward for several inches. This circular motion from the centre outwards helps to prevent recontamination of the operative site.
- The antiseptic should be allowed to dry before starting procedure.

Processing used for (soiled) instruments, gloves and other items

The basic infection prevention process are:

- After the procedure, whilst still wearing gloves, the surgeon or assistant should properly dispose of contaminated objects e.g. gauze, cotton and other waste items in a leak proof container or bag. The waste should not be allowed to touch the outside of the

container or bag.

- All surgical instruments and reusable needles, syringes and gloves which have come in contact with blood/body fluids should be decontaminated by soaking for 10 minutes in a disinfectant solution (0.5% chlorine solution) immediately after use. This is important to prevent transmission of HIV and Hepatitis B.
- Surfaces such as examination tables that may have been contaminated by body fluids should also be decontaminated before reuse.
- Instruments and reusable gloves should be thoroughly cleaned with detergent and water and completely rinsed before further treatment. Then all these including needles, syringes which come in contact with blood or body tissue under the skin should be sterilised. If sterilisation is not possible, H.L.D. by boiling or soaking in a high level disinfectant is a must.

Reusable gloves

- Before removing gloves, gloved hands should be soaked in 0.5% chlorine solution after washing in water.
- The gloves should then be removed by inverting and soaking in the chlorine solution for 10 minutes to kill Hepatitis B and HIV. Thus both surfaces of gloves are decontaminated.
- The gloves should be washed in soapy water inside and out and rinsed thoroughly.
- The gloves should be tested for holes by inflating them and holding under water.
- The gloves should be dried.
- If gloves are to be steam sterilised, they should be packed by rolling cuffs so that they can be reused without contamination. They should be autoclaved at 121 degree C (250° F) for 20 minutes at a pressure of 15 lbs, per square inch. Use only after 24-48 hours, to allow elasticity to be restored.
- If gloves are to be high level disinfected, they should be placed in a bag and a weight put, so that all gloves are at 1" below the water surface.
- The pan should be closed and the water brought to boil and boiled for 20 minutes.
- The bag should be removed with a disinfected forceps. The excess water should be removed by shaking the gloves and then they should be hung up to dry. When dry, they should be placed together in pairs in HLD container. Gloves thus disinfected may be used for upto one week.

Decontaminating needles, instruments, syringes

- After use all instruments should be put in a bucket of 0.5 chlorine solution for atleast 10

minutes to prevent transmission HIV and Hepatitis B.

- All objects should be rinsed in water, then scrubed with soft brush in detergent and water, and rinsed again.
- They should be dried by air or with a clean towel
- Finally they should be sterilised or high level disinfected.

Sterilisation and disinfection of laparoscopes

- Suitable cold disinfectants for endoscopes (laparoscopes and laprocators) contain activated glutaraldehyde (Cidex, Spericidin). As the laparoscopes cannot be autoclaved, they should be washed after each operation, dried and immersed in Cidex Solution (2% glutaraldehyde) for atleast 30 minutes and washed with sterile water before being used on the next client. Endoscopes are not heat-stable and cannot withstand autoclaving or prolonged routine immerson in liquid chemicals necessary for sterilisation. However, after an infected case, laparoscopic equipment should be disassembled, cleaned and sterilised by an overnight soak in activated glutraldehyde.

3.11

EMERGENCY MANAGEMENT

PHC medical officers providing family services might have to manage or assist if complications occur as a result of anaesthesia or the procedure itself. Although these conditions occur infrequently, one must know which are the emergencies, how to prevent them, and what to do, should they occur. If necessary equipment, drugs and skills are available at hand, one can prevent a disaster.

Emergencies which can arise while providing family planning services are as follows:-

Procedure	Anaesthetic emergencies	Operative emergencies
IUD insertion	NA	a. Syncope b. Uterine perforation
Sterilisation	a. Convulsions b. Anaphylaxis (Bronchospasm & urticaria) c. Cardiopulmonary arrest d. Respiratory arrest e. Aspiration Shock (due to anaphlaxis, haemorrhage or vasovagal attack)	**Female Sterilisation** a. Bowel/bladder injury b. injury to major blood vessels c. Uterine perforation d. Vasovagal attack e. Complications of pneumoperitoneum-gas/air embolism, cardio-respiratory embarrassment, mediastinal emphysema, pneumothorax **Male Sterilisation** a. Vasovagal attack b. Injury to testicular artery
MTP (First trimester)	As for sterilisation	Uterine haemorrhage & perforation

Prevention of anaesthetic complications

You will meet fewer disasters and will be better prepared to deal with them, if you take the following precautions. They apply to all anaesthetics, including local anaesthesia or sedation.

i. Starve the patient.

ii. Put him/her on a table that tips (head can be lowered).

iii. Suction, intubation equipment and ambu bag should be instantly available, because however many precautions are taken, an occasional patient will collapse on the table.

iv. Monitor pulse and respiration.

v. Maintain a clear airway.

Complications of local anaesthesia (respiratory arrest, cadio-pulmonary arrest, convulsions, anaphylaxis) are usually caused by:

a. Giving too much drug - do not exceed the maximum dose (3 mg/kg plain lignocaine without adrenaline).

b. Unusual sensitivity to drug - cannot be anticipated unless there is positive past history.

c. Injecting the drug in a blood vessel - aspirate before you inject.

Drugs like Pethidine, Chlorpromazine, Promethazine may nauseate the patient and depress pharyngeal or laryngeal reflexes so that inhalation of stomach contents is real danger. Diazepam can lead to significant cardiac and respiratory depression, particulary when used in combination with other sedative drugs.

Management of common emergencies

1. Anaphylaxis

a. Epinephrine 0.3 - 0.5 mg (0.3 -0.5 ml of 1:1000 soln) SC q 3-5 min as needed, for upto 3 doses.

b. Oxygen inhalation in case of respiratory distress.

c. Aminophylline, 6 mg/kg as a loading dose, slow IV over 2-30 min. to treat brochospasm.

d. Hydrocortisone sodium succinate, 500 mg q6h IV for serious or prolonged reactions. The peak effect of corticosteroids, occurs after 6-12 hours; their major role is in preventing redevelopment of anaphylaxis.

e. Antihistamines are probably of little value in treating the acute episode. However, they may shorten the duration of the reaction and prevent relapses.

f. IV fluids, if there is hypotension.

g. Endotracheal intubation and assisted ventilation may be necessary for managing severe brochospasm.

2. Cardio-pulmonary arrest

A Airway

i. Position the patient on a firm flat surface.

ii. Open the mouth to remove vomitus or debris if visible.

iii. Tilt the head backwards and lift the chin forwards.

B Breathe the patient

i. Ventilate using bag and mask with 100% oxygen or air, or mouth to mouth, if bag and mask

is not available. Endotracheal intubation may take too long, especially if one is not an expert. But as soon as a person skilled in intubation is available, intubate the patient, and connect the tube to an ambu bag.

ii. Feel the carotid pulse. If palpable, continue ventilating 12 times a minute. If the pulse is not felt over a 5 second observation period, "circulate" the patient.

C Circulate the patient

i. Start chest compression with the heel of the hand at the mid-sternal region. Chest compression of 3-5 cm should be delivered at a frequency of one per second without interruption.

D Drugs

i. Epinephrine 0.5-1.0 mg (5-10 ml of 1:10,000 soln.) IV, and repeat it as necessary.

ii. If cardiac arrest has lasted longer than 2 min., give sodium bicarbonate. 50-75 ml (1 mEq/Kg) IV. Repeat the dose every 10 minutes until the pulse returns.

Cardiac massage should be terminated as soon as effective cardiac contractions occur, to produce a detectable pulse and systemic BP.

3. Respiratory depression or arrest

As soon as you see that a patient has a respiratory depression (breathing is slow and irregular) or respiratory arrest (patient is not breathing at all), check the pulse or apex beat and the airway:

a. If the heart has stopped, follow steps under "cardio-pulmonary arrest".

b. If there are signs of respiratory obstruction (stridor, cyanosis, paradoxical diaphragmatic movements), take steps to open the airway - tilt the head backwards so that nostrils point upwards; lift the chin; insert an oropharyngeal airway and suck out secretions; ventilate with bag and mask or mouth-to-mouth. If these measures fail, a tracheostomy will be necessary.

c. If the patient has received opioid medication, give Naloxone hydrochloride 0.4-0.8 mg IV and ventilate the patient.

4. Convulsions

a. Put in a mouth gag or other soft object to protect the tongue.

b. Turn the head to one side and suck the oropharynx.

c. Diazepam 5 -10 mg IV slowly up to 1 mg/min.

d. Oxygen inhalation.

e. Phenytoin 500-1500 mg (13-18 mg/kg) slow IV, push not faster than 50 mg/min helps to

prevent recurrence.

(If seizures persist despite above measures, Suxamethonium followed by intubation and Thiopental 15 mg/kg IV will have to be given by an anaesthetist).

5. Aspirations

If an anaesthetised or sedated patient vomits or regurgitates, lower the head end of the bed, turn the partient's head to one side and suck out the throat.

Treatment of Acid aspiration syndrome-

a. Oropharyngeal suction
b. Intubate, given 100% oxygen and ventilate
c. Aminophylline 6mg/kg slow IV
d. Broad spectrum antibiotics
e. IV fluids in restricted quantities to limit pulmonary edema

6. Hypovolemic/Haemorrhagic shock

a. IV fluids - Normal Saline or Ringer lactate until tissue perfusion improves (increased urine output, skin turgor, mental status).
b. Raise the legs, but keep the patient's feet on the same level as the head.
c. Oxygen
d. Catheterize the bladder.
e. Arrange for blood transfusion if shock is due to haemorrhage.
f. If fluid challenge fails to improve tissue perfusion, start Dopamine drip 1-10 mcg/kg/min (5 ml in 500 ml at a rate of 10-20 drops/min).
g. Soda bicarb 50-75 ml IV (1 mcg/kg) if hypovolaemia is prolonged.
h. Treat the cause.

7. Uterine perforation

a. If the instrument is felt to pass more deeply, do not reconfirm by probing uterine wall.
b. If there are no signs of bowel injury or herniation, monitor vital signs, watch for signs of peritonitis or intra-abdominal bleeding.
c. In case of suspected bowel injury/intra-abdominal bleeding/peritonitis, refer for laparotomy.

8. Syncope

a. Stop the procedure, allow the client to rest. Lower the head and wipe the face with cold water.
b. Perform the procedure under sedation, after a while or at a later date.

Chapter 4

MANAGERIAL SKILLS

4.1

Introduction

Medical Officers at a Primary Health Centre generally consider themselves as clinicians and are more inclined towards clinical aspects of health care.

Although clinical skills are important in family planning, there are other factors which work to increase or decrease acceptance and these relate to making family planning services available in a PHC. MOs therefore must also handle job responsibilities which are managerial in nature and require knowledge, skills and attitudes more specific to management.

Management implies mobilizing, protecting and utilising human, material and financial resources, so that they are effectively and efficiently used. Some of the responsibilities of a PHC MO related to family planning are :

(1) Counselling
(2) Screening of clients
(3) Performing family planning procedures
(4) Follow up of clients
(5) Planning, organising and co-ordinating quality family planning services
(6) Supply and inventory management
(7) Staff training and skill development
(8) Supervision, monitoring and evaluation

Of these, the first four can be classified as the service providers' role and the last four as managerial roles.

4.2

SUPPLIES, INVENTORY CONTROL AND STORAGE

The management of stores, supplies and inventory control are critical functions performed by MOs in the PHC. For family planning services, a functioning inventory system is essential for

maintaining continuity of methods. An effective supply management system means that the right quantity of the right quality goods are sent to the right place at the right time for the right cost.

Supplies of family planning methods to PHCs are usually made available by the District Programme Officer on a 3 monthly or 6 monthly basis. This is known as direct supply. Direct supply is based on the stock position in the district head quarters and the number of PHCs where the supply has to go. Sometimes the calculation is based on previous years supply made to a particular PHC. If extra supplies of a particular item (e.g. contraceptives) are required, the PHC medical officer makes an extra indent to the District Medical Officer of Health and if the item indented is present in the stock, it is supplied.

A similar procedure is generally adopted at the state level where supplies made to districts depend on previous year's supply or availability of the item in the central stores.

This system may not always work properly and could result in accumulation of extra stocks in some PHCs leading to difficulties in storing the product properly or wastage. Alternatively, supplies may fall short of clients. Therefore, the alternate system of supply of indents is better, wherein the MO assesses the requirement for a specified duration (based on population and contraceptive prevalence rate), compares it with the existing stock and then orders the required amount keeping provision for a buffer stock depending on the time required for supplies to reach the PHC.

Inventory control

Inventory control is the process by which a proper balance of supply can be maintained at all levels-State, District and PHC. We are concerned here with the Inventory control at PHC level.

Various studies have shown that quarterly indenting of family planning supplies is better than annual supply because :

1. Quarterly supply would not occupy excess space, as the storage capacity of a PHC is usually limited.
2. Less quantity of supply would mean lighter transport and hence a saving in cost.
3. Less quantity can be stored more systematically. There would be less wastage due to expiry or improper storage.
4. With the right amount of stocks, the PHC MO has full knowledge of the PHC stock position. Monitoring and evaluation is then easier. While annual indents are easy to supply, they are cumbersome to handle and maintain.

Inventory control helps the MO to plan :

1. What to indent

2. When to indent
3. How much to indent
4. Where to indent

The Medical Officer needs to know :

a) Stock position of the PHC itself

b) Stock position in sub centres attached to the PHC

c) Stock position of the district

d) Relevant data about the PHC population

1. Population of the PHC sub centre wise, growth rate and literacy structure of the community.
2. CPR (Couple Protection Rate)
3. Methodwise percentage coverage of family planning
4. Number of eligible couples - with no children, with one child, with two children and with more than two children.
5. Choices of contraceptives as per demand of community with name and brand of contraceptives.
6. Lead time for each item of supply (Lead time means time taken for placing the indent and receiving supply)
7. Supply sources - Government & other sources

(I) Government

(a) Free supply - Nirodh condoms, Mala N pills.

(b) Supply at subsidised rates as Delux Nirodh and Nirodh Super Delux condoms and Mala D pills.

(II) Non Governmental (alternative source of supply)

(a) Names of various brands of condoms and pills available in the market and purchased by the community.

(b) Brands names and stock positions of various contraceptives available in the nearby market, their prices and if possible, the names of the couples who are regular purchasers.

(i) Under Social Marketing Programme like Sawan, Bliss, Ecroz, Masti etc.

(ii) Open Market products like Kohinoor, Moods, Kamasutra.

With the above knowledge the MO can calculate 'What to Indent' and 'When to Indent' and 'How much to Indent' and 'Where to Indent'. The MO should keep a bufferstock to maintain supplies during the lead time or in the eventuality of a supply failure, if any.

Managing supplies

When the supplies are received :

1. The consignment should be opened and checked. If this is not possible due to large quantity, a sample should be collected from some packages and examined for :
   - any damage to the packet or covering over the piece.
   - expiry date of the product received. If the expiry is nearer and the quantity is not expected to be utilised or used within the expiry date, the District Headquarters should be informed so that either the consignment which is expected to be extra can be returned or sent to another place where the demand is more.
2. The supply should be entered in the stock register, itemwise - the name of the item, from where it is supplied, the amount, cost (if any) and expiry date.
3. A separate 'Expiry Date Register' should be maintained month wise so that on the first day of every month, it shows which item is expiring in that month and the coming month. This will help the MO plan the use of the item or if it is not likely to be needed, to send information to the District Headquarters.
4. The supplies should be resupplied as soon as possible to the sub centre as per the sub centre needs calculated on the basis of population and users, last years average use rate and expected rise in the number of users due to promotion of contraceptive as per planned strategy. This report can be monitored from the monthly report submitted by the ANM incharge of the sub centre during the monthly meeting at the PHC. If the resupply is made to the sub centre early, storage problem of the PHC is solved to a great extent. The quantity of supplies may be so enormous that it can cover the verandah and obstruct the movement of clients.
5. The rest of the supplies should be stored properly using the FEFO method, (first to expire first out). The earliest expiry date items to be stored in the front row of storage shelf so that the items are used before expiry and are not left lying at the back.

Storage

Proper storage of items, of both consumable and non consumable goods is essential to save the goods from deterioration and destruction by weather condition, insects, rats etc.

Storage includes :

1. Building or storage place : Generally in a PHC, stores are a part of the PHC building and are constructed according to a specified architectural plan. As such their size and placing is fixed from the very beginning and cannot be changed. Therefore to manage a store, it is always essential to keep a balance between the size of supply and the storing capacity. Even with all efforts, sometimes the supply size is greater than room capacity and the stores have to be left lying in the verandah or some other important place or even outside the PHC in the open. Hence, it is advised to keep a watch on the indents and resupply goods to various sub centres as soon as possible.

The storage room or area should ideally be :

1. Clean and well ventilated.
2. Located fairly near the entrance of the PHC so that supplies can be easily received and despatched without disrupting services in any area, particularly the operating area.
3. Well lit, but no direct sunlight should be allowed to fall on the goods like condoms and pills. The light source should be placed in such a way as to reach the back of shelves and various cupboards.
4. Protected from rain and damp.
5. Built in such a way as to be safe from thefts.
6. Provided with shelves or cupboards for storing each item separately e.g., consumable goods which need permanent space and consumable goods which are supplied quarterly, six-monthly or annually and are further distributed to sub centres.
7. Provided with a board in which the names of the items and their storing plan are shown for easy procurement.
8. Equipped with fire fighting equipment approved from the Indian Fire Services and a stand with hanging fire buckets, some filled with sand and some with water. The buckets should be examined now and then so that the buckets and contents are full and dry.
9. Protected from pests like rats and insects (including spiders) which are the greatest source of destruction in the store.
   (a) Periodical cleaning and spraying of the area specially corners and roof with insecticides like D.D.T. Pyrethrum, Baygon etc. will free the store from most of the insects.
   (b) Rats can be killed by rat killer pills which should be kept at the corners and should be periodically counted to see how many have gone. Precaution should be taken not to get these mixed with other open pills by keeping them in a bowl. Also if the architect has given a projecting 9 inches tile, about 9 inches above the ground around the building, rats will not be able to enter the building.

(c) Steel cupboards are self protected and should preferably be used.

Methods of storing

1. Packets be placed one in front of the other so that by seeing the packet in the front row, it is known what is stored there.
2. Items nearing the expiry date are kept in the front (FEFO) as mentioned earlier.
3. All items should be labelled legibly. A small tag with the name of the item may be fixed on the brim just in front of the item.

Consumable items and non-consumable items are stored in different ways. Consumable items include drugs, dressings, contraceptives (condoms, IUDs, OCPs), sutures, needles, syringes, rubber catheters and tubing etc. They also include contingency items such as kerosene oil, soaps, phenyl, broom sticks, linen e.g. sheets, towels, dusters.

Non-consumable items include surgical instruments, surgical equipment, lights, suction apparatus, oxygen cylinder, autoclaves, dressing drums, trays etc. and dead stock i.e. chairs and tables needing repairs or replacement.

1. Rubber gloves

These should be well cleaned with running water, wiped dry, powdered with boric or chalk powder, wrapped in a piece of cloth and stored in a cardboard box.

2. Syringes and needles

The plunger of the syringe should be taken out, cleaned well, wiped dry and stored wrapped up in a clean paper with barrel and plunger kept separately. Needles should be washed with clean water pushed through the syringe and a thin wire passed through its body and stored in their original packets or alongwith the syringe wrapped up.

3. Instruments

a) Sharp edged instruments like scalpel and blades should be stored in a rectangular tray immersed in pure lysol or cidex solution or carbolic acid. Before use, the preservative should be completely washed out.

b) Other instruments should be washed with soap and water, wiped dry and kept after greasing with vaseline to prevent rusting.

c) Glass items and glasss tubes should be washed with soap water, rubbed dry and stored after wrapping in a clean cloth, cotton or paper.

4. Special Instruments

a) **Suction apparatus** - The rubber catheter should be separated and stored like other rubber tubings, as stated above. The metal box should be cleaned and dried and then jars

fixed. The apparatus should preferably be kept on a shelf so that the rats do not crawl over it and floor dust is avoided.

b) **Light sources** - When not in use, the glass should be cleaned and wrapped in cloth.

c) **Oxygen cylinder** - Detach the tubing. Keep the nasal catheter in the rubber box after washing or it may be immersed in a bottle tied to the side of cylinder and filled with Savlon lotion. One precaution to be taken before keeping the oxygen cylinder away is to see that the gas is not leaking. This can be done by immersing the tube in the water and observing that no air bubbles are coming out.

d) **Generator** - A list of do's and don'ts are printed over a card hung at the side of the generator. These must be followed.

e) **Fire fighting equipments** - For large stores, these have to be periodically checked by fire services people, who come on request.

Drugs and supplies should be taken out for daily use without breaking quantities, in round figures e.g. from a condom carton of 6000 pcs., take out 1000 or 2000 at a time (not 1060 or 2180).

The expiry date must be looked into at the time of distribution. Any damaged pack of condom or pill should never be supplied to a client. It should be destroyed. Any discoloured packet or packet with fungus growth must also be destroyed.

4.2.1

CONTRACEPTIVE SOCIAL MARKETING IN INDIA

Introduction

India was the first country in the world to launch a Contraceptive Social Marketing Programme in 1968 known as the Nirodh Social Marketing Programme which now also has an Oral Contraceptive component. This programme has now grown to be one of the largest in the world. Today most developing countries following India's lead are successfully operating Contraceptive Social Marketing Programmes (CSM).

Social marketing

Social Marketing develops, offers and promotes a beneficial product, behaviour, or concept in an acceptable or feasible way to a group of people. It involves the use of commercial marketing techniques like market research, product differentiation and packaging, pricing, advertising and branding and distribution.

Social Marketing, as in consumer marketing, recognizes that the needs of different segments of the target population are different and therefore in order to satisfy their needs, the entire market (in our case eligible couples) should be "segmented" into smaller groups with similar characteristics. The social marketing programme then chooses the segment on which to focus its attention. Based on this, products/services/behavioural concepts are developed. Also, pricing (affordable prices), distribution, advertising and promotion decisions are taken based on the selected "target audience". The aim is to build a strong "brand" and loyalty to a product. This way, social marketing ensures that the target audience (consumers/beneficiaries) remains the focal point of all decisions and "consumer satisfaction" follows. This technique is market-oriented because all policies are based on market research and not based on what the Programme Managers think is correct.

Such a strategy helps to expand the entire market. All large consumer marketing organisations follow this marketing strategy, e.g. Hindustan Lever has several brands of soaps such as Lux, Lifebuoy, Liril, Pears, Le Sancy, Rexona, Dove, each brand meeting the need of different users. As a result the total consumption of Hindustan Lever is very high.

Main differences between commercial and social marketing :

- Commercial marketing is undertaken with a clear "profit" objective, whereas social marketing has a broader social objective of achieving "social dividends".
- Commercial marketing reaches mainly the middle and affluent section of the population since the prices are normally high to maximise margins to the company, whereas social marketing with its social objective, aims at reaching lower and middle income families and therefore the prices are set at levels that are affordable by the target groups.

Pricing of social marketing products/services, however low, has the following advantages :

- A product purchased at a price by the consumer is most likely to be used since there is a tendency not to throw away products for which a consumer has paid money. In case of product/services made available at no cost, there is a tendency not to use or waste the product.
- The consumer who pays for a product or services is more conscious of his rights and demands quality products/services. Therefore, the social marketeer, keen to satisfy the consumers, ensures that the quality of the product/services is maintained. This not only ensures "continuity" on the part of the consumer, but due to positive reaction results in trials of the products/services by the friends and relatives of the consumers.
- Pricing helps to recover a portion of the cost of the social marketing programme from the beneficiaries, making it more cost-effective and possibly self-sustaining in the long term.

The Indian Contraceptive Social Marketing (CSM) programme

Under the social marketing programme, products are distributed through retail outlets at a subsidised price. While the government procures the product, it is distributed by consumer product companies (currently 6) as well as non-government organisations (NGOs) namely Parivar Seva Sanstha (PSS) and Population Services International (PSI) who have their own distribution and sales infrastructure.

The CSM programme today markets 6 brands of condoms and 3 brands of oral contraceptive pills. Condoms and OCPs are also distributed free by the government health services. OCPs became part of this programme only in 1987. That year also saw the introduction of multi-brand strategy where the NGOs were permitted to launch separate brands under the CSM programme.

Today, the CSM programme sells approximately 320 million pieces of condoms and 1.2 million cycles of oral contraceptive pills annually. Under the free distribution scheme of GOI, 660 million pieces of condoms (1992) and 24 million cycles (1992) of oral contraceptives were distributed through PHC, SC, UFWC etc. The main CSM products and their current prices (as on 1st December, 1994) are :

Condoms

Brand	Pieces Per Pack	Owner	Prices/Pack (Rs.)
Nirodh	3	GOI	0.50
Nirodh Delux	5	GOI	1.50
Super Delux	4	GOI	3.00
Sawan	4	PSS	3.00
Sawan	10	PSS	6.00
Bliss	4	PSS	6.00
Masti	4	PSI	3.00
Masti	10	PSI	7.00

Oral Contraceptive Pills (OCPs)

Brand	Owner	No. of Tablets	Price/Pack((Rs.)
Mala D	GOI	21 + 7 placebos	2.00
Ecroz	PSS	21 + 7 ferrous fumarate	6.00
Pearl	PSI	21 + 7 ferrous fumarate	5.00

In addition to the above, products are also available through commercial (unsubsidised) marketing channels. This are

Condoms

Brand	Pieces Per Pack	Owner	Prices/Pack (Rs.)
Kohinoor	3	London Rubber	4.00
Kohinoor	10	London Rubber	10.00
Kohinoor Luxury	3	London Rubber	6.00
Moods	3	Hindustan Latex	6.00
Moods	10	Hindustan Latex	12.00
Kamasutra	3	J.K. Chemicals	6.00
Kamasutra	6	J.K. Chemicals	12.00
Scented	3	J.K. Chemicals	8.00
Adam	3	Polar Latex	5.00
Adam	10	Polar Latex	16.00

Oral Contraceptive Pills (OCPs)

Brand	Owner	No. of Tablets	Price/Pack (Rs.)
Triquilar	German Schering	21	18.60
Ovral	John Wyeth	21	16.56
Ovral L	John Wyeth	21	12.29
Lyndiol	Infar	22	13.50
Saheli	CDRI	8	28.00
Centron	Torrent	8	29.00

In terms of market share, the highest selling condom in Himachal Pradesh is Kohinoor (combined figures for Punjab, Haryana, Chandigarh and Himachal Pradesh are available based on ORG Retail Audit of Consumer Off Take), followed by Nirodh Delux (January - March 1994 figures). Amongst OCPs, Ovral has the highest market share, followed by Ovral L, and Mala D. It may be noted here that many OCPs are also being utilised for treatment of gynaecological disorders.

The sale of branded CSM products of voluntary organisations - PSS and PSI during 1993-94 in Himachal Pradesh were as follows :

Condoms	(in pieces)	OCPs	(in cycles)
Sawan '4'	214,200	Ecroz	9,686
Sawan '10'	108,900	Pearl	10,000
Masti '4' & Masti '10'	490,560		
Bliss	140,000		
Nirodh	5027,400		
Total ..	59,81,060		19,686

The above mentioned contraceptives are being socially marketed by PSS and PSI under the umbrella of CSM of GOI. The total sales under CSM of GOI in 1993-94 were 59,81,060. This may be compared to 60,53,472 free condoms distributed by Govt. of Himachal Pradesh in 1993-94 (data from government of Himachal Pradesh) which is almost equal. The products are procured by the two NGOs from the Ministry of Health and Family Welfare, New Delhi and packaged as per the NGO's requirements. These NGOs then utilise the existing commercial network available in cities and rural areas i.e. the wholesalers, stockists and the retailers to distribute the products. Most contraceptives are sold through chemists, followed by general stores. OCPs can now be sold over the counter (OTC) as long as it is a low dosage pill and has specified compositions as per the Drug Controller of India.

The condoms sale in the country under the CSM have increased from 16,267 pieces in 1987 to 276 million in 1993. However, the per capita usage of condoms in our country still remains poor inspite of the AIDS prevention campaign. In Himachal Pradesh, 36% of couples are using this method and most of it is through social and commercial market channels. (National Health Survey of Himachal Pradesh - 1992).

The pill market in India is at a nascent stage with only 3.1% couples using this method. In Himachal Pradeshit has now reached 6.7%. However, the potential to further increase this is high. Thirty five percent (35%) of family planning acceptors in neighbouring countries such as Bangladesh use this method.

There is a great need to step up contraceptive social marketing programme in our country and use this alternative system of supply for larger number of consumers. It is necessary that Medical Officers recognise CSM as a major factor in family planning. PHC MOs should estimate the contribution of CSM to couple protection from wholesalers (stockists, generally treated in district head quarters, towns) and retail shopkeepers of the area CSM product users can also be

enumerated on the eligible couple registers and subsequently during home visits by health workers. Counselling for condoms and oral pills should also cover choices available to the client, through CSM. This means that government health personnel should promote socially marketed condoms and pills as an available option for their clients. This will be possible only if the service providers themselves are fully aware of CSM products - brands, prices and where they are available.

For contraceptive social marketing to be successfully integrated with government Family Welfare services at PHC level, it will ultimately be necessary that use of CSM products is reported by the PHC as part of monthly/annual family coverage figures.

4.3

PHYSICAL REQUIREMENTS (INSTITUTIONAL SET UP FOR STERILISATION, MTP & IUD SERVICES IN PHCs)

Facilities

Facilities performing voluntary sterilisation procedures in the national family welfare programme must meet the following requirements. These guidelines adapted from "The Standards for Performing Voluntary Sterlisation" - Government of India (1992) are also applicable for MTP. For IUD insertion in a PHC, the operation theatre should be used. In the sub centre however, any room or area designated for that purpose (with equipment and facilities available) may be used. [See also sections on Sterilisation page no. 55]

(a) The PHC must be well ventilated and fly proof with a concrete ('pukka') or tile floor that can be cleaned thoroughly.

(b) There must be running water.

(c) There must be an electric source of light. (it is best to have standby generator, if possible) and an alternative light source (such as a large torch).

(d) There should be marked sheltered space for seating of clients. Separate areas may be marked for seating of males and females so that both the genders may have some privacy.

(e) Separate reception room is not possible but there may be some person at a table near the waiting area to receive a client, greet and guide her/him. This is the quickest method of creating a rapport with the client.

(f) It is ideal to have a separate place for counselling but in a usual PHC situation when the MO or the provider does the counselling, it may be done in the clinic examination room provided confidentiality can be maintained.

(g) Laboratory with facilities of blood test and urine examination for terminal methods and with facility for tests for urine sugar, proteins, haemoglobin etc. before the operative procedure. A clean closed toilet should be available nearby for collection of urine samples.

(h) Physical examination rooms (separate for males and females) or a single examination room may be used for both male and female clients, if privacy can be maintained by examining each client separately.

(i) It is best to have a separate area (screened or curtained off) for shaving, washing, changing clothes and pre-medication near the operation theatre.

(j) A separate space or washing room should be available for the surgeon to change shoes, mask and apron as an anteroom to the operation theatre. It should have elbow-operated taps. After scrubbing, gloves should be changed inside the operation theatre.

(k) Sterilisation room should be attached to the OT for sterilisation of linen, instruments, syringes, needles, sterile pads etc. Autoclave, trays, sterilising drums and sterilisers are kept in this room. A stand for drying the gloves and linen should be available.

Operation theatre

1. It should be isolated.
2. It should have washable floor, proper lighting and should be spacious enough for movement.
3. The operation table should be placed in the middle of the room and light may be allowed from the glass window.
4. Direct dust and air should be avoided by closing the window and keeping the door shut manually or by having automatic closing doors.
5. It should be fly proof and fumigated once a week and carbolized each day. The best way for fumigation is to place 40% formalin solution in 4 bowls in the 4 corners of the room in the evening and shutting all the doors and windows for atleast 24 hours (on Sunday).
6. Separate recovery room or ward is preferable but in a PHC with limited space, one or two wards may be separated for the purpose. The number of beds should be calculated as per average number of acceptors operated each day.
7. When special camps are arranged, a large number of acceptors might arrive and separate or tented accommodation may be needed. It should be near the theatre and should have an emergency tray and equipment alongwith oxygen.

8. Follow-up of operative cases may be done in the doctor's room.
9. A clean toilet is essential and is appreciated by clients. It should be inspected frequently by the MO to ensure that it is clean and tidy and that sufficient water supply is available.
10. Space for storage of instruments, drugs and OT equipment will help in making required drugs, instruments etc. available readily. One steel cupboard may be used for the purpose.
11. Doctors' or nurses' duty rooms, if available, should not be used for storage of material.
12. Stores and verandahs should be checked to see that there is no obstruction of client movement.

For smooth and quality family planning services, certain equipment and supplies are essential in carrying out terminal methods of family planning. These are listed below as per standards laid down by Government of India. Please note that the list is not exhaustive.

A. Basic equipments

1. Examination table with mattress and sterilised sheet.
2. Blood pressure apparatus
3. Thermometer
4. Stethoscope
5. Adjustable side light or torch
6. Weighing scale

B. Laboratory

1. Haemoglobinometer with accessories (for haemoglobin estimation)
2. Microscope
3. Neuber counting chamber and pipettes for differential and total blood cell count.
4. Test tubes and reagents for testing sugar and albumin in urine.
5. Reagents

C. Sterilisation room

1. Autoclave
2. Sterilizers
3. Dressing Drums

D. Operation theatre

1. Operation table
2. Shadowless lamp and torches
3. Instrument trolly or table
4. Mini laparotomy kit
5. Vasectomy kit (In Non Scalpel Vasectomy (NSV), two specially designed instruments are used).
6. Blood pressure instrument.
7. Stethoscope
8. Emergency tray (list of drugs given on next page) Ambu bag, laryngoscope and endotracheal tube are essential parts of the tray.

E. Recovery room

1. Beds (number of beds calculated as per average number of clients per day) with mattresses, sheets, pillow covers, pillows and blankets.
2. Thermometer
3. Blood pressure instrument and stethoscope

F. Emergency tray

a) Equipment

1. Airway
2. Ambu bag
3. Laryngoscope with spare batteries
4. Endotracheal tubes (size with connectors)
5. Suction machine, electric manual
6. Oxygen inhalation unit with two cylinders, rubber tubing, nasal catheter and wrench as supplied by Indian Oxygen Ltd.
7. Artery forceps, scissors, needle holder, cannula and retractor

b) Emergency drugs

(to be checked frequently for expiry date and broken ampoules)

1. Injectible pain relieving drugs like Pethidine 100 mg or Ketamine.
2. Injection Dexamethasone
3. Injection Adrenaline
4. Injection Naloxone
5. Injection Sodium bicarbonate 7.5%
6. Injection Aminophyllin
7. Injection furosemide
8. Injection glucose 25%
9. Injection Calcium gluconate 10%
10. Intravenous infusion set

- Dextrose 5% in normal saline
- Dextrose 5%
- Ringer lactate, normal saline
- If available, Plasma expanders may be kept available for use in the stores.

NOTE :

1. Emergency tray should be kept at a place where it is easily available.
2. Referral hospitals (Government or Private) nearest to the PHC and family planning camp area should be known to all personnel and it is best to clearly indicate the name(s), distance and route on a board or wall.
3. In a camp situation, the facilities should be similar to that of a PHC, except that in camps, space is partitioned and tents may be used in place of wards. The space is normally limited. But in no case is any laxness allowed in the steps taken either for maintaining asepsis or for ensuring complete privacy to the clients.

MOBILE SERVICES

Various studies done recently, mostly in the rural areas indicate that mobile services in the family welfare programme are undeniably important in providing outreach services to rural clients who prefer to avoid difficult and costly journeys to the service centre or PHCs specially in the post

operation phase. In unfavourable weather and uneven hilly terrain, visiting the service centre becomes even more difficult.

Family welfare camps at the doorstep including educational camps and primary health care service camps are more acceptable to the clients requiring services as they do not affect their family life. In static clinics, quality is easily maintained through the established OT and autoclave facilities. Treatment of complications, specially following terminal methods is more convenient in a static clinic. It is easier to handle delivery of spacing methods such as IUDs, OCPs and condoms in a mobile setting than terminal methods.

There can be no compromise with the precautions for asepsis and performance of correct sterilisation procedure while conducting operations in a mobile setting. Therefore no separate standards can be laid down. The standards recommended are similar to those given under institutional set up.

4.4

QUALITY SERVICES IN FAMILY PLANNING

What do we mean by "Quality of Care" ?

"Quality of Care" is not a new concept. It is a basic requirement of any service for it to be acceptable to clients, to attract them, and to make them come back for follow up. Quality is not a waste of money but lack of quality eventually is, because it deters clients and thus causes inefficiency. Therefore, continuous concern for quality is an essential requirement for the survival and growth of any service, including family planning services.

Service quality may be defined as "those attributes of a service that reflect adherence to professional standards by the provider, and satisfaction on part of the client or user". Quality is thus seen as being "**client oriented and provider efficient (COPE)**". The underlying principle behind quality is "to act in the interest of those who need the service". Since women form the majority of family planning clients, and since they very often lack the power to make decisions in their own interest, quality is also women oriented and supportive of women's health interests.

Why is quality of care important for family planning ?

In many countries, it has been noted that contraceptive prevalence rates rise till about 35% as services become more accessible, after which prevalence rates level off, because new acceptors merely replace those who have discontinued use. To raise contraceptive prevalence further, improvements in quality of care becomes necessary, so as to retain current users while reaching

out to new clients. In India, the national family planning programme has since 1951 been implemented through an extensive network of health institutions in all states, by involving several hundred thousand service providers. However, in the effort to utilise family planning for slowing down the growth in population, "quality of service" has not been accorded as much priority as "quantity of services".

Quality of Care is important to family planning programmes for two reasons :

1. It enables clients to exercise their basic right to control their reproductive lives.
2. It contributes to increased adoption and sustained use of contraception.

   Quality services enable a client to reach and implement a family planning decision that meets his or her reproductive needs. Promoting service quality may have other benefits for health and family welfare agencies, such as improved staff morale, reduced staff turnover, better community relations and increased programme efficiency.

Who should take the responsibility for improving service quality ?

The real barrier to service quality improvement is often not lack of resources but lack of interest in the clients on the part of programme managers and service providers. Providing quality health and family planning services requires concerted efforts at all levels of the service delivery system i.e. from the planning stage upto follow up and evaluation. It involves all staff members, but the top management needs to be particular about quality and should place it high on the agenda. In the case of family planning services provided by a PHC, it is the attitude of MOs and their alertness in recognising and using opportunities for quality improvement that will greatly determine how far existing services can change for the better.

What are the elements of family planning service quality ?

Meeting the client's personal family planning needs is the major focus of a quality family planning programme. By adapting the "Quality of Care Framework" developed by Judith Bruce in 1989, six elements have been identified as being fundamental in the working definition of family planning service quality in India. These elements are :

I. Client convenience and service environment

II. Client provider interaction

III. Choice of methods

IV. Equipment and supplies

V. Professional standards and technical competence

VI. Continuity of care

Each of these elements contributes to increased contraceptive use by increasing the client's options, their ability to use the chosen contraceptive effectively and then desire to continue contraception in future. Satisfied users generally help to recruit new clients. These elements also make it possible for quality to be measured by suitable indicators and for quality to be improved by appropriate interventions.

All persons providing services/products i.e., staff, suppliers and distributors must understand :

- The principles of quality care e.g. requirement in terms of physical infrastructure.
- The need to acquire the necessary technical and interpersonal skills.
- The need to be committed to changing practices in accordance with the changing needs of clients.
- That it is a never ending journey
- That quality must be measured.

4.5

ACCESS TO CARE

Acceptance of family planning services is dependent on quality of services of which access to services is an important aspect. Some indicators to measure accessability or acceptability are :

- **Service is conveniently located**

  If a service is located so that it is easy to reach, clients will come for family planning services willingly. If a client has to change several buses to reach a PHC, she is likely to postpone her visit for a family planning method till it is most pressing, or after she has conceived.

- **Service staff are available**

  The availability of staff for family planning is also important. Sometimes, the ANM may not be available and MO and other staff may be busy with other tasks. This reduces accessability to the service. The MO should ensure that at any point of time any one person, preferably female is available for family planning clients.

- **Facility is adequate**

  The availability of adequate facilities of waiting room, examination area, clean water and sanitation facilities serves to reassure the client that he/she has gone to a competent service

provider. The PHC should be well maintained and clean so that clients will want to accept the services there. When the client has confidence in the PHC, the chances of dissatisfaction with services provided are less.

- **Hours/days of service provision are convenient**

  Sometimes, services are available on certain days or during certain hours in a working day. For operative procedures, it may be necessary to fix timings. However, all other services must be made available every day during working hours. If the hours/days of service are restricted, the acceptance of pills may be seriously affected as they have to be taken on the 5th day of the period. Again, sometimes if services are available only at certain times and clients cannot come during this time, it is worth rescheduling timings to suit clients, to promote family planning.

- **Waiting time is acceptable**

  If clients are made to wait for 1 hour before an IUD is inserted or condoms and pills are provided, they are not likely to return to the PHC for contraception. The MO should make arrangements for family planning clients to be seen as soon as they register for services or at the earliest. This is possible if each staff member is given specific responsibility for family planning services.

- **Staff is acceptable in terms of sex, ethnic group, age**

  Female clients often prefer female service staff such as doctors, nurses etc. The absence of a female doctor/ANM on a day when the client visits the PHC will certainly affect her acceptance of a method. The MO can ensure that on days the female doctor is on a visit elsewhere, any ANM is available to handle female clients. Similarly, for male clients, availability of a male MO or health worker will enhance acceptability.

- **Frequency of outreach is adequate**

  An effective way of promoting contraceptive methods is through outreach. Door to door visits, educational camps in the villages help in building rapport and promoting family planning acceptance.

- **Privacy and confidentiality are ensured**

  Family planning is a private, personal matter for the client. Clients should therefore be counselled, examined and followed up in a place where privacy can be maintained. Other service providers or PHC staff should avoid entering the clinic unnecessarily when a client is present. Confidentiality, whereby the client feels assured that her/his case will not be revealed to others, is equally important.

4.6

MONITORING AND EVALUATION

The national family planning programme has since 1951, been implemented through an extensive network of health institutions in all states of India, by involving several hundred thousand service providers. Over the years, in the effort to utilise family planning for slowing down the growth in population, it has been recognised that "quality of services" has not been accorded as much priority as "quantity of services".

What are the elements of family planning service quality?

By adapting a "Quality of Care Framework" developed by Judith Bruce in 1989, six elements have been identified as being fundamental in the working definition of family planning service quality in India. The following elements or components make it possible for quality to be measured by suitable indicators and for quality to be improved by appropriate interventions :

I. Client convenience and service environment
II. Client provider interaction
III. Choice of methods
IV. Equipment and supplies
V. Professional standards and technical competence
VI. Continuity of care

I. **Client convenience and service environment :** This element refers to making family planning services convenient for the client in terms of location of service institutions (PHCs, CHCs, etc.), timings and cost of availing services, organising services so that clients do not have to wait for too long, keeping the premises, clinics, wards and toilets clean as well as ensuring privacy and confidentiality which are essential for making the service "client oriented".

II. **Client provider interaction** : Since providers basically have to share their knowledge and skills with the client, communication with clients is an essential element of service quality. This component broadly covers "how" the provider communicates with the client (building rapport, courtesy, empathy, active listening, respect for the client, etc.) and "what" the provider conveys to the client (clear, simply worded information on available options, how methods work, their benefits, risks, etc.).

III. **Choice of methods** : It is necessary that clients decide and the provider assists them in reaching a decision that is in their best interest. Their choice is based on reproductive needs

adopt a method and which contraceptive method to adopt. Correct choice means longer and more regular contraceptive usage. This element also looks at whether complete information has been given, whether women (rather that husbands or mothers-in-law) take decisions on contraception, whether there are restrictions because of rules or disincentives, and whether or not clients are encouraged to switch methods, if they so desire.

IV. **Equipment and supplies** : This element refers to the availability, quality and maintenance of equipment for family planning. It also covers contraceptive supplies, consumables for asepsis (linen, disinfectants, etc.), screening (gloves, laboratory reagents, etc.) records and follow up (registers, drugs, etc.). Proper storage and inventory control are also required for maintaining service quality.

V. **Professional standards and technical competence** : Family planning is a technical service requiring skilled providers. This element covers the norms or standard guidelines established for institutions and personnel providing family planning services. Quality is dependent on the training, experience and skills of the providers, as well as protocols for asepsis, procedures, follow up and emergency management.

VI. **Continuity of care** : Family planning services should promote continuity of contraceptive use by clients. Both from the health and demographic points of view, it is beneficial to provide long term services to a finite number of clients, rather than to rope in more and more short term acceptors each year. Spacing method users are crucially dependent on follow up, resupply, management of side effects or complications and periodic discontinutation or switching of methods. Contraceptive failures, which have an adverse effect on clients and programmes, can be prevented or managed by ensuring continuity of care.

How can service quality be measured ?

In order to describe, monitor and improve the quality of family planning services, the above framework is not sufficient and measurement tools are also required. If service quality cannot be easily measured, then it is difficult to evaluate or improve it. A list of indicators to assess the quality of family planning services provided by a PHC, have been given in Table I-VI. The indicators correspond to each of the six elements of quality, and have been framed as questions to be applied to the PHC situation, by medical officers. Based on these indicators, measurement instruments (questionnaires/checklists) can be designed for monitoring and improving quality on a routine basis.

basis.

Case situations illustrating the quality of family planning services provided by a Primary Health Centre

Case No. 1.

Kamala Devi was called fasting at 9.30 a.m. for laparoscopic tubectomy in a family planning camp at the PHC. It was a cloudy day in December. Since there was a crowd, she had to wait outside. Kamala Devi was 24th on the list. After a while, Dr. Sanjeev of the PHC interviewed her, meticulously examined her, arranged for blood and urine tests and filled out some forms. The surgical team arrived from the district headquarters at 1.00 p.m. When her name was called out at 3.30 p.m., Kamala Devi had gone some distance down the road to relieve herself. After surgery, the female health worker explained in detail what medicine she was to take, when to resume normal activity and also that she should return to the PHC after a week and follow up with Dr. Sanjeev.

Case No. 2.

Twenty three year old Dharampal, who was planning to get married after a fortnight, went to the PHC for advice on how to delay the first child. He was unsure as to which room to enter and whom to approach. Both staff members in the MCH room were women. When approached, the pharmacist asked him to wait outside the OPD room. The door was open and Dharampal could see the doctor examining a patient. He waited till he heard the doctor loudly give instructions to the patient and then went in. It was almost lunch time and the doctor was in a great hurry. Dharampal could not ask all the questions he had in mind. The doctor told him to use condoms, but Dharampal felt too shy to ask him exactly when and how to wear a condom. He went home and consulted his friend, Shravan Kumar - a shopkeeper, who told him all about the lubricated condoms he had in his shop.

Case No. 3.

When her first daughter was a month old, Shanti came to the PHC without her husband's or mother-in-law's knowledge, for advice on how to delay the next preganancy. The elderly nurse told her only about the IUD and asked her to come on the following Thursday. Although there was a water shortage and gloves had not been washed that day, the IUD was somehow inserted without a pelvic examination being performed. A few weeks later, Shanti developed foul smelling vaginal discharge. Her husband became upset and brought her to the PHC. The doctor listened to them patiently, calmed the husband, examined Shanti, removed the IUD, and prescribed medication for the discharge. The doctor counselled the couple about condoms and oral pills. Shanti and her husband went home with a packet of condoms and with instructions to contact the

local health worker for resupply.

Case No 4

Four months after PHC Kalyanpur had made an indent, an excessively large consigment of condoms and pills arrived in the month of July. These were kept in the balcony for a week, till space could be made in the MCH room. Condoms and pills were then alloted to the health workers for distribution. However, most of the health workers felt that pills caused too many side effects and so women did not prefer them. One of the workers recalled her experience of a woman who had forgotten the pill for three days and had later become pregnant. At the next meeting, health workers complained that since condom packets received by them had been damaged by rain, most of their continuing clients had avoided using them. Towards the end of the same year, a long delayed training programme on family planning for health workers was further postponed because "sterilisation performance was lagging behind".

Case No. 5

Dr. Kalpana had recently joined as Block Medical Officer. Using a local donation, she decided to put up boards displaying timings outside all PHCs and subcentres in the block. She also got the PHC toilets cleaned and repaired. After observing the insertion of IUD's by health workers at two PHCs and three subcentres, she decided to reorient them in batches on monthly meeting days. She asked her staff to show sample condoms, pills and IUDs, to all clients who showed interest in family planning, during home visits and in clinics. She asked the health workers to keep a record of all new acceptors who had discontinued pills or IUDs within three months and reviewed the action taken in such cases, at sector meetings. Dr. Kalpana personally attended most family planning camps in the block, checked whether equipment was in working order, and made sure that each acceptor received a follow up card with instructions and the necessary drugs.

INDICATORS FOR ASSESSING QUALITY OF FAMILY PLANNING SERVICES IN A PRIMARY HEALTH CENTRE

Element I : Client convenience and service environment

PROVIDER LEVEL	*CLIENT LEVEL*
A. Is the PHC service or family planning camp organised in a way that clients do not have to wait for unusually long periods ?	G. Is a visit to the PHC affordable for clients, in terms of time and money (transport, lost wages)?
B. Has the PHC publicised clinic timings and indicated room(s) to visit, for specific services ?	H. Are clients aware of PHC timings ?
C. Are providers available on all working days at the scheduled timings ?	I. Are clients satisfied with the following : 1. PHC timings 2. Waiting room and waiting duration 3. Adequacy of water and toilet facilities 4. Privacy for counselling and examination 5. Staff members experience and appropriate gender. 6. Confidentiality of their case.
D. Is there adequate privacy for clients at PHC clinics and wards ?	
E. Are PHC clinics/wards and toilets clean and hygenic ?	
F. Do providers ensure confidentiality ?	

INDICATORS FOR ASSESSING QUALITY OF FAMILY PLANNING SERVICES IN A PRIMARY HEALTH CENTRE

Element II : Client - provider interaction

PROVIDER LEVEL	*CLIENT LEVEL*
A. Do providers establish a rapport with the clients and treat them courteously ? Do they listen to clients with empathy ?	H. Do clients receive adequate attention and feel comfortable while talking to the provider ?
B. Do providers spend adequate time with clients ?	I. Do clients get the opportunity to explain their own situation and ask questions from the provider ?
C. If possible, do providers follow up with the same client ?	J. Do clients follow up regularly with the same provider ?
D. During the counselling session, do providers use a checklist of essential steps to be covered ?	K. Can client correctly explain how the method of their choice works, its benefits and risks ?
E. Are informational materials used by providers during counselling (booklets, models, contraceptive sampes etc.)?	L. Can client recall instructions to follow, possible side effects, when and where to follow up ?
F. Do providers give adequate and accurate information to clients to enable them to decide on a suitable method ?	
G. Do providers give clear and understandable instructions to clients who have decided upon a particular method ?	

INDICATORS FOR ASSESSING QUALITY OF FAMILY PLANNING SERVICES IN A PRIMARY HEALTH CENTRE

Element III : Choice of methods

PROVIDER LEVEL	*CLIENT LEVEL*
A. Do providers offer a choice of suitable methods available in the national family welfare programme to each client, depending upon their reproductive needs ?	G. Even if the provider were to help with the decision, is it the client who ultimately decides on a suitable method ?
B. If a method is not readily available at the PHC (eg. tubectomy, vasectomy), are clients referred to a suitable hospital/camp?	H. Can clients explain why they chose a particular method ? Can they describe at least one method in addition to the one chosen ?
C. Are clients restricted in the use of contraceptives (e.g. insisting on spouse's consent, parental consent for adolescents, denial of service to single or unmarried persons etc.) ?	I. Do clients receive more incentive for adopting certain contraceptive methods ?
D. Do providers encourage clients to switch methods, if desired ?	J. Can clients also obtain contraceptives from retail outlets or shops in their area ?
E. Do providers insist that clients undergoing MTP accept certain contraceptive methods?	
F. Do providers face disincentives if there is low acceptance of certain contraceptive methods by clients of their area ?	

INDICATORS FOR ASSESSING QUALITY OF FAMILY PLANNING SERVICES IN A PRIMARY HEALTH CENTRE

Element IV : Equipment and supplies

PROVIDER LEVEL	*CLIENT LEVEL*
A. Are contraceptives available in sufficient quantity in the PHC ? Are they stored properly ? B. Are there sufficient supplies available to maintain asepsis (disinfectants, gloves, etc)? C. Are supplies replenished within reasonable time periods, on request by the PHC ? D. Is essential equipment for IUD insertion, sterilisation, asepsis, etc. available and functional ?	E. Are regular supplies of contraceptives available for continuing clients ? F. Are clients aware of alternative sources of contraceptive supplies ?

INDICATORS FOR ASSESSING QUALITY OF FAMILY PLANNING SERVICES IN A PRIMARY HEALTH CENTRE

Element V : Professional standards and technical competence

PROVIDER LEVEL	*CLIENT LEVEL*
A. Have training and skill criteria been established for performing family planning procedures ? B. Is the role of each provider in the PHC clearly delineated ? C. Are standard guidelines for family planning services available in the PHC ? D. Do providers routinely follow standard guidelines for family planning practice ? E. Do providers undergo periodic refresher training ? F. Do providers demonstrate satisfactory knowledge of available methods (use, benefits, contraindications, side effects/ adverse reactions) and of asepsis procedures ? G. Do providers possess adequate skills for client screening, IUD / sterilisation procedure, and follow up ? H. Are essential laboratory tests for screening performed correctly at the PHC? I. Are complications detected and managed by the PHC ? Are referrals made when appropriate ? J. Are providers capable of handling clients who have reproductive tract infections, STDs or suspected HIV ? K. Do providers periodically evaluate the quality of their services ?	L. Do clients experience physical or emotional discomfort during sterilisation/IUD procedures ? M. Do side effects/complications occur in a significant proportion of clients ? N. Has contraceptive failure occured in a significant proportion of clients ? O. Do clients with complications follow up at the same PHC ?

INDICATORS FOR ASSESSING QUALITY OF FAMILY PLANNING SERVICES IN A PRIMARY HEALTH CENTRE

Element VI : Continuity of care

PROVIDER LEVEL	*CLIENT LEVEL*
A. Do providers maintain and monitor records on follow up ? B. Do providers ensure linkage between PHC and outreach services for follow up purposes ? C. Are the following indicators monitored by providers for reducing discontinuation, failure and complication rates ? 1. Discontinuation rates per contraceptive 2. Method switch rates 3. Failure rates per contraceptive 4. Side effects and complications related to contraceptive use 5. Reasons for discontinuation 6. Proportion of pregnancies following discontinuation.	D. Do clients return to PHC for follow up care? E. Do clients continue using the method on a regular basis ? F. Do clients return to the PHC if they wish to switch methods ? O. Do clients with complications follow up at the same PHC ?

CHECK LIST FOR PHC VISIT

This check list covers important indicators of quality of family planning in a PHC. It is not exhaustive and participants may add their own comments to it.

(✓) Tick mark for Yes and (X) cross for No

Organisation of Services:

1. Are Family Planning Services offered on each day that the clinic is open ? Yes No
2. Do clients always receive the family planning services that they desire on the same day at the time of their visit ? Yes No
3. Do you think clients wait too long to be seen by Health Care personnel and why ? Yes No

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4. Is there a system for resupply to continuing users who come for supply of Contraceptives (Condom, Oral Pills), so that they do not have to wait with new clients ? Yes No
5. Is the clinic clean ? Yes No
6. Are there enough seats (chairs or benches) for clients to sit while waiting ? Yes No
7. Are the service and waiting area protected from the weather conditions ? Yes No
8. Are clean and functional toilets available for clients ? Yes No
9. Is running water available in the OPD, OT and laboratory and the room where IUDs are inserted ? Yes No
10. Is there sufficient lighting and ventilation for fresh air ? Yes No
11. Is there adequate linen available ? Yes No
12. Is the clinic located close to the bus stop or road ? Yes No
13. Is there privacy for clients to discuss family planning with MOs or paramedics ? Yes No

14. Are there samples of FP methods, leaflets, charts available at the counselling site ? Yes No

15. Give comments on condition of each area

a) waiting area

b) counselling/examination room

c) laboratory

d) scrubbing/changing area

e) sterilization room

f) toilets

Additional comments

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_____

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Supplies, Stores and Inventories:

1. Is there a clean and safe store for contraceptives and other supplies? Yes No
2. Are inventories supplied by indent ? Yes No
3. Is an up-to-date stock register maintained for each contraceptive product ? Yes No
4. Does the MO order the contraceptives at regular intervals ? Yes No
5. Is there an expiry date register ? Yes No
6. Are supplies stored according to F-E-F-O method ? Yes No
7. Are there insects/rats in the store ? Yes No
8. Are consumables & non-consumables stored separately ? Yes No
9. Are store shelves labelled properly ? Yes No

10. Is there atleast one closed cupboard for storage Yes No

11. Are non-consumables and equipment to be repaired, stored properly ? Yes No

Additional Comments

INSTITUTIONAL SET UP

CHECKLIST FOR EQUIPMENT/SUPPLIES RELATED TO IUD INSERTION AND REMOVAL

1. Total IUDs in stock

2. Proportion/percentage of IUDs expired and/or damaged

3. Are adequate equipment/supplies available in the OPD for the screening of clients for IUD insertion ?

   For pelvic examination :

   Speculum

   Antiseptic

   Cotton wool for swabbing

   Gloves

   For general examination :

   Sphygmomanometer

   Stethoscope for BP

4. Are equipment/supplies available and functional, for IUD insertion and removal ? (some of these items have already been listed in 3 above, for screening of clients; the same may be used for procedures)

Sterilizer for boiling instruments,
Steel drums for keeping sterile cotton,
gauze pieces etc.

Chittel's forceps

Speculum

Volsellum

Uterine sound

Artery forceps for removal of IUD

Gauze/cotton

Antiseptic solution

Gloves

Drapes for the client