

ZAMBIA FAMILY PLANNING GUIDELINES AND PROTOCOLS



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MINISTRY OF HEALTH



World Health
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Health Services and Systems Program
Contributing to improved health status of Zambia

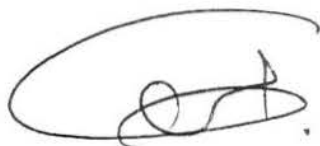
Foreword

Family planning is a key component of reproductive health and one of the most effective interventions for the attainment of the high level of reproductive health. It plays a major role in the reduction of maternal and newborn mortality and hence contributes to the achievement of the Millennium Development Goals. Family planning is recognized as a key intervention for improving the health of women, men and children.

This document, 'Zambia Family Planning Guidelines and Protocols' provides updated and client centred guidelines to health care providers in Zambia. It is a significant contribution to the reproductive health field in Zambia. It includes a wide range of topics that will guide providers on how to help men and women choose appropriate family planning methods and use them effectively and with satisfaction. The document helps health care providers give their clients simple and accurate information and advice on method use and other reproductive health issues. It also offers guidance for appropriate procedures in offering family planning methods and helping continuing users.

This document will be a valuable resource for clinic based family planning providers, as well as an important tool for the spread of correct and timely information to young people and adults. It will also be an important tool for allowing individuals and couples to articulate their reproductive health rights and enjoy optimal reproductive health.

This document is a revised version of the original 'Family Planning in Reproductive Health of 1997'. The work in this document is an expression of the common aims of all partners who collaborated in the revision of its earlier version.



Dr. S. K. Miti
Permanent Secretary
Ministry of Health

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Mrs Aggie Mutonyi	Kafue District Health Management Team (DHMT)
Dr. Mirriam Chipimo	Central Board of Health (CBOH)
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Dr. Francis Chanda	University Teaching Hospital (UTH)
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Particular tribute is paid to Jennifer Orkis who put in a great deal of time and effort to ensure that the document became progressively better.



Dr. V. Mukonka
Director - Public Health and Research

Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
CBD	Community Based Distributor
CBoH	Central Board of Health
COC	Combined Oral Contraceptive
CSM	Contraceptive Social Marketing
DHB	District Health Board
DHMT	District Health Management Team
EBD	Employer Based Distributor
EC	Emergency Contraception
ECPs	Emergency Contraceptive Pills
FIFO	First-In, First-Out
FP	Family Planning
Hb	Hemoglobin
HIV	Human Immunodeficiency Virus
HCPZ	Health Communication Partnership Zambia
IEC	Information Education Communication
IUD	Intrauterine Device
LAM	Lactational Amenorrhea Method
MoH	Ministry of Health
MCH	Maternal and Child Health
NFP	Natural Family Planning
NSAIDs	Non-Steroidal Anti-Inflammatory Drugs
PAC	Post Abortion Care
PID	Pelvic Inflammatory Disease
POP	Progestin-Only Pill
PMTCT	Prevention of Maternal to Child Transmission (of HIV)
STI	Sexually Transmitted Infection
TBA	Traditional Birth Attendant
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Emergency Fund
UTH	University Teaching Hospital
VCT	Voluntary Counseling and Testing
VSC	Voluntary Surgical Contraception
WHO	World Health Organization

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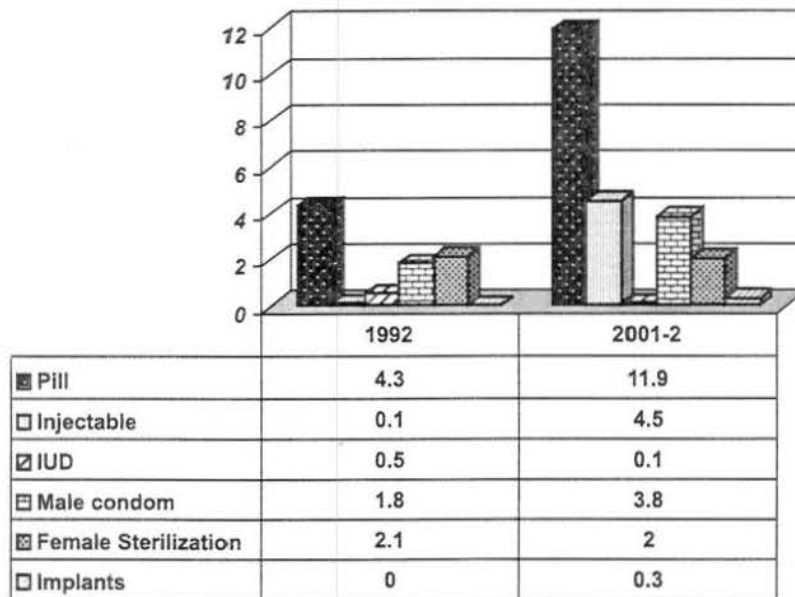
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Introduction

The “Zambia Family Planning Guidelines and Protocols” are an updated version of the “Family Planning in Reproductive Health: Policy Framework, Strategies Guidelines” first published in March 1997.

This updated document is meant to provide a technical description of all the family planning (FP) methods available in Zambia, and to set guidelines for appropriate provision of services. The standards complement broader effort to improve access to high quality FP care within the context of Reproductive Health (RH). They provide all the relevant information needed to develop more simplified, practical materials for RH management and service delivery, and aim to help district programme managers assess and improve upon the current state of Zambia's FP system. The update coincides with the Recently updated Medical Eligibility Criteria for Contraceptive Use (Third Edition 2004) which provides evidence-based technical guidance on the initiation and continuation of use of the methods available. The update is timely as it addresses health care practices that limit access based on theoretical concerns and provider bias or preferences. These limitations have consequently contributed to the low utilization of family planning (see table below). The Zambia Family Planning Guidelines will have updates on all hormonal contraceptives, IUDs, Barrier methods, fertility awareness-based methods, lactational amenorrhea method, male and female sterilization and emergency contraception.

Figure 1. Trends in Contraceptive Use in Zambia



Family planning plays a major role in reducing maternal and newborn morbidity and mortality. Consequently it contributes towards achievement of the Millennium Development Goals to which Zambia is a signatory. Effective FP services are critical for the attainment of the goals.

The initial overall goal of the document was to improve the standard of living and quality of life of all Zambians. The objectives include among others, initiating and sustaining measures aimed at slowing the nation's high population growth, enhancing people's health and welfare, and preventing premature death and illness, especially among the high risk groups of mothers and children. Another main objective is ensuring that all couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so. These objectives are maintained.

Purpose and organization of this document

This document, "Zambia Family Planning Guidelines," is intended to support and guide the national and district levels in the planning and implementation of the FP component of their RH programmes within the context of the health reform structures. It is presented in three sections. The first section is entitled "Strategies for Family Planning", the second, "Service Delivery Requirements" and the third, "Family Planning Methods".

The first section "Strategies for Family Planning" addresses the challenges of implementing the FP programmes within the context of reproductive health as defined by the Programme for Action of International Conference on Population and Development (ICDP). It looks at the various aspects of reproductive health, especially family planning in Zambia, and, based on an analysis of the gaps and needs, proposes specific strategies for improving access to and quality of family planning care. It builds on the existing structures and proposes others that will help maximize service provision in a cost effective manner.

This first section also provides the rationale for improving family planning services and highlights the critical role of family planning in the context of reproductive health. This is followed by a description of the current reproductive health situation in Zambia and an identification of areas of concern, including which target groups need to be addressed as priorities.

The rest of this section describes the specific strategies and activities that will be initiated and /or strengthened in order to improve access, quality, and management of family planning services. It also addresses the needs of the special target groups that must be met in order to make significant impact on the improvement of the reproductive health of Zambian people.

The second stage, "Service Delivery Requirements", describes the expected quality of care in family planning provision. It gives the necessary training needs and skills for the health providers. Requirements for supervisory activities are also elaborated i.e. monitoring client flow, clinic inventories and, resupply procedures. In addition, issues of FP logistics, infection prevention, Record keeping, and Monitoring and Evaluation are clearly explained in this section.

The third section, "Family Planning Methods", contains a technical description and discussion of all the family planning methods available in Zambia and includes guidelines for their service provision. Information is limited to those technical aspects of contraceptive prescribing practices and standards that are related to the medical eligibility criteria for safe use of family planning methods: the advantages and disadvantages of various methods; their efficacy, mode of action, common side effects and side effect management; appropriate screening procedures; the level of provider needed for effective counselling; and service provision and follow-up care to users. In contrast to the earlier edition of these guidelines, this document presents common side effects, as well as information on how to assess and manage them, in a table form.

SECTION ONE

Strategies For Family Planning

Strategy 1: Integrate family planning with other reproductive health programmes

The integration and management of various Reproductive Health (RH) programmes can avoid unnecessary duplication of effort and maximize use of limited resources while offering comprehensive care to people. Ministry of Health makes a commitment to an integrated approach to health care, including the provision of RH services, at the district and community levels. There are certain common concerns in all areas of RH. These include STI/HIV prevention and control, MCH/Safe motherhood, Prevention of Mother to Child Transmission (PMTCT), adolescent RH, male responsibility in RH, and prevention and management of abortion.

The integration of services will be approached in a pragmatic way. The principle will be that wherever health care is being provided, no opportunity will be missed for addressing, or initiating action to address, all the RH needs of an individual and his/her community. Effective linkages will benefit not only individual health but will also make the tasks of health care providers more meaningful. Moreover, because RH needs and interventions are mutually reinforcing and interdependent, linkages in service provision will result in more efficient and cost-effective service delivery. Links also need to be established so that RH services can work closely with other services in other sectors, such as social welfare, education, agriculture, and employment.

Health personnel at service delivery points should provide the appropriate mix of FP services as shown in Table 1. This is dependent on the availability of basic facilities such as space, equipment and supplies, as well as the availability of trained health staff and Community Based Distributors. (CBDs). The services at various levels will include incrementally:

- Counselling services on selected aspects of sexual and reproductive health such as FP, infertility, STIs/HIV/AIDS, abortion, sexuality, pregnancy, and the rights of clients.
- Provision of high quality FP care based on informed choice.
- Prevention, treatment, and referral for sexual and reproductive health problems.
- Provision of referral and follow-up FP services for clients.
- Use of the management information system to provide information for future programme planning, evaluation, and development.
- Carrying out operational research activities that will provide information to improve quality and management of FP services.
- Training support and supervision of FP service providers at more peripheral levels.

The following are strategies for incorporating other RH issues into FP.

STI/HIV Prevention and Control

- Provide information on STIs, including HIV/AIDS, to all persons attending health facilities or community health services for MCH or FP purposes in order to reduce high-risk behaviour and STI/HIV transmission.
- Inform people about the urgent need to seek health care for STI symptoms, recognizing high-risk cases on the basis of history taking or a checklist, and providing sensitive and appropriate counselling to all people, including the young.
- Promote and provide condoms to all people at risk regardless of age or sex.
- Counsel men, women, and young people effectively on the selection of appropriate FP methods to protect against pregnancy and STI/HIV infection.
- Manage STI cases among symptomatic women and men by using the syndromic approach (syndromic diagnosis, treatment, education, counselling, condom promotion, partner notification, and follow-up, if necessary).
- Refer complicated cases to appropriate levels of health care.

MCH/Safe Motherhood

- Increase the availability and accessibility of FP information and services within those facilities providing MCH care and STI/HIV prevention and management. This will help reduce the number of pregnancies, particularly high-risk and unplanned pregnancies, and thus result in a reduction in maternal deaths.

Adolescent Reproductive Health

- Facilitate access, especially for young girls, to all types of services dealing with RH concerns, and specifically FP, without consent of spouses, parents/guardians or relatives as allowed by current legislation. Spousal/guardian counselling, however, is strongly recommended. Special concern has to be given to the counselling of adolescents under 16 years of age. When, after counselling, young adolescents are unwilling to involve their parents/guardians, special care should be taken to ensure that these adolescents under 16 have the mental maturity to understand what is involved in their decision along with its possible consequences.
- Provide information, education, and skills training to enable young people to deal with their RH decisions in a mature way. Do this in a variety of locations, including health services, schools, clubs, recreation centres and employment-based services.
- Reduce barriers to access of induced abortion services as allowed under the Termination of Pregnancy Act of 1972.
- Encourage of all people in contact with adolescents to have a supportive attitude toward them, instead of sanctions and negative reinforcement.
- Facilitate continuation of school education for pregnant young girls.
- Strengthen family education, for example, understanding of the physiology of RH system and how it works, responsible parenthood, the importance of building relationships and maintaining human values and dangers and risks associated with early sexual activities, in all schools. Such information will need to be completed by appropriate service for students of reproductive age.

Male Involvement

- Improve communication between couples about decisions regarding fertility and FP that would reflect the needs and desires of both men and women.
- Provide men with needed information that would enable them to participate responsibly in FP decision-making. They can get information and learn more about FP by accompanying their partners on clinic visits and by taking advantage of special clinic hours for men where available.
- Organize services for FP for men either through STI/HIV prevention and control clinics, or allocating special times in MCH/FP clinics when they could receive appropriate information and private services.
- Encourage men to play an important role in preventing STIs by maintaining a monogamous relationship or using condoms to protect their partners and themselves. The condom the most effective method of protection against STIs next to abstinence is a "male method;" men's cooperation is essential to stop the spread of STIs, including AIDS.
- Make information on STI/HIV protection available through a number of formal and informal channels including at places of work and recreation.
- Allow men to participate in the design and implementation of FP and RH services and to express ways in which they can be encouraged to take more responsibility.

Prevention and Management of Abortion

Abortion related deaths account for a significant proportion of all maternal deaths and are

disproportionately higher in young girls between 15 and 19 years of age. Many deaths could be prevented through provision of client friendly, quality FP information and services to all.

- Address the problem of contraceptive failure or induced abortion in a sensitive and humane manner. Counsel women and inform them about the possibilities of legal abortion and its requirements according to the Termination of Pregnancy Act of 1972.
- Provide information on and methods of emergency contraception.
- Train in the early recognition of abortion complications, especially sepsis. Evacuation of the uterus, antibiotic therapy, and intravenous fluids will be made available at selected health centres and surgical treatment will be available at hospitals. The treatment will be rapid, without punitive or judgmental overtones.
- Health workers will provide post abortion care and information about where these services can be obtained. All health centres and hospitals that provide treatment of abortion complications will be equipped with appropriately trained staff to provide FP methods or advice.
- Termination of pregnancy in the health services will be of high quality, equitably distributed, and accessible to those in need.
- Information, education, and communication (IEC) on RH issues will be provided in all service delivery points. Providers will provide information freely without bias to individuals, couples and the community.
- Young pregnant girls will be counselled and informed about their options, including assistance in accessing legal abortion services.
- Efforts will be undertaken to ensure that young pregnant girls do not get expelled from schools. Collaboration with the education sector will be ensured to protect the educational opportunities of young girls and to increase the quality and quantity of information related to sexuality and RH being provided in schools.

Breastfeeding

The main indications for breastfeeding remain the need to provide an ideal food for the infant and to protect it against disease. There are no medical conditions in which the use of lactational amenorrhoea is restricted, and there is no evidence of its negative impact on maternal health. However, conditions or obstacles, which affect breastfeeding, may also affect the duration of amenorrhoea, making this a less useful choice for FP purposes.

Breastfeeding should be promoted, protected, and supported in all populations, for all women who are HIV-negative or unknown HIV status. When replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV infected mothers is recommended. Otherwise, exclusive breastfeeding is recommended during the first six months of life, and should then be discontinued. Women who are HIV-positive should receive counselling on the risks and benefits of various infant-feeding options based on local assessments, guidance in selecting the most suitable option for their situation, and supported for their choice. They should also have access to follow-up care and support, including FP and nutritional support.

TABLE 1. Available Family Planning Methods, Services and Providers at Various Levels

LEVEL	AVAILABLE FP METHODS	AVAILABLE SERVICES	AVAILABLE PROVIDERS
Community	<ul style="list-style-type: none"> ▪ Pills ▪ Condoms ▪ LAM 	<ul style="list-style-type: none"> ▪ FP counselling ▪ Provision of selected FP methods ▪ Selected aspects of MCH information and care ▪ Referral for services offered at health facilities ▪ STI/HIV counselling ▪ PMTCT counseling 	<ul style="list-style-type: none"> ▪ CBDs ▪ CHWs ▪ EBDs ▪ TBAs (trained in FP) ▪ Lay counsellors
Health Post	<ul style="list-style-type: none"> ▪ Pills ▪ Condoms ▪ NFP ▪ LAM ▪ Injectables ▪ EC 	<ul style="list-style-type: none"> ▪ FP counselling ▪ Provision of selected FP methods ▪ EC ▪ Selected aspects of MCH information and care ▪ Post-abortion counselling ▪ Referral for services offered at health facilities ▪ STI/HIV counselling ▪ PMTCT counseling 	<ul style="list-style-type: none"> ▪ Clinical Officer ▪ Midwife ▪ Nurse
Health Centre	<ul style="list-style-type: none"> ▪ Pills ▪ Condoms ▪ NFP ▪ LAM ▪ Injectables ▪ EC ▪ IUDs ▪ Implants 	<ul style="list-style-type: none"> ▪ FP counselling ▪ Provision of selected FP methods ▪ EC ▪ MCH information and care ▪ PAC ▪ Referral for services at first level hospitals ▪ STI/HIV counselling and care ▪ PMTCT counselling ▪ Information and care for other RH problems 	<ul style="list-style-type: none"> ▪ Clinical Officer ▪ Midwife ▪ Nurse ▪ Physician
First Level Referral Hospital	<ul style="list-style-type: none"> ▪ Pills ▪ Condoms ▪ NFP ▪ LAM ▪ Injectables ▪ EC ▪ IUDs ▪ Implants ▪ VSC 	<ul style="list-style-type: none"> ▪ FP counselling ▪ Provision of selected FP methods ▪ EC ▪ Menstrual regulation ▪ STI/HIV counseling and care ▪ PAC ▪ MCH information and care ▪ PMTCT counselling ▪ Information and care for other RH problems 	<ul style="list-style-type: none"> ▪ Clinical Officer ▪ Midwife ▪ Nurse ▪ Obstetrician/Gyne cologist ▪ Physician
Second and Third Level Referral Hospital	<ul style="list-style-type: none"> ▪ Pills ▪ Condoms ▪ NFP ▪ LAM ▪ Injectables ▪ EC ▪ IUDs ▪ Implants ▪ VSC 	<ul style="list-style-type: none"> ▪ FP counselling ▪ Provision of selected FP methods ▪ EC ▪ Menstrual regulation ▪ STI/HIV counselling and care ▪ PAC ▪ MCH information and care ▪ PMTCT counselling ▪ Information and care for other RH problems ▪ All aspects of RH 	<ul style="list-style-type: none"> ▪ Clinical Officer ▪ EHT ▪ Midwife ▪ Nurse ▪ Physician ▪ Obstetrician/Gyne cologist ▪ Physician

Strategy 2: Expand access to family planning through non-public

Private Sector and Social Marketing

Contraceptive social marketing (CSM) will help increase client access to FP methods. Contraceptives should be marketed through outlets such as hospitals, health centres, pharmacies, and other retail outlets. Issues that must be addressed when providing FP methods through CSM include the following:

- CSM outlets must sell FP methods to clients without bias, and provide supportive information and education on proper and safe usage of the products that are sold.
- Outlets shall maintain records of FP sales by type, quantity, and sex of purchaser.
- Only oral contraceptive products approved by the Food and Drugs Control Board may be marketed through CSM outlets.
- Trained CSM personnel, such as those in community services, and other non-medical persons will be authorized to dispense supplies of oral contraceptives to users who have been adequately screened with the help of a checklist. The initial supply of three cycles of oral contraceptives for new clients can be dispensed as well as subsequent cycles after client review at the health centre.
- Only personnel who have satisfactorily completed training in approved courses can provide oral contraceptives.
- Oral contraceptives and condoms also may be socially marketed through trained health workers, such as doctors, midwives, nurses, pharmacists and clinical officers. The Ministry of Health will determine the procedures by which this will be done.

Community-Based Programmes

Community-based services for distribution of FP methods are an effective means of increasing access to FP information and services, especially to those in peri-urban and rural areas who are far from health services or who cannot reach them for economic, social, or cultural reasons. Community-Based Distribution (CBD) services are often more acceptable and less costly. They also are compatible with the decentralization of services and with the involvement of the community in the provision and support of its own health care services.

Where CBD programmes are run by donors or nongovernmental organizations and serve large rural areas, they must work in tandem with Ministry of Health facilities and in line with the stipulated FP policies and guidelines. This will result in greater efficiency and cost-effectiveness for both Ministry of Health and CBD programmes. Collaboration will be especially important in service statistics reports and in shared logistics and communication systems. CBD workers also will be able to refer clients to Ministry of Health facilities for investigation and use of other methods requiring clinic facilities.

Community-based services will include:

- Counselling on the range of FP methods and related FP problems.
- Provision of limited FP method mix, namely, natural FP methods, condoms, and the provision of the first three cycles of oral contraceptives for new clients and subsequent cycles after client review at the health centre. This will be done in compliance with the national FP policies and standards.
- Assessment of high risk clients for STI/HIV infection, counselling, and referral for further assessment and management.
- Referral for other methods of FP such as IUD insertions, continuation of oral contraceptives, sterilization, implants, and injectables, and follow-up of clients with other RH concerns.
- Record-keeping of stocks and supplies and client data by sex, age, and method.

Among the important elements that must be considered in CBD of FP services, the following guidelines are suggested:

- The communities must be involved in planning and implementation of CBD programmes. The community must be prepared and accept the CBD programme.
- Selection and recruitment of CBD workers should take into account what the community would consider acceptable culturally and socially. Generally, older married women who are mothers and who themselves practice FP are more successful. In some cases, it is better for men to serve as distributors to male clients and women as distributors to female clients. CBD workers should live in the community to be served.
- CBDs must be supported with strong linkages to the health care system for referral purposes and with adequate logistics support for supplies.
- Training will be structured in such a way that it is simple and done in phases so that CBD officers are given an opportunity to apply and master their knowledge before adding new skills. Periodic refresher training will form part of the training programmes. Training will include how to motivate clients for FP, screening for medical indications against certain methods, recognizing high-risk complications, and making referrals. CBD workers should also be able to provide information, education and counseling on a range of reproductive health concerns of interest to clients.
- Supervisors will be properly trained and not be seen as policing CBD workers but as helping improve the quality of work. Adequate transportation facilities must be ensured.
- Payment and motivation for CBD workers is an important issue that needs careful consideration.
- There will be adequate IEC activities to support CBD programmes.
- Trained CBD workers will be authorized to provide an initial three cycles of oral contraceptives with the help of a checklist, after which a clinical assessment of the client will be required. Follow-up supplies of oral contraceptives to clients will be given only after such a clinical assessment at the health centre.

Information, Education, and Communication (IEC)

In the context of FP/RH, IEC includes all activities that are generated to:

- Improve understanding of reproductive and FP rights.
- Raise awareness about available methods of FP, how they are used, their mode of action, and their advantages and disadvantages.
- Change attitudes regarding FP and RH.
- Facilitate informed decision-making.
- Discourage engagement in high-risk behaviors, and/or promote positive health behaviors.

The following information should be included in IEC materials and activities on FP/RH:

- The health benefits of FP for the mother, child, and family.
- The implications of large families on the economic status of families, the needs of individual members of the family, and the nutritional status of the family.
- The implications of large communities on government in terms of providing adequate and high quality basic social services, education, and health care.
- The rights of clients.
- The rights of providers.
- Advantages and disadvantages of FP methods, common side effects, and how methods are used.
- The availability and accessibility of various service delivery points.
- Corrections of myths and misconceptions about FP methods.
- Prevention of consequences of high-risk behaviors and practices such as those related to STIs and HIV/AIDS and unplanned/unwanted pregnancies.

IEC messages shall be consistent, clear, and culturally appropriate. Messages for IEC shall be determined through research and in consultation with target and interest groups through interviews and focus group discussions. This will help ascertain:

- What is already known about FP.
- Existing misconceptions.

- Potential ways filling the information gaps.
- Best types of IEC methods, approaches, channels of communication, and materials to use.

Messages shall be pre-tested with target and interest groups before they are released to the public to ensure acceptability and clarity. District Health Boards (DHBs) shall be responsible for developing prototypes of IEC materials to supply to all health institutions (government, military, mines, mission, pharmacies, and nongovernmental organisations), and the Ministry of Health shall oversee the quality and appropriateness of all materials prepared by DHBs and others.

IEC materials will be disseminated through various channels such as press, radio, television, magazines, theatre, plays, and folk media. Health personnel shall ensure that learning materials are readily available and properly used in order to provide clients with the ability to make an informed choice.

Strategy 3: Target family planning services to priority groups.

Priority groups for FP information and services include:

- Women with children less than three years of age
- Young adults
- Parents with four or more children
- Parents with satisfied parity
- Couples/individuals wanting to delay their first pregnancy
- Men
- STI/HIV/AIDS infected persons
- Sex workers
- Clients with physical disabilities
- Clients with mental retardation, drug or alcohol addiction, or major psychiatric disorders

Service provision to target groups will be accomplished through the framework shown in Table 2.

Table 2. Service Provision to Priority Groups.

TARGET GROUP	SERVICE	PROVIDERS
Women with children less than two years of age	<ul style="list-style-type: none"> • IEC • RH/FP counselling • FP methods • Child care • STI/HIV counselling and care 	<ul style="list-style-type: none"> • All trained FP service providers • TBAs • CBDs
Young adults	<ul style="list-style-type: none"> • IEC • RH/FP counselling • FP methods • STI/HIV counselling and care 	<ul style="list-style-type: none"> • All trained FP service providers • TBAs • CBDs • Peer counsellors • School health services
Parents with four or more children	<ul style="list-style-type: none"> • IEC • RH/FP counselling • Long-acting contraception or VSC • STI/HIV prevention and care 	<ul style="list-style-type: none"> • All trained FP providers with counselling skills in VSC
Parents with satisfied parity	<ul style="list-style-type: none"> • IEC • RH/FP counselling • Long-acting contraception or VSC • STI/HIV prevention and care 	<ul style="list-style-type: none"> • All FP service providers with counselling skills in VSC
Couples/individuals wanting to delay their first pregnancy	<ul style="list-style-type: none"> • IEC • RH/FP counselling • FP methods • STI/HIV prevention and care 	<ul style="list-style-type: none"> • All trained FP service providers • TBAs • CBDs
Men	<ul style="list-style-type: none"> • IEC • Counselling • FP methods • STI/HIV prevention and care 	<ul style="list-style-type: none"> • All trained FP service providers • CBDs • Peer counsellors
STI/HIV/AIDs infected persons	<ul style="list-style-type: none"> • IEC • Psychosocial counselling and support • FP (dual) methods • Condom promotion and provision 	<ul style="list-style-type: none"> • All trained FP service providers • Psychosocial counsellors • Medical doctors with counselling skills • Peer counselors
Sex workers	<ul style="list-style-type: none"> • IEC • Counselling • FP methods • STI/HIV screening and care • Condom promotion and provision 	<ul style="list-style-type: none"> • All trained FP service providers • Psychosocial counsellors • Volunteers
Clients with physical disabilities	<ul style="list-style-type: none"> • IEC • RH/FP counselling • FP methods • STI/HIV prevention and care 	<ul style="list-style-type: none"> • Sign language/Braille teachers • All trained FP service providers
Clients with mental retardation, drug or alcohol addiction, or major psychiatric disorders	<ul style="list-style-type: none"> • IEC • Counselling client/guardian • Long-acting contraception, VSC • Other FP methods • STI/HIV prevention and care 	<ul style="list-style-type: none"> • All trained FP service providers • Medical doctors • Peer counsellors • Alcoholics Anonymous

SECTION TWO

Service Delivery Requirements

Quality of Care in Family Planning

Quality of care is essential for maintaining the health and satisfaction of clients. Quality of care is also important for increasing the demand for FP and decreasing fertility rates. High quality care includes:

- Providing and ensuring a broad range of methods including referral.
- A client-provider interaction that is acceptable to the client.
- Effective counselling and the provision of complete and accurate information about all the methods.
- Providing privacy and confidentiality.
- Ensuring that providers have the necessary technical and counseling skills to provide the methods safely.
- Providing convenient and accessible services that meet the needs of clients.
- Providing follow-up care to ensure continuity of services.

Choice of Methods

All women, men, and young people shall be provided with the FP methods they request, subject to them meeting the agreed eligibility criteria, without the interference of personal opinions or preconceived biases of the service providers

Client-Provider Relationship

- Ensure that providers communicate with clients effectively and in culturally appropriate ways.
- Treat all clients with respect and dignity.
- Provide quality services in a way that does not infringe upon the client's rights.
- Personalize care so that it is responsive to the client's needs and is not influenced by personal biases.
- Assure privacy and confidentiality.

Effective Client Counseling and Information Provision

During the counselling session providers will:

- Establish open, interactive communication with clients.
- Listen to and address the client's needs, concerns, and misperceptions.
- Inform clients of the variety of FP methods available, how they work, their effectiveness, advantages, limitations, side effects, how to use and store them, expected return to fertility, re-supply if necessary, and the importance of follow-up. Make sure client understands that not all methods are appropriate for all users.
- Inform clients that some methods are not available through the service, but may be available through other providers in the area.
- Assess clients' FP needs; they may change over time and require reassessment to see if the method being used is the most appropriate.
- Assist the client in selecting an appropriate method by asking a series of questions about clients intentions with respect to childbearing, risk of exposure to STI/HIV, breastfeeding status, number of children and their spacing, and any health problems with previous births.
- Explain that if the client becomes dissatisfied with the method other choices are available.

Privacy and Confidentiality

In order to ensure privacy, FP service providers should observe the following measures:

- Inform the client in advance if a physical exam is going to be undertaken. Ensure that he/she is comfortable with this.
- Make every effort to ensure privacy, for example, by rearranging furniture, if there are no separate rooms to use for examinations.
- Ask client to undress only if necessary. Do not ask the client to undress and then leave him/her waiting for a long time
- Provide a screen if there is no dressing room.
- Any person who does not have a role in the examination room should leave during the examination. If health staff must be present, limit their number, explain the reason for their presence and ask for the client's permission.

In order to ensure confidentiality, FP service providers must observe the following measures:

- Assure the client that any information he/she provides or the details of services received will not be communicated to others without his/her consent.
- Never talk about the client in the presence of other clients.
- Never discuss clients outside of the service delivery room.
- If talking to colleagues about the client, include the client in the conversation.
- If the client prefers to leave his/her card at the health facility, file the client's records immediately after completion.
- Control unauthorized access to client records.

In order to provide anonymity if required, FP service providers shall:

- Retain the clients' cards at the health facility.
- Arrange separate service hours for young adults, men, and couples.
- Offer services in workplaces or the community.

Competence of Providers

- Service providers will be trained and given regular updates on FP.
- CBD agents and pharmacies will adequately counsel and screen clients using an approved checklist before dispensing oral contraceptives.

Training

Appropriate training shall be provided to all service providers involved in FP. The service providers include physicians, nurses, pharmacists, midwives, clinical officers, public health practitioners, community-based workers, and distributors of contraceptive social marketing. Training for each group will be based on an assessment of current knowledge and functional job descriptions. Training will focus on the skills and information that providers need to do their work effectively. Skills and knowledge will be monitored and updated through regular supervision and periodic retraining. Training and retraining will include the emphasis on the skill sets outlined in Table 3.

Table 3: Aspects of Provider Training and Retraining

Skill Set	Content of Training
IEC/Counselling	FP; STI/HIV/AIDS; MCH; adolescent health
Communication	Sensitive, unbiased, open, and interactive communication process
Administrative	Record-keeping; referral systems; inventory control
Technical	FP technologies, procedures and requirements for care and followup;- adolescent health issues; STI/HIV prevention and care; selected aspects of MCH
Managerial	FP logistics management; project development; monitoring and evaluation

Technical Skills

For methods that require specific technical skills, such as IUD insertions and Voluntary Surgical Contraception (VSC), providers will receive practical training in method provision. This training will be done by competent people who regularly perform these procedures and who have demonstrated aptitude as trainers.

Practice of technical skills will be facilitated by use of training models that will allow providers to practice before performing the procedures on users. Specific guidelines for the training of various levels of staff in providing integrated FP care will be prepared and used as standards.

Supervision

Proper supervision of FP providers will be put in place to ensure that medical and counselling protocols/standards are being followed and that appropriate levels of quality of care are being maintained. Supervision will be regular and constructive and help providers perform their duties instead of constantly looking for faults. Supervisory activities will include:

- Monitoring and updating medical protocols and counselling.
- Ensuring that provider's knowledge and skills are up to date.
- Monitoring quality of counselling and the correct use of visual aids and other materials.
- Monitoring client flow, i.e., time spent waiting for appointments and time spent receiving services.
- Monitoring record-keeping and referral procedures.
- Monitoring clinic inventories and resupply procedures.
- Monitoring continuation rates.

Convenience and Accessibility of Services

All hospitals, health centres, and clinics will have physical structures and space conducive for the provision of FP services. Health staff at all service delivery points will ensure the following:

- Accessible geographical location
- Convenient for and conducive to specific needs of male, female and young adults
- Provision of privacy and confidentiality
- Good ventilation
- Adequate space and facilities
- Clean and safe water
- Proper sanitation
- Appropriate fire safety measures

- Monitoring of status of the physical facility and appropriate corrective measures are taken
- Clean service delivery points, with well-organized client flow and provision of services at times convenient to clients.
- Periodic review of reproductive health needs of the population in the catchment area for appropriate intervention.

Continuity of care

- All clients should be advised on appropriate follow-up visits.
- All clients should be encouraged to report any health concerns.
- Service providers should follow the established referral system.
- FP care will be seen as part of a continuum of care comprising various aspects of RH, providing an opportunity to address other RH concerns besides such as prevention of STIs/HIV, nutrition, infant and childcare, infertility, safe abortion, safe pregnancy, and childbirth.

Logistics of Family Planning

The efficient delivery of high quality, cost-effective FP services requires logistical infrastructure. The logistics system will include accurate projections of supply needs, suitable arrangements for ordering and procurement, appropriate storage facilities, efficient distribution systems, regulations for infection control, consistent record-keeping, and regular monitoring to ensure product quality.

Projections of supply needs

Service providers will make projections of supply needs based on the expected number of users of different methods, the desired levels of reserve stock, and the average product life. A record-keeping system that includes information on trends in use and distribution of specific commodities will help service providers make accurate projections of their commodity needs.

Ordering and procurement arrangements

In order to ensure that sufficient supplies are reliably available at all levels of service provision while at the same time avoiding oversupply procurement will match demand closely, and provide a minimum buffer stock to allow for unexpected delays in supply or variations in demand. See Table 4 for minimum and maximum stock levels.

Table 4. Minimum and Maximum Stock Levels for Various Service Delivery Points.

SERVICE DELIVERY POINT	MINIMUM STOCK	MAXIMUM STOCK
Community	1 Month	2 Months
Health Post	1 Month	1 Month
Health Centre	2 Months	3 Months
First Level Referral Hospital	4 Months	6 Months
Second and Third Level Referral Hospital	7 Months	9 Months

When an order is placed, confirmation that the following conditions are satisfactory must be made: the name of the product, the number of units contained in the package, carton, or container, the manufacturer's product batch number, the manufacturer's expiry date, and the number of units in the package, carton, or container. The minimum acceptable remaining shelf life of the product when it arrives at the warehouse of the one who ordered should be clearly marked.

Storage facilities

Variations in temperature or humidity and exposure to ultraviolet light or ozone during storage may seriously damage some FP methods, especially condoms. Storage facilities must be well ventilated, dry and clean. Supplies need to be protected from sunlight, and storage temperatures should not exceed 24°C. Store boxes at least 10 centimeters above the ground, and do not stack them more than 2.4 metres high.

Distribution

Products should be distributed in a timely manner so that they reach users well before the product expiry date. Commodities are to be distributed on a first-in, first-out (FIFO) system so that older supplies are used before newer ones. Commodities will be distributed using either a "push" system (supplies are automatically shipped to the next level in the distribution system on the basis of estimated need), or a "pull" system (commodities are requested by service delivery points), or a combination of the two. In both types of systems, record-keeping at the local level will be ensured for maintaining an adequate inventory of supplies. Local delivery sites, including clinics, will ensure that older commodities are used before newer ones.

Infection Prevention

Infection control is vital in the safe delivery of FP services, MCH, and STI/HIV prevention and control for both clients and service providers. Infection in the service delivery points must be prevented by the use of aseptic techniques, avoidance of cross infection, and proper processing of clinic equipment. All categories of health workers both in institutions and in communities should be made familiar with infection control procedures and their training adapted to suit their needs.

The basic infection prevention processes that will be used to prevent disease transmission from contaminated instruments, gloves, and other items are: decontamination, cleaning, sterilization, and careful storage.

1. **Decontamination** is to be the first step in handling used (soiled) surgical instruments and gloves. Decontamination should be used to treat instruments and objects that may have been in contact with body fluids. Immediately after use, items will be placed in 0.5 percent chlorine solution for 10 minutes. Surfaces, especially pelvic examination or operating tables that may have come in contact with body fluids should be wiped with a suitable disinfectant, such as 0.5 percent chlorine solution. This decontamination should occur before reuse, when surfaces are visibly contaminated, or at least daily.
2. **Clean** instruments with a brush in soapy water. Pay particular attention to instruments with teeth, joints, or screws where organic material can collect. After cleaning, rinse instruments thoroughly with water; this is to remove detergent residue that could interfere with chemical disinfection.
3. **Sterilization** ensures that all microorganisms, including bacterial endospores, are destroyed. *Steam sterilization* is generally the method of choice for sterilizing instruments and other items used in FP and health care facilities. If steam sterilization equipment is either not available or not suitable, *high-level disinfection* should be used. There are two types of high-level disinfection: boiling and chemically disinfecting. For high-level disinfection by boiling, boil instruments for 20 minutes. Begin timing when the water is at a rolling boil. Totally submerge all instruments; do not add anything to the container.

To chemically disinfect instruments, soak instruments in 2 percent glutaraldehyde or 8 percent formaldehyde for 20 minutes, then rinse well with boiled water. Under guarded conditions, 0.5 percent chlorine bleach may be used as a high-level disinfectant. Endoscopes (laparoscopes) and other instruments that would be damaged by heat can be sterilized safely with formaldehyde.

4. Sterile instruments will not remain sterile unless properly stored. A separate area that has limited access should be provided for storage of sterile supplies. This storage must be kept as clean, dust-free, and lint-free as possible. When stored, sterilized instruments and other items should be wrapped either prior to sterilization (then the entire pack is sterilized) or if not wrapped, stored in sterile containers with tight fitting lids. Wrapped, sterilized packs can be stored up to one week on an open shelf, or for up to one month if placed in a plastic dust cover or in a sealed plastic bag. Label all packs with an expiration date. Where storage in either a sterile wrap or sterile container is not possible, store unwrapped items such as scalpels and scissors in a dry, disinfected, covered container.

Record-Keeping

All FP service providers shall maintain adequate and accurate records of clients and commodities in order to plan, monitor, and evaluate their activities. The primary purpose is to provide quality care to clients and to evaluate the attainment of targets. An improved record-keeping system is indispensable for providing the minimum essential information about the client. Various types of records need to be kept, including:

- Clinical records on FP clients. Include basic information such as age, parity, RH history, FP history, and other health indicators. Keep this information at the clinic.
- A daily activity register of the number of visits by client, type and quantity of FP method supplied, type of service provided for other RH problems, and reasons for referral to another facility.
- A supply stock record that states the number and type of supplies available.
- Monthly and quarterly reports that provide a summary of number and type of clients served, the amounts of contraceptives received and dispensed, and the anticipated demand for the next quarter. Send these to the District Health Boards (DHBs) and MoH headquarters, respectively. The DHB will review reports and give feedback on a quarterly basis to service delivery points.
- The client's Family Planning Card indicating his or her name, age, gender, the name of the facility where services were received, and social, medical, obstetrical, surgical, contraceptive, and gynaecological histories. The client must keep this card and must produce it at every visit, unless for reasons of anonymity the client prefers to leave it at the health facility.
- The client referral card (if appropriate).

Monitoring and Evaluation

In order to improve the quality of FP services progressively, it is important to monitor and evaluate services regularly. This will entail:

- Setting up a system for monitoring, and evaluation of FP service delivery and training of personnel.
- Development of an appropriate national mechanism to facilitate decision-making about the type and quality of contraceptive services and supplies being provided. This can be achieved through:
 - Collecting qualitative and quantitative data on the basis of standard forms and

- questionnaires, including those for assessing levels of user satisfaction.
- Monitoring and evaluating the FP service delivery guidelines from time to time, using measurable indicators of achievement and appropriate evaluation methodologies.
 - Initiating research on contraceptive practices and effects of methods on users.
 - Reviewing the Zambia Family Planning Guidelines document according to new developments.
 - Facilitating the dissemination of information to health personnel at all levels.
 - Making available and encouraging use of the Zambia Family Planning guidelines.
 - Encouraging health personnel at all service delivery points to use and maintain various records to evaluate the activities. The records should include a client register, monthly reports, quarterly reports, supply stock records, reports on service delivery personnel, feedback to service delivery point, and information on the catchment area.

Health personnel at all service delivery points shall pay attention to the information drawn from the following indicators:

- Number of FP new acceptors (increase and decrease)
- Number of dropouts (increase or decrease)
- Availability and client's use of method mix
- Coverage of services (percentage of the population in the catchment area)
- Number of trained service providers
- Availability of essential supplies and equipment; and
- Other RH service indicators, such as changes in numbers of cases related to STIs, reproductive tract infections, and HIV/AIDS

District level managers will analyse the results of such monitoring and evaluation exercises on a regular basis and make appropriate changes for the improvement of services and care to clients.

SECTION THREE

Family Planning Methods

How to Use This Section

This section details each FP method currently available in Zambia, including low-dose combined oral contraceptives, progestogen-only pills, progestogen-only injectables, contraceptive implants, copper intrauterine devices, emergency contraception, male sterilization, female sterilization, natural family planning methods, male condoms, female condoms, and the lactational amenorrhoea method. For each FP method, there is an introduction, information on method's mode of action and efficacy, advantages, disadvantages, side effects and how to manage them, time until fertility returns, standards for service provision, and medical eligibility criteria.

The *Introduction* contains background information on the method, examples of specific types available in Zambia, any changes in recommendations regarding use, and other key information, while *Mode of Action* explains the method's mechanism of pregnancy prevention. The *Efficacy* section reports statistics on effectiveness of the method in preventing pregnancy, citing information on efficacy with typical use and with perfect use when available. The potential benefits of using this method – often contraceptive and non-contraceptive in nature – are conveyed in *Advantages*, while potential risks, difficulties, or inconveniences associated with the method are listed in *Disadvantages*.

Side Effects delineates common, expected side effects, as well as more serious ones that deserve urgent medical attention. Assessment and management of these side effects is also included in this section.

Return to Fertility explains how long it will take for a couple to be able to conceive following discontinuation of the method.

Service Provision is further broken down into several sections. “Who Can Provide” details which persons or places can offer the contraceptive method.. Both the “Counselling” and “Screening” sections highlight counselling and screening issues particularly relevant for specific methods. “Instructions for Users” is directed toward the users, whereas “When to Start” gives guidance to providers on the when to start various types of individuals (i.e. menstruating, amenorrhoeic, post-partum women) on the different methods.

Finally, *Eligibility* is to be used to help determine who should and should not be started on a method.

The information on medical eligibility found in these guidelines is derived from World Health Organization (WHO) Medical Eligibility Criteria for Contraceptive Use. WHO classifies the suitability of different contraceptive methods for people with varying illnesses or conditions.

Table 5 provides the rationale for these categorizations.

Medical Eligibility criteria

Table 5. WHO Classification System for Medical Eligibility criteria Contraceptive Use.

CATEGORY	DESCRIPTION	CLINICAL JUDGMENT AVAILABLE	CLINICAL JUDGEMENT LIMITED
1	No restriction for use of the contraceptive method.	Use the method in any circumstance.	Use the method
2	Advantages of using the method generally outweigh the theoretical or proven risks.	Generally use the method.	
3	Theoretical or proven risks usually outweigh the advantages of using the method. Safe use requires careful clinical judgment.	Use of method not usually recommended unless other more appropriate methods are unavailable or unacceptable.	Do not use method.
4	Condition represents an unacceptable health risk if the contraceptive method is used.	Method not to be used.	

For individuals with conditions classified in Category 3, careful clinical judgment is required. Take into account the severity of the condition and the availability, practicality, and acceptability of alternative methods. If the method is used, it should be the method of last choice and careful, routine follow-up care must be provided.

Since these medical eligibility criteria cannot be applied to voluntary surgical contraception, an equivalent set of definitions to those described above has been established.

- Accept:** There is no medical reason to deny sterilization to a person with this condition.
- Caution:** The procedure is normally conducted in a routine setting, but with extra preparation and precautions.
- Delay:** The procedure is delayed until the condition is evaluated and/or corrected. Alternative temporary methods of contraception should be provided.
- Special:** The procedure should be undertaken in a setting with an experienced surgeon and staff, equipment needed to provide general anesthesia, and other backup support. For these conditions, the capacity to decide on the most appropriate procedure and anesthetic regimen is also needed. Alternative temporary methods of family planning should be provided, if referral is required or there is otherwise any delay.

Dual Protection and Dual Method Use

Helping people make decisions about contraceptives should reflect both the need to prevent unplanned pregnancies *and* the need to prevent STI/HIV infection. Most FP methods, such as hormonal methods and IUDs, do not protect against STI/HIV transmission. However, the methods most effective at preventing STI/HIV, such as barrier methods especially condoms are not necessarily the most effective contraceptives. Combining a barrier method with a more effective contraceptive can maximize the dual protective effect. Programme managers and providers must help clients decide which method or methods to choose in the light of these combined needs and on the basis of a careful assessment of risks. A needs assessment or survey can identify populations at risk and STI/HIV prevalence rates for each district or area to help understand the magnitude of the problem and the risks that are faced by people living in the district.

It is of note that individuals who consider themselves or their partners at high risk of STI/HIV infection are generally amenable to dual method use with supportive counselling. Some individuals may be able to achieve protection against both STI/HIV and pregnancy using a barrier method alone. Motivated and well-counselled individuals may be able to use condoms alone safely because condoms are highly effective when used correctly and consistently. Women at risk of STI/HIV transmission and presenting conditions, for which pregnancy is especially contraindicated, must be strongly advised and counselled in dual method use.

Low Dose Combined Oral Contraceptives (COCs)

Introduction

Combined oral contraceptives (COCs, also known as “the pill”) are pills that use synthetic estrogen and progestin to prevent pregnancy. The effective doses of these two hormones have decreased significantly since their introduction in the early 1960s. It is now recommended that only the low dose preparations containing 35 µg of ethinyl estradiol be made available for general use. Combined oral contraceptives are appropriate for most women who want highly effective and easily reversible protection against pregnancy. Combined oral contraceptives have several health benefits in addition to pregnancy prevention.

Mode of Action

Low dose COCs work by stopping ovulation, thickening the cervical mucus so that sperm cannot pass through, and changing the lining of the uterus (endometrium), so that an egg would be unable to attach to it if somehow released and fertilized.

Efficacy

During the first year of use, COCs have a failure rate between 0.1–8.0 percent, depending on whether the pills are taken correctly and consistently. When pills have been manufactured to acceptable standards, stored, distributed, and used correctly, they are virtually 100 percent effective.

Advantages

- A highly effective method for pregnancy prevention when used correctly.
- Help prevent ectopic pregnancy.
- Are effective within 24 hours.
- Do not interfere with sexual intercourse.
- May reduce menstrual cramping and heavy menstrual bleeding.
- Can be used to change the timing and frequency of menstruation.
- Have been found to provide protection against anaemia, endometriosis, PID, ovarian cancer, endometrial cancer, and benign breast disease.
- May also protect against the development of benign ovarian cysts, uterine fibroids, and osteoporosis, although evidence is not yet conclusive.

Disadvantages

- Must be taken daily.
- Require one to obtain supplies.
- May have a lowered effectiveness if drugs used for the treatment of tuberculosis (rifampicin and griseofulvin) or epilepsy (phenytoin, carbamazepine, barbiturates, and primadone) is taken simultaneously, necessitating additional contraceptive methods.
- Can reduce milk supply in breastfeeding women.
- Do not offer protection against STIs, including HIV infection.

Table 6. Side Effects and management

Side effect	Assessment	Management
Amenorrhea	Asks if/how she has been taking her pills. Has she missed any pills in the cycle? Check for pregnancy	Missed pills or pills taken late increase the risk of pregnancy. If client is taking COCs correctly, reassure. If not pregnant, no treatment is required except counseling and reassurance. Explain that blood does not build up in her uterus or body with amenorrhea. If pregnant, stop the use of COCs and assure her that the pill will have no effect on the fetus.
High blood pressure	Ask if this is the first time anyone has told her that she has high blood pressure Allow 15 minutes rest, then repeat BP reading	If BP increases in a client with normal BP who is using COCs, follow closely. If any warning signs (severe headaches, chest pain, blurred vision) occur or BP>160/100, the method should be stopped If COCs are stopped, help client choose another method. Tell her the BP usually goes away within three months after stopping. Take BP monthly to be sure it returns to normal. If after 3 months, it has not, refer for further evaluation
Nausea/Dizziness/Vomiting/breast tenderness	Find out if pills are taken in the morning or on an empty stomach Check for pregnancy No cause found	Advise client to take pill with evening meal or before bedtime. Counsel that it will probably decrease over the first three months. If pregnant, manage as above ("in Amenorrhea"). If problem is intolerable stop COC and help client choose another method
Bleeding/spotting	Has client recently begun COCs? Check for gynaecological condition (intrauterine or ectopic pregnancy, incomplete abortion, PID) Ask if she has missed 1 or more pills or if she takes pills at different time every day.	If yes, reassure. Advise that break-through bleeding/spotting is common during the first 3 months of COCs. If the problem persists, help client choose another method. If gynaecological problems are present, refer or manage according to clinic guidelines If yes, review instructions.
Headache (especially with blurred vision)	Ask if there has been a change in pattern or severity of headaches since beginning the COCs	If headaches are mild, treat with analgesics and reassure. Re-evaluate after 1 month if mild headaches persist. If headaches have increased or persisted since starting the COCs, help client choose another method.

Return to Fertility

After discontinuation of COCs, fertility is not decreased but may be delayed for a few months.

Service Provision

All Service Delivery Requirements apply.

Who Can Provide

Persons trained to advise women about COCs include:

- Physicians
- Nurses/ Midwives
 - Clinical officers/Environmental health officers
 - Trained community workers (including trained CBD agents and TBAs)
 - Pharmacists
 - Trained social marketing retailers and other trained providers and retailers

Counselling

Counseling should also focus on STI, VCT for HIV and dual protection.

All oral contraceptive acceptors and users should receive appropriate counseling to ensure free, informed choice of the pill and its proper and consistent use, especially the need for daily compliance to achieve good contraceptive efficacy. Counselling should include discussion of the advantages, disadvantages, effectiveness, and mode of action, relevant contraindications, and common side effects during the initial month of use, i.e. what to expect and how to manage the effects, return to fertility after discontinuation of the method, proper pill use, and what to do when pills are missed, and when to return for follow-up care and information on STI/HIV protection.

Screening

Screening of clients involves careful recording of family, medical, and obstetric history. Physical examinations (blood pressure, breast exam) are not required routinely but they may, in some circumstances, optimize the safe use of COCs, and should be performed when indicated by medical history. Physical examinations including pelvic examinations, STI screening by lab tests, and cervical cancer screening are also procedures that are beneficial for certain groups of women and represent good health practices, but they are not prerequisites for the safe use of COCs. Counselling, however, must be considered as an essential and mandatory procedure for the initiation of COC use. In CBD situations, the use of simple checklists can enable trained community workers to counsel effectively and to identify clients who need referral to a clinical facility.

When feasible, a woman should be seen three months after initiating COC use in order to determine if a significant problem has developed, to manage any side effects and to replenish supply of pills. Subsequent visits may be scheduled on a yearly basis or when and if any problems develop.

Instructions for Users

Women may be provided with COCs in advance with appropriate instructions on pill initiation, provided they are medically eligible.

- Take one pill every day, preferably at the same time.

- If you forget to take your pill at the regular time, take the forgotten pill as soon as you remember, then take your next pill at the regular time.
- Do this even if it means you have to take two pills on the same day.
- If you miss two or more pills, you will need to use a back-up barrier method for the remainder of that pill pack.
- Take two pills when you remember, take two pills the following day, and take one pill every day at the regular time for the remainder of that pack.
- Read the instructions in your pill pack for further information.

Other Conditions when women can start COCs.

Menstruating Women

- If COCs are started within five days from the beginning of menstrual bleeding, no additional contraceptive protection is needed.
- COCs can also be started at any other time, if it is reasonably certain that the potential user is not pregnant.
- If it has been more than 7 days since menstrual bleeding started, the user should abstain from sex or use additional contraceptive protection for the next 7 days.

Amenorrhoeic Women

- Combined oral contraceptives can be started at any time, given that it is reasonably certain the user is not pregnant.
- The user will need to abstain from sex or use additional contraceptive protection for the next 7 days.

Postpartum Breastfeeding Women

- If a woman is more than 6 months postpartum and her menstrual cycles have returned, she can start COCs as advised for other menstruating women.
- If a woman is more than 6 months postpartum and amenorrhoeic, she can start COCs as advised for other amenorrhoeic women.
- Women less than 6 weeks postpartum who are primarily breastfeeding should not use COCs.
- For women who are more than 6 weeks but less than 6 months postpartum and are primarily breastfeeding, use of COCs is not usually recommended unless other more appropriate methods are not available or not acceptable.

Postpartum Non-Breastfeeding Women

- If a woman is 21 or more days postpartum, her menstrual cycles have not returned, and it is reasonably certain that she is not pregnant, she can start COCs immediately but will need to abstain from sex or use additional contraceptive protection for the next 7 days.
- If her menstrual cycles have returned, she can start COCs as advised for other women having menstrual cycles.
- It is highly unlikely that a woman will ovulate and be at risk of pregnancy during the first 21 days postpartum.
- However, for programmatic reasons, some contraceptive methods may be provided during this period.
- For women less than 21 days postpartum, use of COCs is not usually recommended unless other more appropriate methods are not available or not acceptable.

Post Abortion Women

- COCs can be started immediately post abortion.
- No additional contraceptive protection is needed.

Women Switching from Another Hormonal Method

- Can start COCs immediately if she has been using her hormonal method consistently and correctly or if it is reasonably certain that she is not pregnant. There is no need to wait for her next menstrual period.
- If her previous method was an injectable, she should start COCs when the repeat injection would have been given.
- No additional contraceptive protection is needed.

Women Switching from a Non-hormonal Method (other than the IUD)

- Can start COCs within 5 days after the start of her menstrual bleeding.
- No additional contraceptive protection is needed.
- Can start immediately or at any other time, if it is reasonably certain that she is not pregnant.
- If it has been more than 5 days since menstrual bleeding started, she will need to abstain from sex or use additional contraceptive protection for the next 2 days.

Eligibility

See Table 7.

TABLE 7. WHO Medical Eligibility Criteria for Low Dose Combined Oral Contraceptives.

WHO Category 1: NO RESTRICTIONS ON USE	WHO Category 2: GENERALLY USED BUT WITH PRECAUTIONS
<ul style="list-style-type: none"> • Age: menarche to 40 years • Parous/nulliparous, • Parous • Depressive disorders • Obstetric/gynecologic conditions <ul style="list-style-type: none"> ○ History of preeclampsia ○ History of ectopic pregnancy * ○ Post abortion ○ > 21 days postpartum (nonbreastfeeding) ○ Irregular menstrual pattern with or without heavy bleeding ○ Severe dysmenorrhoea * ○ Endometriosis ○ PID (history or current) * ○ Benign breast disease * ○ Family history of breast cancer ○ Benign ovarian tumours ○ Cervical ectropion erosion ○ Uterine fibroids with/without distortion ○ Endometrial or ovarian cancer * ○ Gestational trophoblastic disease (benign or malignant) ○ History of pregnancy-related diabetes • Chronic disease/other condition <ul style="list-style-type: none"> - Thyroid disease - Epilepsy¹ - Superficial varicose veins - Mild headaches - Viral hepatitis (carrier not active case) - Schistosomiasis - Fibrosis of the liver - Malaria - Iron deficiency anaemia * - Tuberculosis - nonpelvic or pelvic² - Prior pelvic surgery • STI/HIV (advise condom use) <ul style="list-style-type: none"> - Current purulent cervicitis or chlamydial infection or gonorrhoea - History of STIs - HIV-positive, AIDS - Clinically well on ARV therapy - High risk of HIV <p>Other antibiotics apart from rifampicin and griseofulvin can be used</p>	<ul style="list-style-type: none"> • Age > 40 years • Smoker < 35 years • Severe headache (including migraine without focal neurological symptoms) • Obesity • Gynecological / obstetric conditions <ul style="list-style-type: none"> - Breast feeding (? 6 months post partum) - Breast disease-undiagnosed mass - Cervical cancer or precancerous cervical lesions - History of pregnancy-related cholestasis • Cardiovascular conditions <ul style="list-style-type: none"> - Know hyperlipidemias (depending on type and severity) - Mild hypertension (blood pressure <160/100) if blood pressure can be monitored periodically, if not, this is category three - Superficial thrombophlebitis - Uncomplicated vulvular heart disease • Chronic diseases/other conditions <ul style="list-style-type: none"> - Thalassemia - Sickle cell disease - Insulin and noninsulin-dependent diabetes (uncomplicated) - Surgically treated or asymptomatic biliary tract disease • Can use hormonal contraception if on ARVS or Griseofulvin

WHO Category 3: METHOD OF LAST CHOICE	WHO Category 4: DO NOT USE
<ul style="list-style-type: none"> • Light smoker • Age > 35 years • Obstetric/gynecologic conditions <ul style="list-style-type: none"> - Breast feeding (6weeks-6 months post partum)¹ - <21 days postpartum (nonbreastfeeding) - History of breast cancer and no evidence of disease in past 5 years - Unexplained vaginal bleeding • Cardiovascular conditions <ul style="list-style-type: none"> - History of hypertension; current blood pressure not known - Hypertension (blood pressure 160-179/100-109) - Known hyperlipidaemias² • Chronic diseases/ other conditions <ul style="list-style-type: none"> - Current or medically treated biliary tract disease - History of combined OC- related cholestasis - Use of certain antibiotic or antiseizure medications³ - Mild cirrhosis (compensated) - Nephropathy/retinopathy/neuropathy (if conditions very severe this is category 4) 	<ul style="list-style-type: none"> • Heavy smoker (>20 cigarettes /day) • Age ? 35 years • Migraine headaches with focal neurological symptoms • Obstetric/gynecologic conditions <ul style="list-style-type: none"> - Known or suspected pregnancy - Breast feeding (<6 weeks postpartum) - Breast cancer (current) • Cardiovascular conditions <ul style="list-style-type: none"> - Moderate/severe hypertension (blood pressure > 180/110) - Current or history of thromboembolic disorders or stroke - Major surgery with prolonged immobilization - Current or history of ischemic or complicated valvular heart disease - Hypertension with vascular disease - Known thrombogenic mutations • Chronic disease /other conditions <ul style="list-style-type: none"> - Diabetes with certain vascular complications and /or > 20 years duration - Nephropathy/retinopathy/neuropathy - Active viral hepatitis or severe cirrhosis - Liver tumors (benign or malignant) - Severe cirrhosis (decompensated)⁵

¹ * Combined COCs provide protection against these conditions.

¹ Classification is based on data for women with selected depressive disorders. No data on bipolar disorder or postpartum depression were available. There is a potential for drug interactions between certain antidepressant medications and hormonal contraceptives.

¹ COCs may be started immediately post-abortion.

¹ Certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primadone, topiramate, oxcarbazepine) lower COC effectiveness.

¹ Rifampicin is likely to decrease COC effectiveness.

¹ If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation.

¹ Potential drug interactions between hormonal contraceptives and ARVs may alter the safety and effectiveness of both the hormonal contraceptives and the ARVs.

Progesterone-Only Pills (POPs, Minipill)

Introduction

Microlut (30ug levonorgestrel, 35 tablets) is one example of a progestogen-only pill (POP, minipill). POPs are appropriate for most women who want effective protection against pregnancy and who can tolerate some menstrual bleeding irregularities. POPs are appropriate for breast-feeding women and women who have some cardiovascular disorders or who smoke. Only a few gynecological conditions completely preclude use. Many conditions that were previously thought to be barriers to use are no longer considered risk factors.

Mode of Action

Progestin, the hormone in the minipill, works mainly to thicken the cervical mucus so that sperm are unable to pass through. Ovulation is sometimes suppressed.

Efficacy

The failure rate of POPs ranges from 0.5 - 10 percent during the first year of use. The efficacy of POPs is slightly less than COCs. The need to take pills daily and at a regular time is more crucial with POPs, as the woman is at risk of pregnancy sooner after missing a POP than after missing a COC.

Advantages

- Are a highly effective method for prevention of pregnancy when taken correctly.
- Are suitable for women with risk factors for the use of estrogen-containing methods.
- Can be used by breastfeeding women, as they do not change the quality or quantity of the breast milk.
- Do not interfere with sexual intercourse.
- Decrease pain and bleeding during menstrual periods.
- May protect against endometrial and ovarian cancer, other cancers, and diseases.

Disadvantages

- Have a lower level of contraceptive effectiveness than COCs.
- Require strict daily pill taking.
- Often cause irregular bleeding.
- Do not offer protection against STI/HIV.
- Do not protect against ectopic pregnancy as well as COCs.
- May decrease in effectiveness if taking drugs used for the treatment of tuberculosis (rifampicin and griseofulvin) and epilepsy (phenytoin, carbamazepine, barbiturates, and primadone). Patients on these drugs should be counseled to use additional contraceptive methods.

Side Effects

Refer to Table 8 on page 40-41.

Return to Fertility

Immediate or after a slight delay.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

Persons trained to advise women about POPs include:

- Physicians
- Nurses/Midwives
- Clinical Officers/Environmental health officers, Pharmacists
- Trained community workers (including trained CBD agents and TBAs)
- Trained social marketing retailers and other trained providers and retailers (with permission of the MOH).

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

All oral contraceptive acceptors and users should receive appropriate counselling to ensure free informed choice of the pill and its proper and consistent use, especially the need for daily compliance at a regular time in order to achieve good contraceptive efficacy. Counselling should include discussion of the advantages, disadvantages, effectiveness, mode of action, relevant contraindications, and common side effects during the initial month of use, i.e., what to expect and how to manage the effects, return to fertility after discontinuation of the method, proper pill use, and what to do when pills are missed, and when to return for follow-up care and information on STI/HIV protection.

Screening

Screening of clients involves careful recording of family, medical, and obstetric history. Physical examinations such as blood pressure or a breast exam are not required routinely for initiating use of POPs, but they should be performed when indicated by medical history. Pelvic examinations, STI screening, and cervical cancer screening are also beneficial for certain groups of women and represent good health practices, but they are not prerequisites for the safe use of POPs. Counseling, however, must be considered an essential and mandatory procedure for the initiation of POP use. In CBD situations, the use of simple checklists can enable trained community workers to counsel effectively and to identify clients who need referral to a clinical facility.

When feasible, a woman should be seen three months after initiating POP use in order to determine if a significant problem has developed, to manage any side effects, and to replenish supply of pills. Subsequent visits may be scheduled on a yearly basis, if any problems develop, or if the woman chooses to switch to another method.

Instructions for Users

Women may be provided with POPs prior to initiation, given they are medically eligible and have been provided with appropriate instructions on when and how to start using the method. The following are recommendations on initiating POP use.

- In order to prevent pregnancy, it is critical to take the minipill every day, and at the same time.
- If you take it more than three hours after your regular time, you need to use a back-up method for the next 48 hours.
- Read the instructions found in your minipill pack for further information.

Other Conditions when women can start POPs

Menstruating Women

- Can start POPs on day one.
- No additional contraceptive protection is needed.

- Can start POPs at any other time, if it is reasonably certain that she is not pregnant.
- If it has been more than one day since menstrual bleeding started, she will need to abstain from sex or use additional contraceptive protection for the next 2 days.

Amenorrhoeic Women

- Can start POPs at any time, if she is reasonably certain that she is not pregnant.
- She will need to abstain from sex or use additional contraceptive protection for the next 2 days.

Postpartum Breastfeeding Women

- Can start POPs at any time if she is between 6 weeks and 6 months postpartum *and* amenorrhoeic.
- If she is fully or nearly fully breastfeeding, no additional contraceptive protection is needed.
- Women who are more than 6 weeks postpartum and whose menstrual cycles have returned can start POPs as advised for other women having menstrual cycles.
- For women who are less than 6 weeks postpartum and primarily breastfeeding, use of POPs is not usually recommended unless other more appropriate methods are not available or not acceptable.

Postpartum Non-Breastfeeding Women

- Can start POPs at any time if she is less than 21 days postpartum. No additional contraceptive protection is needed. It is highly unlikely that a woman will ovulate and be at risk of pregnancy during the 1st 21 days postpartum. However, for programmatic reasons, some contraceptive methods may be provided during this period.
- If client is 21 or more days postpartum, her menstrual cycles have not returned, and it is reasonably certain she is not pregnant, she can start POPs at any time. She will need to abstain from sex or use additional contraceptive protection for the next 2 days.
- If her menstrual cycles have returned, she can start POPs as advised for other women having menstrual cycles.

Post Abortion Women

- Can start POPs immediately post abortion. No additional contraceptive protection is needed.

Women Switching from Another Hormonal Method

- Can start POPs immediately if she has been using her hormonal method consistently and correctly or if it is reasonably certain that she is not pregnant. There is no need to wait for her next menstrual period.
- If her previous method was an injectable, she should start POPs when the repeat injection would have been given.
- No additional contraceptive protection is needed.

Women Switching from a Nonhormonal Method (other than the IUD)

- Can start POPs on the first day of her menstrual bleeding.
- No additional contraceptive protection is needed.
- Can start immediately or at any other time, if it is reasonably certain that she is not pregnant but will need a backup for two days.
- If she takes the pill after the first day since menstrual bleeding started, she will need to abstain from sex or use additional contraceptive protection for the next 2 days.

Eligibility

See **Table 9** on pages 45-46 for the medical eligibility criteria for initiating POP use.

Progesterone-Only Injectables

Introduction

Progesterone-only injectables are injections given every 2 or 3 months to prevent pregnancy. They are appropriate for most women who want highly effective protection against pregnancy and can tolerate menstrual bleeding irregularities. Progesterone-only injectables are suitable for breast-feeding women and women who have some cardiovascular disorders or who smoke. Only a few gynecologic conditions completely preclude use. Many conditions that were considered barriers to use are no longer considered risk factors for complications. Examples include norethisterone enanthate (NET-EN, 200mg for a 60-day regimen) and depot medroxyprogesterone acetate (DMPA, 150 mg for a 90-day regimen).

Mode of Action

Injectables stop ovulation, make the cervical mucus too thick for sperm to pass through, change the rate of ovum transport through the fallopian tubes, and make the endometrium unsuitable for implantation.

Efficacy

Progesterone-only injectables are a very effective contraceptive method with a narrow range of failure rates, between 0.1 - 0.6 percent during the first 12 months of use.

Advantages

- Provides highly effective protection against pregnancy for 2 (NET-EN) or 3 (DMPA) months.
- Has no adverse estrogen effects or estrogen-related complications.
- Does not depend on client action for efficacy.
- Can be used during lactation after six weeks postpartum.
- Reduces menstrual flow, and is thus beneficial for women with iron deficiency anaemia.
- Does not decrease production or quality of breast milk.
- Possibly protects against endometrial cancer, PID, sickle cell disease, endometriosis, and may aid in the recession of preexisting ovarian cysts and benign breast lumps.
- Ensures periodic contact with medical or trained health personnel.

Disadvantages

- Causes menstrual changes such as amenorrhoea or irregular/prolonged/heavy bleeding.
- Does not offer protection against STI/HIV.
- Requires injection every two (for NET-EN) or three (for DMPA) months.
- May delay fertility return.

Side Effects

Refer to table 8 on pages 40-41.

Return to Fertility

After discontinuing DMPA or NET-EN, fertility is not impaired but is generally delayed. The average time between last injection and conception is about nine months. Fertility typically returns more quickly following NET-EN discontinuation than following DMPA discontinuation.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

- Physicians

- Nurses/Midwives
- Clinical officers

Providers must be trained and able to:

- Counsel women about injectables and other contraceptive choices.
- Give deep intramuscular injections using proper sterile techniques.
- Use pre-sterilized, disposable injection equipment, and dispose of equipment properly.

Injectable contraceptives can be provided anywhere where trained providers and sterile needles and syringes are available.

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

Counseling must include informed choice of method, mode of action, advantages, disadvantages, efficacy, STI/HIV protection, and return to fertility. Because menstrual irregularities are commonly associated with the use of DMPA and NET-EN, careful counselling of new acceptors results in a high degree of satisfaction among women and reduces the number of discontinuations related to bleeding problems. Informing clients about what to expect helps them better understand and cope with side effects. Counseling must include advice on follow-up injections and when to return for any side effects/complications.

Screening

The essential screening procedures involve careful recording of medical, contraceptive and obstetric history. Routine lab tests, pelvic and breast examinations, blood pressure tests, cervical cancer screening, and STI screening are all useful for maintaining good health, but are not prerequisites for the safe use of progestogen-only injectables unless the medical history indicates otherwise. Because the administration of injections requires regular contact with health services, all health workers providing injections must be able to recognise cases that need medical assessment and know how to deal with any problems or minor side effects. A physician should follow up women on a yearly basis or when significant or chronic problems develop.

Instructions for Users

- Go to a trained health professional to receive your first shot.
- Sterile needles and syringes must be used for each client.
- Injection site must be in the gluteal or deltoid muscle.
- The injection site must not be rubbed to avoid more rapid absorption.
- DMPA is administered every 90 days, and NET-EN is administered every 60 days.
- For both NET-EN and DMPA, a subsequent dose may be given if the client is up to two weeks early for her scheduled injection

Return to the clinic for your next injection 2 (NET-EN) or 3 (DMPA) months later, or if you have any problems or questions.

Other Conditions when women can start Progesterone Only Injectables

The following recommendations on initiating injectable use are based on information for DMPA but apply also to NET-EN. If the woman cannot have the injection at the time of the consultation, arrangements can be made for her to have the injection through an appropriate service at a later date.

Menstruating Women

- Can have the first injection within 7 days after the start of her menstrual bleeding.
- No additional contraceptive protection is needed.

- She also can have the 1st injection at any other time, if it is reasonably certain that she is not pregnant.
- If it has been more than 7 days since menstrual bleeding started, she will need to abstain from sex or use additional contraceptive protection for the next 7 days.

Amenorrhoeic Women

- Can have the first injection at any time, if it is reasonably certain that she is not pregnant.
- She will need to abstain from sex or use additional contraceptive protection for the next 7 days.
- If have any doubt do pregnancy test.

Postpartum Breastfeeding Women

- Can have the first injection at any time if she is between 6 weeks and 6 months postpartum, and amenorrhoeic.
- If she is fully or nearly fully breastfeeding, no additional contraceptive protection is needed.
- If she is more than 6 weeks postpartum and her menstrual cycles have returned, she can have the first injection as advised for other women having menstrual cycles.
- For women who are less than 6 weeks postpartum and primarily breastfeeding, use of injectables is not usually recommended unless other more appropriate methods are not available or not acceptable.

Postpartum Non-Breastfeeding Women

- Can have the first injection at any time if she is less than 21 days postpartum.
- No additional contraceptive protection is needed.
- If she is 21 or more days postpartum and her menstrual cycles have not returned, and it is reasonably certain she is not pregnancy, she can have the 1st injection at any time.
- She will need to abstain from sex or use additional contraceptive protection for the next 7 days.
- It is highly unlikely that a woman will ovulate and be at risk of pregnancy during the 1st 21 days postpartum.
- However, for programmatic reasons, some contraceptive methods may be provided during this period.
- If her menstrual cycles have returned, she can have the first injection as advised for other women having menstrual cycles.

Post Abortion Women

- Can have the 1st injection immediately post abortion.
- No additional contraceptive protection is needed.

Women Switching from Another Hormonal Method

- Can have the first injection immediately, if she has been using her hormonal method consistently and correctly or if it is reasonably certain that she is not pregnant. There is no need to wait for her next menstrual period.
- If her previous method was another injectable, she should have the progestogen-only injection when the repeat injection would have been given.
- No additional contraceptive protection is needed

Women Switching from a Non hormonal Method (other than the IUD)

- Can have the first injection immediately, if it is reasonably certain that she is not pregnant.
- There is no need to wait for her next menstrual period.
- If she is within 7 days of the start of her menstrual bleeding, no additional contraceptive protection is needed.

- If it has been more than 7 days since menstrual bleeding started, she will need to abstain from sex or use additional contraceptive protection for the next 7 days.

Eligibility

See **Table 9** on pages 45-46 for the medical eligibility criteria for initiating injectable use.

Contraceptive Implant

Introduction

Norplant and Jadelle implants are long acting, reversible, low-dose, progestogen-only contraceptives that provides protection for five years. The drug levonogestrel is released slowly by means of six (Norplant) and two (Jadelle) small capsules placed subdermally on the woman's arm. Each Norplant capsule (34 mm long, 2.4 mm diameter) contains 36 mg and each Jadelle capsules (43mm long, 2.5 mm diameter) contain 75 mg of levonorgestrel. Norplant releases levnorgestrel at a rate of 85 ug per 24 hours during the first few weeks of use. The amount declines over the next 18 months to a constant rate of 30-35 ug per 24 hours. Jadelle, in contrast, releases 435 picograms per milliliter (pg/ml) 1 month after insertion. During the first year, levnorgestrel remains well above 300 pg/ml.

Mode of Action

Implants stop ovulation, thicken the cervical mucus to inhibit sperm penetration, and may also make the endometrium unsuitable for implantation if an egg were to be released and fertilized (this is unlikely).

Efficacy

Implants are one of the most effective methods of contraception, with failure rate of 0.2 percent during the first 12 months of use. The efficacy of Norplant and Jadelle decreases after five years of use, when it is recommended that the capsules be removed.

Advantages

- Are highly effective in preventing pregnancy, even in obese women.
- Have an almost immediate return of fertility after removal.
- Provide long-term protection up to five years.
- Are effective immediately after insertion.
- Have no estrogen-related side effects or complications.
- Decreases the amount of menstrual flow, which helps protect against anaemia.
- Protects against endometrial and ovarian cancer.
- Does not affect the quality or the quantity of breast milk
- Does not interfere with sexual intercourse.

Disadvantages

- Require a minor surgical procedure for insertion and removal using appropriate infection prevention procedures.
- Cause menstrual changes such as prolonged menstrual bleeding, spotting, and/or amenorrhoea.
- Do not offer protection against STI/HIV.
- May create some discomfort during insertion and removal.
- Must be inserted/removed by trained health provider in a health facility.
- Decrease ectopic pregnancy.

Table 8.

Side Effects and management of side effects for Progestogen-Only Pills, Injectables, and Implants.

Side effect	Assessment	Management
Amenorrhoea	<p>If taking POPs, ask how she has been taking her pills. Has she missed any pills in the cycle? Has she stopped taking the pills?</p> <p>Check for pregnancy (intrauterine or ectopic)</p>	<p>Amenorrhoea, though less common in implant users (about 7%) occurs in up to 40%. It is rare in POC users.</p> <p>Amenorrhoea for 6 weeks or more, especially after a pattern of regular menses, may signal pregnancy and should be evaluated.</p> <p>If not pregnant, no treatment is required except counseling and reassurance. Advise the client to return to the clinic if amenorrhoea continues to be a concern.</p> <p>If intrauterine pregnancy is confirmed, stop the use of the method and reassure that the small doses of Progestin in the POCs will have no harmful effect on the fetus.</p>
<p>Bleeding spotting, including</p> <p>Prolonged spotting (> 8 days)</p> <p>Moderate bleeding (? normal menses) (50-80ml)</p>	<p>Perform a pelvic exam (speculum and bimanual) to be sure bleeding is not due to other causes (e.g. genital tract problems such as vaginitis, cervicitis, cervical polyp or uterine fibroids)</p> <p>Check for pregnancy</p>	<p>If an abnormality of the genital tract is found, treat the problem and counsel the client or refer for further evaluation. Do not stop use of POCs.</p> <p>See amenorrhoea for pregnancy related conditions.</p> <p>Reassure client that light, intermenstrual bleeding or spotting occurs in many women using the method. It is not serious and usually does not require treatment. Most women can expect the altered bleeding patterns to become more regular after 6 to 12 months.</p> <p>If the client is not satisfied after counselling and reassurance, but wants to continue using the method, two treatment options are recommended:</p> <ul style="list-style-type: none"> - A cycle of COCs - Ibuprofen (up to 800mg 3 times daily for 5 days) or other Non Steroidal Anti-Inflammatory Drugs (NSAID) <p>Be sure to tell the client to expect bleeding during the week after completing the COCs.</p>

Side effect	Assessment	Management
Lower abdominal pains with or without symptoms of pregnancy	<p>Take history, perform abdominal and pelvic (speculum and bimanual) examination</p> <p>Check vital signs:</p> <ul style="list-style-type: none"> • Pulse • Blood pressure • Temperature <p>Examine to rule out:</p> <ul style="list-style-type: none"> • Ectopic pregnancy • PID • Appendicitis • Ovarian cysts 	<p>Refer immediately if the client has any of the following</p> <p>Moderate to severe lower abdominal tenderness</p> <p>Elevated resting pulse (>100BPM)</p> <p>Decreased blood pressure (<90/60)</p> <p>Elevated temperature (>38°C)</p> <p>Suspected/confirmed pregnancy and acute anaemia (e.g. 9 g/dl Hb or <27Hct)</p> <p>In some women using POCs, ovarian follicles develop and their shrinkage (atresia) is sometimes delayed. In these instances, the follicle may continue to grow beyond the size it would attain in a normal cycle. These enlarged follicles cannot be distinguished from ovarian cysts. They usually occur during the first 6 months of use, generally are asymptomatic and often palpable. In most cases the enlarged follicles disappear spontaneously and should not require treatment or stopping use of the POC. Rarely they may twist or rupture, sometimes causing abdominal pain, surgical interventions may be required</p>
Weight gain or loss (change in appetite)	<p>Compare weight prior to POC use (if known) and current weight.</p> <p>Check pregnancy</p> <p>Check that the client is eating and exercising properly</p>	<p>Counsel client that fluctuations of 1-2 kg may occur.</p> <p>Review diet if weight change is excessive (? 2kg or more). If weight gain (or loss) is unacceptable, even after counselling, stop use and help client choose another method.</p>
Breast fullness or tenderness	<p>Check for pregnancy</p> <p>Check breasts for:</p> <ul style="list-style-type: none"> • Lumps or cyst • Discharge or galactorrhea (leakage of milk-like fluid), if not breast feeding <p>If she is breastfeeding and breast(s) is tender, examine for breast infection</p>	<p>If pregnant, manage as above (see amenorrhoea)</p> <p>If not pregnant, breast tenderness usually improves within 3 months of starting POCs</p> <p>Do not stop POC unless client requests it after counselling</p> <p>If physical examination shows lump or discharge suspicious for cancer (e.g. firm, nontender or fixed and which does not change during the menstrual cycle), refer to appropriate source for diagnosis. If no abnormality, reassure.</p> <p>If breast(s) is not infected, recommend a bra that provides additional support</p> <p>If breast infection, use warm compresses, advise to continue breast-feeding and give antibiotics as appropriate.</p>
Nausea/Dizziness/Vomiting	<p>Check for pregnancy by checking symptoms performing a pelvic examination (speculum and bimanual) and pregnancy test.</p>	<p>If pregnant, manage as above (see absence of vaginal bleeding).</p> <p>If not pregnant, reassure that this is not a serious problem(s) and usually disappears with time.</p>

Return to Fertility

The return to fertility is not delayed following removal of Norplant or Jadelle. Since fertility returns rapidly following removal of the implants, women discontinuing this contraceptive method who do not wish to conceive need to start using another contraceptive method immediately.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

Persons who have received special training in client counseling, proper implant insertion and removal procedures, and aseptic techniques can provide this service.

- Physicians
- Nurses/Midwives
- Clinical officers

The insertion and removal require injections (for the anesthetic) and skin-piercing procedures. Therefore, these techniques must be carried out under aseptic conditions to avoid infection at the implant site. Staff must not only be trained and supervised in aseptic techniques, but they must understand the importance of such procedures to their own health and to the client's. Adequate equipment and supplies must be provided to clean and sterilize all materials.

- All women who choose Norplant must have access to removal, or to referral arrangements for removal if requested.
- Follow-up for routine monitoring and removal at five years must be supported by appropriate transport and communication facilities.

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

Informed choice must be ensured. Counselling should include general information about Norplant and Jadelle, how they work, the advantage and disadvantage, compared with those of other methods available, their reversibility, length of protection period, the possible side effects and their management, the procedure for insertion and removal, type of and need for immediate post insertion care, the importance of follow-up care, and the need to go to the health facility for any problems or removal. Because menstrual irregularities are commonly associated with the use of Norplant and Jadelle, careful counselling of new acceptors results in a high degree of satisfaction among women and reduces the number of removals related to bleeding problems. Informing clients about what and expect helps them better understand and cope with side effects. Counselling must include advice on where and when to return for any side effects/complications and clear guidelines on the simultaneous need to use condoms if either partner is at risk of STI/HIV transmission.

Screening

Screening of clients mainly involves taking a careful medical history to identify conditions that may preclude implant use. Physical examinations (including breast and pelvic) and laboratory tests (including STI screening, blood sugar, or hemoglobin) are not required routinely for safe Norplant use, but they should be performed when indicated by the medical history. These are beneficial for women as part of their overall reproductive health care, but they are not essential to all women for initiating implant use.

The single most important and essential procedure is effective counseling to ensure informed choice and complete understanding by the client of the various elements for safe and effective use of implants.

It is useful for the woman to be seen by the provider during the first month after insertion in order to deal with any problems or side effects that may have developed, and for post-insertion counseling. After this, follow-up visits can be planned on a yearly basis. The woman must know where to go for help if any serious problem should develop or if she chooses to have the implants removed. Advise the woman when to return, and when it is time to remove the implant.

Instructions for Users

- Implants are inserted under the skin of your arm in a minor surgical procedure that is performed under aseptic conditions.
- A local anesthetic is first injected into the upper arm.
- A small incision is made and with a special needle, the capsules are placed one at a time in a fan shape just under the skin.
- No sutures are used.
- The incision is covered with a small adhesive bandage and protective gauze.
- The cut should be kept clean and dry until it is healed.
- One week after the insertion, return to the clinic for a check-up.
- The removal process is very similar to insertion, but takes a little longer.
- All women who choose Norplant or Jadelle must have access to removal, or to referral arrangements for removal if requested.
- Follow-up for routine monitoring and removal at five years must be supported by appropriate transport and communication facilities.

Instructions For Different Conditions

The following recommendations on initiating implant use are based on information from, and relate to, approve levonorgestrel implants (Norplant and Jadelle).

Menstruating Women

- Can have the implant inserted within 7 days after the start of her menstrual bleeding.
- No additional contraceptive protection is needed.
- Can have the implant inserted at any other time, if it is reasonably certain that she is not pregnant.
- If it has been more than 7 days since menstrual bleeding started, she will need to abstain from sex or use additional contraceptive protection for the next 7 days.

Amenorrhoeic Women

- Can have the implant inserted at any time, if it is reasonably certain that she is not pregnant.
- She will need to abstain from sex or use additional contraceptive protection for the next 7 days.

Postpartum Breastfeeding Women

- Can have the implant inserted at any time if she is between 6 weeks and 6 months postpartum and amenorrhoeic.
- If she is fully or nearly fully breastfeeding, no additional contraceptive protection is needed.
- If she is more than 6 weeks postpartum and her menstrual cycles have returned, she can have the implant inserted as advised for other women having menstrual cycles.
- For women who are less than 6 weeks postpartum and primarily breastfeeding, use of progestogen-only implants is not usually recommended unless other more appropriate methods are not available or not acceptable.

Postpartum Non-Breastfeeding Women

- Can have the implant inserted at any time if she is less than 21 days postpartum.
- No additional contraceptive protection is needed.
- If she is 21 or more days postpartum, her menstrual cycles have not returned, and it is reasonably certain she is not pregnant, she can have the implant inserted at any time.
- She will need to abstain from sex or use additional contraceptive protection for the next 7 days.
- If her menstrual cycles have returned, she can have the implant inserted as advised for other

- women having menstrual cycles.
- It is highly unlikely that a woman will ovulate and be at risk of pregnancy during the 1st 21 days postpartum.
- However, for programmatic reasons, some contraceptive methods may be provided during this period.

Post Abortion Women

- Can have the implant inserted immediately post abortion.
- No additional contraceptive protection is needed.

Women Switching from Another Hormonal Method

- Can be inserted immediately, if she has been using her hormonal method consistently and correctly or if it is reasonably certain that she is not pregnant.
- There is no need to wait for her next menstrual period.
- If her previous method was an injectable, she should have the implant inserted when the repeat injection would have been given.
- No additional contraceptive protection is needed.

Women Switching from a Nonhormonal Method (other than the IUD)

- Can have the implant inserted immediately, if it is reasonably certain that she is not pregnant.
- There is no need to wait for her next menstrual period.
- If she is within 7 days of the start of her menstrual bleeding, no additional contraceptive protection is needed.
- If it has been more than 7 days since menstrual bleeding started, she will need to abstain from sex or use additional contraceptive protection for the next 7 days.

Norplant: Woman weighing < 70 kg

- A woman who weighs less than 70 kg at insertion and who continues to weigh less than 70 kg can have her implants left in place for up to 7 completed years.
- She should be counseled that increased weight (to >70 kg) might lead to lower effectiveness of Norplant after 4 or 5 years (depending on the amount of weight gained).

Norplant: Woman weighing 70-79 kg

- Implants will be less effective beyond the 5th year of use if weight continues within the same range.
- She should return for a follow-up visit by the end of 4 years of use.
- If she still weighs 70 - 79 kg, she and her provider should decide whether or not to leave implants in place for the full 7 years.
- If she weighs 80 kg or more at follow-up, she should seriously consider having her implants removed after 4 years of use because of their reduced effectiveness.

Norplant: Woman weighing 80 kg or more

- Should return for a follow-up visit by the end of year 4.
- If she still weighs 80 kg or more, she should seriously consider having her implants removed after 4 years of use because of their reduced effectiveness.

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- Women can have the implants left in place for up to 5 years, unless she weighs 80 kg or more.
- If she weighs 80 kg or more, she should seriously consider having her implants removed after 4 completed years of use because of their reduced effectiveness.

Eligibility

TABLE 9. WHO Medical Eligibility Criteria for Progestogen-Only Pills, Injections, and Norplant Implants.

WHO Category 1: NO RESTRICTIONS ON USE	WHO Category 2: GENERALLY USED BUT WITH PRECAUTIONS
<ul style="list-style-type: none"> • Age 16 years or more • Parous/nulliparous • Smoking: any age, light or heavy • Obesity • Obstetric/gynecologic conditions <ul style="list-style-type: none"> - History of preeclampsia - History of ectopic pregnancy (INJECTABLES AND NORPLANT)¹ - Postpartum (nonbreast-feeding) or post abortion - Breast-feeding (> 6 weeks postpartum) - Benign breast disease and family history of breast cancer - Pregnancy-related jaundice/diabetes - Cervical ectropion/erosion - Uterine fibroids with or without distortion - Severe dysmenorrhoea - Endometriosis - Prior pelvic surgery - Endometrial or ovarian cancer - Benign ovarian tumors - PID (history or current) - Gestational trophoblastic disease • Cardiovascular conditions <ul style="list-style-type: none"> - Thromboembolic disorders - Valvular heart disease (complicated or uncomplicated) - Mild/moderate hypertension (BP< 180/100) (PILLS & NORPLANT) • Chronic diseases/other conditions <ul style="list-style-type: none"> - Diabetes (history of gestational disease) - Mild and severe headaches without focal neurological symptoms (PILLS) 3 - Gallbladder disease surgically or medically treated and asymptomatic Viral hepatitis (carrier, not active case) - Thyroid disease - Thalassaemia or sickle cell disease - Epilepsy - Schistosomiasis - Tuberculosis pelvic or nonpelvic - Malaria - Iron deficiency anaemia • STI/HIV (advise condom use) <ul style="list-style-type: none"> - Current/history of purulent cervicitis or chlamydial infection or gonorrhoea - Other STIs excluding hepatitis and HIV - HIV infected - AIDS - High risk of HIV • Other antibiotics apart from rifampicin and griseofulvin can be used • Depressive disorders 	<ul style="list-style-type: none"> • Age < 16 years • Severe headaches including migraine with or without local neurological symptoms (INJECTABLES AND IMPLANTS) • Severe headaches including migraine with focal neurological symptoms (PILLS) • Obstetric/gynecologic conditions <ul style="list-style-type: none"> - Irregular menstrual bleeding with or without heavy bleeding - Past ectopic pregnancy (FOR PILLS) 1 - Breast disease - undiagnosed mass - Cervical cancer or precancerous cervical lesions • Cardiovascular conditions <ul style="list-style-type: none"> - History of hypertension where blood pressure cannot be evaluated for pills injectables and Norplant - Mild/moderate hypertension (blood pressure < 180/110) (INJECTABLES) 20/110) - Known Thrombogenic mutations - Severe hypertension with vascular disease (PILLS AND IMPLANTS) - Ischemic heart disease and stroke (PILLS AND) IMPLANTS) - Known hyperlipidaemias • Chronic diseases/other conditions <ul style="list-style-type: none"> - Diabetes insulin or noninsulin-dependent - Other vascular disease or diabetes of > 20 years duration (PILLS AND IMPLANTS) - Nephropathy/retinopathy/neuropathy (PILLS AND IMPLANTS) - Use of certain antibiotics and anticonvulsant medications (INJECTABLES)* - Women on ARVs can be on hormonal contraception

WHO Category 3: METHOD OF LAST CHOICE	WHO Category 4: DO NOT USE
<ul style="list-style-type: none"> • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Unexplained vaginal bleeding (PILLS)¹ - Breast-feeding < 6 weeks postpartum - History of breast cancer • Cardiovascular conditions <ul style="list-style-type: none"> - Severe hypertension with vascular disease (INJECTABLES) - Other vascular disease and diabetes of >20 years duration (INJECTABLES) - Viral hepatitis (active) - Severe cirrhosis (decompensated) - Current breast cancer (PILLS)¹ - Past history and no evidence of current breast cancer for five years <ul style="list-style-type: none"> ○ Jaundice ○ Liver tumors (benign or malignant) ○ Use of certain antibiotics or antiseizure medications (PILLS AND IMPLANTS)¹ ○ Ischemic heart disease and stroke (INJECTABLES) ○ Nephropathy/retinopathy/neuropathy (INJECTABLES)² • Chronic diseases/other conditions 	<ul style="list-style-type: none"> • N.A.

POCs may be started immediately post-abortion.

² Certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primadone, topiramate, oxcarbazepine) lower POC effectiveness.

³ Classification is based on data for women with selected depressive disorders. No data on bipolar disorder or postpartum depression were available. There is a potential for drug interactions between certain antidepressant medications and hormonal contraceptives.

⁴ Rifampicin is likely to decrease POC effectiveness.

⁵ Potential drug interactions between hormonal contraceptives and ARVs may alter the safety and effectiveness of both the hormonal contraceptives and the ARVs.

⁶ If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation.

Copper Intrauterine Devices (IUDs)

Introduction

IUD stands for intrauterine device. This is a small, T-shaped device made of flexible plastic that is inserted into the uterus by a trained health professional. It is recommended that inert IUDs no longer be used. The most widely used copper IUD in Zambia is the Cu T 380A, for which most of the data on safety and efficacy are available. The copper IUD can be left in place for up to ten years. Copper IUDs are appropriate for women with low STI risk who want highly effective, long-term contraception that does not require regular administration. Many conditions that have previously been considered contraindications or barriers to IUD use are no longer considered risk factors. The key conditions that preclude women from IUD use are linked to STI risk and certain gynaecological conditions.

Mode of Action

The IUD prevents pregnancy by causing temporary, reversible changes in the uterus and uterine tubes that inhibit fertilization.

Efficacy

The most effective IUD is the Cu T 380A, with a less than 1 percent failure rate in the first year of use. The Cu T380 A has been shown to be effective for more than 10 years with continuous use. With an estimated 2.2 pregnancies per 100 users at 10 years of use, Cu T 380A has one of the lowest pregnancy rates recorded for a reversible method of contraception.

Advantages

- Provide highly effective protection against pregnancy.
- Provide long-term protection (up to 10 years).
- Are effective immediately.
- Have an immediate return of fertility after removal if no infections have occurred.
- Do not interfere with breast-feeding.
- Are low maintenance, requiring no daily action.
- Do not interfere with sexual intercourse.
- Provide immediate postpartum and/or post abortion protection.

Disadvantages

- Do not offer protection against STI/HIV transmission.
- Must be inserted and removed by trained health workers in settings with infection prevention procedures, which may require one to travel significant distances.
- Require pelvic examination for insertion.
- Decrease ectopic pregnancy.
- May be spontaneously expelled from the body.
- Have side effects, including bleeding irregularities (See *Side Effects*).

Table 10. Side Effects and management

Side effects	Assessment	Management
Amenorrhea (absence vaginal bleeding and spotting)	<p>Ask client:</p> <ul style="list-style-type: none"> - When she had her last menstrual period (LMP), - When she last felt IUD strings and - If she has symptoms of pregnancy <p>Check for pregnancy (intrauterine or ectopic) by history, checking symptoms and performing a pelvic examination (speculum and bimanual) or a pregnancy test, if indicated and available.</p> <p>Perform Pelvic (speculum and bimanual) examination to check for strings</p>	<p>If the client is over 45, explain that amenorrhea could be related to menopause.</p> <p>If not pregnant do not remove IUD. Provide counseling and reassurance. Refer for investigation to identify the cause of amenorrhea, if the client remains concerned.</p> <p>If pregnancy less than 13 weeks (by LMP or examination) and strings visible, explain that IUD should be removed to minimize the risk of pelvic infection. If the client agrees, remove IUD. Advise her to return to clinic if she has excess bleeding, cramping, foul discharge or fever (possible threatened or incomplete abortion).</p> <p>Do not attempt to remove IUD if:</p> <ul style="list-style-type: none"> - Strings are not visible, or - Pregnancy greater than 13 weeks (by LMP or examination) <p>If the client is pregnant and wishes to continue pregnancy but does not want IUD removed, advise her of increased risk of miscarriage (spontaneous abortion) and infection that pregnancy should be followed closely.</p>
<p>Bleeding (Prolonged or heavy bleeding)</p> <p>Prolonged bleeding: (>8 days)</p> <p>Heavy bleeding: (twice as long or twice as much as normal)</p>	<p>Perform pelvic examination (speculum and bimanual) to be sure client does not have:</p> <ul style="list-style-type: none"> - Intrauterine or ectopic pregnancy - Incomplete abortion - Vaginal, cervical or pelvic infection. <p>Ask client how much she has bled. Check for signs of marked anemia (pale conjunctiva or nail beds, low haemoglobin/hematocrit [$<9\text{g/dl Hb}$ or $<27\text{ Hct}$]).</p>	<p>Client has IUD less than three months:</p> <p>If examination is normal, reassure and give iron tablets (FeSO_4, 1 tablet containing at least a 200-100 mg elemental iron, daily for 1-3 months).ask client to return in three months for another check. Use locally approved drugs, such as ibuprofen (800mg 3 times daily for one week), during bleeding episode, if available, to decrease the bleeding.</p> <p>If examination is normal and bleeding interval short (less 3 weeks), suspect an ovulation: if longer intervals (more than six weeks) suspect delayed ovulation; or if hot flashes suspect menopause (if age over 45) or other gynecologic endocrine problem. Refer to specialist for further evaluation.</p> <p>If bimanual examination shows enlarged or irregular uterus due to fibroids, tell client of the problem and refer for evaluation. Remove the IUD if the bleeding Worsens and client is anemic or requests for removal, and help client use another method.</p> <p>Client has IUD more than three months:</p> <p>If marked anemia present, recommend removal and help client choose another method give 3 months of iron tablets and re-examine in three months. If the client already has copper IUD remove IUD and help client choose another method.</p>
Irregular bleeding (With or without symptoms of pregnancy)	<p>Perform abdominal and pelvic (speculum and biannual) examinations to check for infection, pelvic pain and tenderness, palpable adnexal mass or enlarged uterus (consistent with pregnancy).</p>	<p>If ectopic pregnancy is suspected, refer for complete evaluation. Ectopic pregnancy must be suspected in clients with irregular bleeding or abdominal pain.</p> <p>If infection is suspected, treat.</p>

Side effects	Assessment	Management
Cramping	Perform abdominal and pelvic (speculum and bimanual) examinations to check for PID and other causes of cramping, such as partial expulsion of the IUD, cervical or uterine perforation, or ectopic pregnancy.	<p>If the cramping is new and more severe and cause found (such as PID), remove the IUD and treat accordingly.</p> <p>If no cause found and cramping not severe, reassure and provide analgesic, such as ibuprofen.</p> <p>If no cause found but cramping but cramping severe, remove IUD. If there is no evidence of infection, replace with new IUD or help client choose another method.</p>
Partner complains about strings	Check to be sure the IUD is in place (i.e., not partially expelled).	Counsel client that one option is to cut strings even with cervical os and inform client that she will no longer be able to feel strings. Record this in the clients chart so that when she returns for removal, the service provider will know that the strings were cut even with the cervix.

Return to Fertility

There is no evidence that IUDs affect subsequent fertility in properly screened women. Return to fertility after discontinuing is immediate, provided no infections have occurred during use.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

Persons who are trained specifically in IUD insertion and removal can provide IUD services:

- Physicians
- Nurses/Midwives
- Clinical officers

Only providers specially trained to insert IUDs postpartum should undertake such a procedure. All insertion and removal procedures must be performed in facilities with appropriate infection prevention practices.

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

All IUD acceptors should receive appropriate counselling for informed, free choice of the method and an understanding of all the relevant information related to safe IUD use. Counselling should include: how the method works, advantages, disadvantages, type of IUD to be used, side effects, need for a pelvic examination and what it entails, effectiveness, follow-up care, warning signs and symptoms of infection for which care is required, the need to check IUD strings from time to time, especially after menstruation. Counselling should include assessment of the client's risk for STI/HIV transmission and proper advice on the need for simultaneous use of condoms should be provided if such risk is present and the client still wishes to use an IUD.

Screening

A careful medical history should be obtained for all clients considering an IUD, and physical and pelvic examinations performed. Additionally, an STI/HIV risk assessment is essential for safe provision. All of this information should be use to determine if there are any existing conditions that would preclude insertion of an IUD. In general, the IUD is very safe for women in monogamous sexual relationships since they are at low risk of STIs and are therefore are unlikely to develop PID. Still, all copper-bearing IUD users should be advised to watch for symptoms of PID, especially during the first month.

Other routine lab tests and examinations are not considered essential for the safe provision of IUDs. In areas where the prevalence of sexually transmitted genital tract infections is high, it may be useful to add simple microscopic STI testing to the routine abdominal and speculum examination as a further measure of safety, where feasible.

A follow up visit is recommended either after the first menses or 3-6 weeks after IUD insertion. Advise the woman to return at any time to discuss side effects, other complications, or a desire to switch contraceptive methods. Communicate when the client needs to return for IUD removal.

Instructions for users

Insertion Procedure For Service Providers

- A clinician holds the vagina open with a speculum, and the uterus steady with a tenaculum.
- A sound may then be inserted to measure the length of the cervical canal and uterus.
- After it is withdrawn, a tube containing the IUD is inserted.
- A plunger in the tube pushes the IUD into place, causing the arms of the IUD to open into a t-shape when the device is in the uterus.
- A short piece of string hangs down through the cervix into the vagina.

For Clients After Insertion

- Write down when your IUD should be replaced, and keep it in a safe place.
- Go for a checkup after your first period to make sure your IUD is still in place. Do not wait longer than three months after insertion to have a checkup.
- For increased protection against pregnancy, it is a good idea to use condoms during your fertile period for the first two to three months after insertion.
- When menstruating, it is a good idea to check tampons or pads daily to see if the IUD has fallen out. During the first few months after insertion, check every few days to make sure the IUD is still in place. After the first few months, feel for the string between periods. This can be done as follows:
 - After washing your hands, insert one finger the index or middle finger is usually easiest into the vagina until you touch the cervix, then feel for the string.
 - If you find the string, the IUD is in place. If it feels longer or shorter than it has on previous occasions, it may have moved and need to be repositioned by a health professional.
 - Do not for any reason pull on the string. This may result in improper positioning, or in the IUD coming out of the uterus.
- Go for annual checkups to be sure the IUD is still inserted properly. Also visit your health provider if you experience any problems or would like to switch methods.
- If it is found that your IUD has been expelled, be sure to use condoms as a back-up method during sex.
- IUDs do not protect against STI/HIV. Be sure to use condoms if you are at risk.

Instructions For Different Conditions

- Prophylactic antibiotics are generally not recommended for copper-bearing IUD insertion.
- In settings of high cervical gonococcal and chlamydia prevalence and limited STI screening, such prophylaxis may be considered.
- IUDs can be inserted at any time during the menstrual cycle.
- At the time of insertion, clients should be taught the technique for self-examination of IUD strings.
- A routine follow-up visit should be arranged three to six weeks after IUD insertion to

ensure that there is no infection or expulsion, and on an annual basis thereafter if no problems develop.

- IUDs should be removed for any medical reasons that deem it necessary, and upon the request of the client regardless of reason.
- For serious side effects, providers must not delay or refuse to remove IUD if the client so wishes.
- Women wishing to switch to the copper IUD from a different method can do so immediately, as long as it is reasonably certain that she is not pregnant.
- There is no need to wait for her next menstrual period, and no additional contraceptive protection is needed after insertion.

TABLE 11. WHO Medical Eligibility Criteria For Copper IUDs.

WHO Category 1: NO RESTRICTIONS ON USE	WHO Category 2: GENERALLY USED BUT WITH PRECAUTIONS
<ul style="list-style-type: none"> • Age > 20 years • Parous • Smoking: all ages, light or heavy • Obesity (BMI > 30 kg/m²) • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Postpartum > 4 weeks - Post abortion, first trimester¹ - History of ectopic pregnancy - Prior pelvic surgery - Irregular menstrual patterns without heavy bleeding - Benign ovarian tumours - Cervical ectropion - Cervical intraepithelial neoplasia - Benign or malignant breast disease - Uterine fibroids without distortion of uterine cavity - Past PID with subsequent pregnancy (method initiation and continuation) • Cardiovascular conditions <ul style="list-style-type: none"> - Multiple risk factors for cardiovascular disease - Hypertension - History of high blood pressure during pregnancy - DVT/PE - Thrombogenic mutations - Superficial venous thrombosis - Current or history of ischaemic heart disease - Stroke - Known hyperlipidaemias - Uncomplicated valvular heart disease • Chronic diseases/other conditions <ul style="list-style-type: none"> - Headaches (non-migrainous and migraines with/without aura) - Epilepsy - Depressive disorders² - Schistosomiasis (uncomplicated, fibrosis of the liver) - Non-pelvic tuberculosis (initiation and continuation) - Malaria - Diabetes - Thyroid disease - Gallbladder disease - History of cholestasis (pregnancy or past COC-related) - Viral hepatitis (active or carrier) - Cirrhosis (mild or severe) - Liver tumours (benign or malignant) - Use of certain antibiotics or antiseizure drugs (antibiotics apart from rifampicin and griseofulvin can be used)³ 	<ul style="list-style-type: none"> • Age < 20⁴ • Nulliparous • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Postpartum < 48 hours - Post abortion, second trimester - Menstrual patterns with heavy or prolonged bleeding; severe dysmenorrhoea - Unexplained vaginal bleeding, before evaluation (for method continuation)⁵ - Endometriosis - Cervical, endometrial, ovarian cancer (for method continuation) - Anatomical abnormality not distorting uterine cavity or interfering with IUD insertion⁶ - Past PID without subsequent pregnancy (method initiation and continuation); current PID (method continuation)⁷ • Cardiovascular conditions <ul style="list-style-type: none"> - Complicated vascular heart disease⁸ • Chronic diseases other conditions <ul style="list-style-type: none"> - Thalassemia⁹ - Sickle cell disease⁹ - Iron deficiency anaemia⁹ • STI/HIV (advise condom use) <ul style="list-style-type: none"> - Current purulent cervicitis or chlamydial infection or gonorrhoea (method continuation)¹⁰ - Other STIs excluding hepatitis and HIV - Vaginitis - Increased risk of STIs (method initiation and continuation)¹¹ - HIV-infected (method initiation and continuation) - AIDS (method continuation) - AIDS, clinically well on ARV therapy (method initiation and continuation)¹²

¹ IUD can be inserted immediately after first-trimester, spontaneous or induced abortion.

² Classification is based on data for women with selected depressive disorders. No data on bipolar disorder or postpartum depression were available. There is a potential for drug interactions between certain antidepressant medications and hormonal contraceptives.

WHO Category 3: METHOD OF LAST CHOICE	WHO Category 4: DO NOT USE
<ul style="list-style-type: none"> • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Postpartum 48 hours – 4 weeks - Benign gestational trophoblastic disease - Ovarian cancer (for method initiation) • Chronic diseases/other conditions <ul style="list-style-type: none"> - Known pelvic tuberculosis (method continuation) • STI/HIV (advise condom use) <ul style="list-style-type: none"> - Increased risk of STIs⁹ - AIDS (method initiation)¹² 	<ul style="list-style-type: none"> • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Pregnancy² - Puerperal sepsis or post-septic abortion - Unexplained vaginal bleeding, before evaluation (method initiation)⁵ - Malignant gestational trophoblastic disease - Cervical or endometrial cancer (method initiation) - Uterine fibroids with distortion of uterine cavity; uterine cavity distorted in a manner incompatible with IUD insertion - Current PID (method initiation) • Chronic diseases/other conditions <ul style="list-style-type: none"> - Known pelvic tuberculosis (initiation) • STI/HIV (advise condom use) <ul style="list-style-type: none"> - Current purulent cervicitis or chlamydial infection or gonorrhoea (method initiation)

³ These antiseizure drugs include phenytoin, carbamazepine, barbiturates, primidone, topiramate, and oxcarbazepine.

⁴ There is concern both about the risk of expulsion due to nulliparity and risk of STIs due to sexual behavior in younger age groups.

⁵ If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. There is no need to remove IUD before evaluation.

⁶ This includes cervical stenosis or cervical lacerations.

⁷ Treat PID using appropriate antibiotics. There is usually no need for removal of the IUD if the client wishes to continue its use. Continued use of an IUD depends on the woman's informed choice and her current risk factors for STIs and PID.

⁸ Prophylactic antibiotics to prevent endocarditis are advised for insertion.

⁹ There is concern about an increased risk of blood loss with copper IUDs.

¹⁰ Treat the STI using appropriate antibiotics. There is usually no need for removal of the IUD if the client wishes to continue its use. Continued use depends on the woman's informed choice and her current risk factors for STIs and PID.

¹¹ For method initiation, if a woman has a very high individual likelihood of exposure to gonorrhoea or chlamydial infection, the condition is a Category 3.

¹² IUD users with AIDS should be closely monitored for pelvic infection.

¹³ The IUD should not be used during pregnancy because of the risk of serious pelvic infection and septic spontaneous abortion.

Emergency Contraception (EC)

Introduction

Emergency contraceptive pills (ECPs) are hormonal methods of contraception that can be used to prevent pregnancy following an unprotected act of sexual intercourse. ECPs sometimes are referred to as "morning-after" or "postcoital" pills. Because these terms do not accurately convey the correct timing of use (ECPs can be used up to three days following unprotected intercourse), and because they do not convey the important message that ECPs should not be used regularly (they are intended for "emergency" use only), they have been replaced by the name "emergency contraceptive pills."

ECPs involve the use of combined oral contraceptives, which total at least 100g ethinyl estradiol per dose, given as 2 doses 12 hours apart. This is known as the Yuzpe regimen, named after the Canadian professor A. Albert Yuzpe who first demonstrated ECPs safety and efficacy in 1974. An example is PC4 (250 g levonorgestrone + 50g ethinyl estradiol), given as 4 pills. ECPs should be started within 72 hours (3 days) of unprotected intercourse at any time during the menstrual cycle to prevent pregnancy. The contraceptive effect diminishes considerably after 72 hours or after implantation has occurred. ECPs are appropriate for use anytime a woman makes an informed choice to use them provided there are no medical contraindications. ECPs are not abortifacients and there is no evidence that ECPs are harmful to the fetus during early pregnancy.

Alternatively, a copper IUD can be inserted within five days of unprotected sexual intercourse as a method of EC.

Mode of Action

EC typically prevents or delays ovulation. It is currently unclear if EC inhibits fertilization or implantation. EC does not cause abortion.

Efficacy

After a single act of unprotected intercourse, ECPs fail to prevent pregnancy in about 2 percent of women who use them correctly. The chances of pregnancy are about four times greater when emergency contraception is not used. The earlier ECPs are taken after unprotected intercourse, the more effective they are. Failure rates may be increased if use of the regimen is extended beyond 72 hours of unprotected intercourse.

Less than one in every 1,000 IUDs inserted as a method of contraception will result in pregnancy, a failure rate of less than 1 percent.

Advantages

- ECPs and IUDs provide emergency protection.
- ECPs are inexpensive, and widely available.

Disadvantages

- ECPs are only effective within 72 hours after unprotected sexual intercourse.
- IUDs are only effective within 5 days after unprotected sexual intercourse.
- Neither method of EC protects against STI/HIV.
- ECPs have a potential for misuse through self-prescription and sharing.

Side Effects

Approximately 50 percent of women who take ECPs experience nausea, and 20–30 percent vomit. Other side effects may include headache, breast tenderness and spotting. If a client vomits within two hours of taking ECPs, a repeat dose must be given. Antiemetics taken after the onset of nausea are unlikely to have an effect. In the event of ECP failure, referral for follow-up care and safe abortion

service, if appropriate, should be provided as specified under the Termination of Pregnancy Act of 1972. If vomiting continues, repeat emergency contraceptive can be given vaginally.

See section on *Copper Intrauterine Devices* for information on side effects of IUDs.

Return to Fertility

ECPs commonly cause a disruption in the length of the next menstrual cycle. While COCs are fully reversible, the time of return to fertility with ECPs has not been studied.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

- Physicians
- Nurses/Midwives
- Clinical Officers
- Trained providers including CBD and social marketing retailers.

These persons must provide instructions on use and the expected side effects.

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

In some cases of unprotected intercourse, clients may feel stressed or embarrassed. Nonjudgmental counselling is crucial. Clients need to understand that ECPs are not suitable for regular contraception because pregnancy rates will be high. Offer other methods of family planning for future use by women who will be sexually active.

Clients must be prepared for possible nausea and vomiting and must know how to manage these common side effects. They must also understand ECP efficacy and safety issues

Common client misperceptions include:

- (1) Belief that ECPs will provide protection in the days and weeks following treatment.
- (2) Belief that ECPs will cause menses to come immediately (menses may be a few days early or a few days later than normal).

Screening

Before EC is administered, screen the client to be reasonably certain she is not pregnant. She should fit into one of the following categories:

- Has not had intercourse since last normal menses.
- Has been correctly and consistently using a reliable method of contraception.
- Is within the first 7 days after normal menses.
- Is within 4 weeks postpartum for non-lactating woman.
- Is within the first 7 days post abortion or miscarriage.
- Is fully or nearly fully breastfeeding, amenorrhoeic, and less than 6 months postpartum.

Clients need to understand that ECPs are not suitable for regular contraception, since pregnancy rates will be high. Repeated requests for ECP use, though not medically harmful, are an indication that the woman requires further counseling on other contraceptive options to be used on a regular basis. Offer other methods of family planning for future use by women who will be sexually active. In some cases of unprotected intercourse, clients may feel stressed or embarrassed. Nonjudgmental counseling is crucial. Prepare clients for possible nausea and vomiting. Make sure they know how to manage these common side effects. They must also understand ECP efficacy and safety issues. Oftentimes, clients

have certain misconceptions about ECPs. Be sure they know that ECPs will *not* provide protection in the days and weeks following treatment, and that ECPs will *not* cause menses to come immediately (menses may be a few days early or a few days later than usual). Clients should be advised against sharing pills and self-prescribing.

Instructions for Users

Levonorgestrel-only or combined estrogen-progestogen ECPs

- Take levonorgestrel-only or combined estrogen-progestogen ECPs as early as possible after unprotected intercourse, within 72 hours.
- Levonorgestrel-only or combined estrogen-progestogen ECPs can also be taken between 72-120 hours after unprotected intercourse.
- The effectiveness of ECPs is reduced the longer the interval between having unprotected intercourse and taking ECPs.
- The preferred regimen is to take 1.50 mg of levonorgestrel in a single dose.
- Alternatively, you can take the levonorgestrel in 2 doses 1 dose of 0.75 mg of levonorgestrel, followed by a second dose of 0.75 mg of levonorgestrel 12 hours later.
- A third option is that she can take combined estrogen-progestogen ECPs in 2 doses one dose of 100 µg of ethinylestradiol plus 0.50 mg of levonorgestrel, followed by a second dose of 100 µg of ethinylestradiol plus 0.50 mg of levonorgestrel 12 hours later.
- To reduce vomiting, take each dose after eating.
- If doing a two-dose regimen, and you vomit within two hours of taking the dose, take another dose as soon as possible.
- Take the follow-up dose 12 hours later.

Emergency IUD

- See an approved provider for insertion of an emergency IUD within 5 days after unprotected sexual intercourse.

Instructions For Different Conditions

- In view of the difficulties in accurately calculating a woman's risk of pregnancy, ECPs can be used at anytime during the menstrual cycle.
- However, they should not be used if there is evidence of established pregnancy.

Eligibility

There are no medical contraindications to the use of ECPs except in the case of confirmed pregnancy. Current evidence suggests that the amount of oral contraceptive steroids used in ECPs is too small to have a clinically significant impact on those conditions that restrict use of regular COCs in women. However, women taking liver enzyme inducing drugs, mainly antiepileptic treatments, and certain antibiotics, including griseofulvin and rifampicin, may have to take a higher dose than the recommended ECP regimen since these drugs lower the efficacy of COCs. These women must be told that the increased dose of ECPs may increase the side effects.

There are no safety data to suggest that there are serious medical consequences of repeated treatment of ECPs in one cycle. Women requesting ECPs more than once a month should be advised that the method is not as effective as standard contraceptives and assisted in finding an effective method for regular use.

Table 12. WHO Medical Eligibility Criteria for Emergency Contraceptives

WHO Category 1: NO RESTRICTIONS ON USE	WHO Category 2: GENERALLY USED BUT WITH PRECAUTIONS
<ul style="list-style-type: none"> • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Breastfeeding (ECP) - History of ectopic pregnancy (ECP) • Other conditions <ul style="list-style-type: none"> - Rape (ECP)¹ - Rape with low risk of STI (EIUD)² - Repeated ECP use (ECP)³ 	<ul style="list-style-type: none"> • Cardiovascular conditions <ul style="list-style-type: none"> - History of severe cardiovascular complications, including ischaemic heart disease, cerebrovascular attack, or other thromboembolix conditions (ECP)⁴ - Angina pectoris (ECP)⁴ • Chronic diseases/other conditions <ul style="list-style-type: none"> - Migraines (ECP)⁴ - Severe liver disease, including jaundice (ECP)⁴
WHO Category 3: METHOD OF LAST CHOICE	WHO Category 4: DO NOT USE
<ul style="list-style-type: none"> • Other conditions <ul style="list-style-type: none"> - Rape with high risk of STI (EIUD)² 	<ul style="list-style-type: none"> • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Pregnancy (EIUD)⁵

Note: Although ECPs are not indicated for a woman with a known or suspected pregnancy, there is no known harm to the woman, the course of her pregnancy, or the fetus if ECPs are accidentally used.

¹ There are no restrictions for use of ECPs in cases of rape.

² IUDs do not protect against STI/HIV/PID. Among women with chlamydial infection or gonorrhoea, the potential increased risk of PID with IUD insertion should be avoided. The concern is less for other STIs.

³ Recurrent ECP use is an indication that the woman requires further counselling on other contraceptive options. Frequently repeated ECP use may be harmful for women with conditions classified as 2, 3 or 4 for COC, CIC or POC use.

⁴ The duration of ECPs is less than that of regular use of COCs or POPs and thus would be expected to have less clinical impact.

⁵ The IUD is not indicated during pregnancy and should not be used because of the risk of serious pelvic infection and septic spontaneous abortion.

Male Surgical Sterilization (Vasectomy)

Introduction

The vasectomy procedure involves minor outpatient surgery done under local anesthesia. It is a simple, safe, inexpensive, and well-accepted permanent method of protection against pregnancy. As with female sterilization, vasectomy requires appropriate counseling, informed consent of the patient, well-trained practitioners to perform the operation, and facilities with infection control procedures.

Mode of Action

One or two small cuts are made in the scrotum (the sack that holds the testicles), and then the vas deferens are cut or blocked. This way, no sperm are contained in the ejaculate, so an egg cannot be fertilized.

Efficacy

Vasectomy is one of the most effective methods of contraception. Failure rates are usually less than 0.5 percent after 1 year. However, vasectomy is not immediately effective. The first 20 ejaculations after the procedure may contain sperm. The couple therefore must use a temporary method such as condoms during this time. A man can have his semen checked to be sure that the vasectomy was effective starting 3 months after the procedure.

Advantages

- Very effective protection against pregnancy.
- Is permanent, thereby providing lifelong contraception.
- Does not change sexual function (erection, release of semen, or sexual pleasure).
- Does not interfere with sexual intercourse.
- Is not associated with long-term health risks.

Disadvantages

- Is considered irreversible.
- Does not protect against STI/HIV.
- Is not immediately effective.
- Carries with it some risk of minor complications, either from the surgery or the anesthesia.
- Must be performed by a trained provider in an appropriate setting, which may require one to travel a significant distance.
- May cause some pain for two to three days following the procedure.

Table 13. Side Effects

Side effects	Assessment	Management
Bleeding at the incision site or inside the incision,	Check for bleeding at the site	Health provider to control
The formation of blood clots in the scrotum and haematoma	Determine presence of infection or abscess	If abscess: drain and treat by applying warm packs and providing pain relief medication. Infection at the incision site or inside the incision should be treated with antiseptic and antibiotics.
Pain in the scrotum/pain at incision site	Check for infection, granuloma or epididymitis	Reassure patient the pain should disappear approximately three days after the surgery.

Infection at the incision site or inside the incision	Confirm presence of infection or abscess	Treat with antiseptic and antibiotics.
Excessive swelling	Check for swollen scrotum Check for possible infection or haematoma	If large and painful may require surgical management. Observe; it usually resolves spontaneously within 1 to 3 weeks. Provide scrotal support as needed.

Return to Fertility

This procedure is considered irreversible.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

Persons who are adequately trained and skilled in minor surgeries can perform vasectomies:

- Physicians
- Obstetricians and gynaecologists

The procedure can be done in any facility with a minor surgical theatre, appropriate equipment, the ability to provide infection prevention measures with drugs, and equipment to handle emergencies. This may include temporary sites or mobile clinics.

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

The client must be informed about temporary alternative methods of family planning, the small risk of procedure failure, and the permanence of the procedure. Providers should inform clients that the procedure does not cause any change in sexual functioning, sexual satisfaction, or the male hormones. Another form of family planning must be used until there are no further sperm present in the ejaculate, or until the man has ejaculated 20 times since the performance of the operation. The client must be advised to avoid strenuous activity for a few days following the procedure in order to avoid bleeding and swelling. A return routine follow-up visit should be arranged one week after surgery.

Screening

Providers who are appropriately trained in counselling, administration of consent forms, the vasectomy technique and standard practices for surgical asepsis, must screen clients. Genital examination is essential and mandatory when doing vasectomy. Screening procedures must take into consideration the medical eligibility factors and conditions described in **Table 5**.

Instructions for Users

After the surgery, use another form of family planning until there are no further sperms left in the ejaculate. This is typically said to be after 20 ejaculations following the operation.

Avoid heavy lifting and strenuous activity for the three days following the procedure.

Go for a follow-up visit one week after the surgery.

Instructions For Different Conditions:

Vasectomy should be provided to men who decide that they will never want any more children. Any man should be able to choose vasectomy regardless of age, current number of children (if any), or marital status. Generally, if a man is married, it is best if he and his wife agree on sterilization. However, a man's request for vasectomy should not be rejected if his wife is against it.

Eligibility

Table 14. WHO Medical Eligibility Criteria for Male Surgical Sterilization

ACCEPT: No medical reason to deny sterilization with this condition	CAUTION: Procedure conducted normally, extra preparation/precautions
<ul style="list-style-type: none"> • High risk of HIV • HIV-infected • Sickle-cell disease 	<ul style="list-style-type: none"> • Young age¹ • Depressive disorders • Diabetes² • Previous scrotal injury • Large varicocele³ • Large hydrocele³ • Cryptorchidism⁴
DELAY: Procedure is delayed until condition is evaluated or corrected	SPECIAL: Undertake procedure with experienced staff and extra support
<ul style="list-style-type: none"> • Local infections, including scrotal skin infection, active STI, balanitis, epididymitis or orchitis • Systemic infection or gastroenteritis⁵ • Filariasis • Elephantiasis⁶ • Intrascrotal mass⁷ 	<ul style="list-style-type: none"> • Coagulation disorders⁸ • AIDS⁹ • Inguinal hernia¹⁰

¹ Young men, like all men, should be counselled about the permanency of sterilization and the availability of alternative, long-term, highly effective methods.

² Diabetics are more likely to get postoperative wound infections. If signs of infection appear, treatment with antibiotics needs to be given.

³ The vas may be difficult or impossible to locate; a single procedure to repair varicocele/hydrocele and perform a vasectomy decreases the risk of complications.

⁴ If cryptorchidism is bilateral, and fertility has been demonstrated, this will require extensive surgery to locate the vas, and this becomes category S. If the cryptorchidism is unilateral, and fertility has been demonstrated, vasectomy may be performed on the normal side and semen analysis performed, as per routine. If the man continues to have a persistent presence of sperm, more extensive surgery may be required to locate the other as, and this becomes category S.

⁵ There is an increased risk of postoperative infection.

⁶ If elephantiasis involves the scrotum, it may be impossible to palpate the spermatic cord and testis.

⁷ This may indicate an underlying disease.

⁸ Bleeding disorders lead to an increased risk of postoperative haematoma formation which, in turn, leads to an increased risk of infection.

⁹ The presence of an AIDS-related illness may require a delay in the procedure.

¹⁰ Vasectomy can be performed concurrent with hernia repair.

Female Surgical Sterilization (Tubal Ligation)

Introduction

Tubal ligation is a highly effective surgical sterilization technique for women who do not want any more children. The two most common forms are mini-laparotomies and laparoscopies. Well-trained providers in appropriate facilities must perform the procedure. Given that sterilization is permanent, special attention must be given to ensure that women fully understand the implications of this procedure and choose it voluntarily. No medical condition absolutely restricts a woman's eligibility for sterilization, but certain conditions necessitate varying levels of precaution.

Mode of Action

These sterilization procedures block the fallopian tubes (which carry eggs from the ovaries to the uterus), thereby preventing sperm and ovum from uniting. A small cut is made in the lower abdomen by a trained provider, who then proceeds to cut, burn or block the fallopian tubes with rings, bands, or clips. This is usually done under local anesthesia.

Efficacy

Female sterilization is very effective; failure rates range between 0.1-1 percent in the first year after the procedure.

Advantages

- Is highly effective in preventing pregnancy.
- Is permanent, allowing sexual spontaneity.
- Does not require one to remember supplies or visit health centres.
- Is effective immediately.
- Does not affect breastfeeding.
- Does not interfere with intercourse.
- Has no known long-term side effect.
- Is cost-effective in the long run.

Disadvantages

- Does not protect against STI/HIV. All clients should use condoms if partners are not monogamous.
- Is considered irreversible, so decision not to have further children must be certain.
- Requires surgery, which has risks (see *Side Effects*).
- Is more complicated than male sterilization.
- Must be performed at specially equipped facilities, which may require one to travel a significant distance in order to receive the procedure.

Table 15. Side Effects and management

Side effects	Assessment	Management
Wound infection	Confirm presence of infection or abscess	If skin infection is present, treat with antibiotics. If abscess is present, drain and treat as indicated
Post operative fever (>38±C	Determine source of infection	Treat infection based on findings
Bleeding	Confirm cause	Control and treat based on cause
Haematoma	Confirm presence of infection or abscess	Apply warm, moist packs to site. Observe; it usually will resolve over time but may require drainage if extensive. If discovered postoperatively, refer to appropriate centre as necessary
Pain at incision site	Determine presence of skin infection or abscess	Treat based on findings (e.g. moist heat, analgesics) If skin infection treat with antibiotics If an abscess is present, drain and treat as usual
Superficial bleeding (skin edges or subcutaneous)	Determine presence of infection, abscess or haematoma	Control bleeding and treat based on cause.

Return to Fertility

This procedure is considered irreversible.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

The type of provider varies with the choice of surgical approach.

Persons with training and basic surgical experience can perform minilaparotomy or classic laparotomy.

- Obstetricians and gynaecologists
- Physicians

Laparoscopies should be performed only by medical doctors who are adequately trained in abdominal and pelvic surgery, have undergone special training in the approach, and have experience performing laparoscopies on a regular basis. The procedure should be done in a facility with a minor surgical theatre, appropriate equipment, the ability to provide infection prevention measures with drugs, and equipment to handle emergencies. The presence of an anesthetist is recommended.

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

As sterilization is a permanent method of contraception, it is suitable for women who are certain that they want no more children. It is critical that providers offering sterilization services give careful counselling that highlights the permanence of this procedure and the availability of safe and effective long-acting alternative methods that women could choose from. Additionally,

male sterilization or vasectomy, should be mentioned as a highly effective and convenient method for couples seeking permanent protection from pregnancy.

Counseling should also include:

- Reviewing the client's reason for choosing tubal ligation;
- Discussing the sterilization procedure, the risks and benefits, care before and after surgery, and possible complications;
- Advising on the need to use condoms if the partner is not monogamous and if there is risk of STIs/HIV; and
- Clarifying any misconceptions about sterilization by informing client that there is no change in sexual function or in the menstrual pattern after the procedure.

Providers should know how to identify women who are likely to regret their decision after the procedure. Age, parity, and couple stability are important considerations.

Whenever possible, a woman should be encouraged to include her partner in the counseling process. However, partner consent should not be a prerequisite for the procedure.

Screening

Individuals wishing to undergo tubal ligation must undergo a medical assessment to ensure fitness for surgery. Blood pressure screening and a pelvic examination are essential and mandatory. Use this information to detect contraindications or any conditions requiring special care or delay in procedure.

Women should also be screened for non-medical factors likely to cause regret after the procedure. As sterilization is a permanent form of contraception, it is suitable only for women who are certain that they want no more children. It is critical to highlight the permanence of this procedure, and the availability of safe and effective long-acting alternative methods that women could choose from, including male vasectomy. Providers should review the client's reasons for choosing tubal ligation, and know how to identify women who are likely to regret their decision after the procedure. Age, parity, and couple stability are important considerations. Whenever possible, a woman should be encouraged to include her partner in the counseling process. However, partner consent should not be a prerequisite for the procedure.

Instructions for Users

- After surgery, 2 to 3 days of rest is recommended.
- Keep the cut clean and dry for 2 to 3 days post-surgery.
- Do not lift heavy items or do strenuous work for one week following the surgery.
- Do not have sex until all of the pain is gone; this is usually approximately one week after the surgery.
- Advise the client to return for any symptoms indicating infection/haematoma, superficial bleeding/hemorrhage.
- Return to the clinic after one week to have stitches removed if present and to check for and treat any complications.

Instructions For Different Conditions

- Female sterilization can be performed at any time during a woman's reproductive life. It is most likely performed:
 - In the immediate postpartum period, directly after delivery or up to 48 hours later. After 48 hours the procedure should be delayed until six weeks or more after delivery, when the uterus has returned to its normal size.
 - During cesarean section delivery.

- Immediately following an induced or spontaneous abortion if there is no sign of infection.
- ± Additionally, the client before the procedure must sign a standard consent form.
- ± Spousal consent is not required.
- ± No incentives are to be given to clients to accept VSC, or to the providers to recruit clients and perform the surgical procedure.
- ± The client is free to change her mind any time prior to the performance of the procedure.
- ± In outreach programmes, all the infection prevention procedures, counseling, and follow-up sessions should be arranged as per procedures in static sites.
- ± Emergency access to referral care should be available.

Eligibility

Table 16. WHO Medical Eligibility Criteria for Female Surgical Sterilization

ACCEPT: No medical reason to deny sterilization with this condition	CAUTION: Procedure conducted normally, extra preparation/precautions
<ul style="list-style-type: none"> • Parous/nulliparous • Smoker - any age and light or heavy smoker • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Breastfeeding - Postpartum: <7 days or >42 days - Mild pre-eclampsia - Post abortion (uncomplicated) - History of ectopic pregnancy - Heavy/light/prolonged/irregular menstrual bleeding - Benign ovarian tumours - Severe dysmenorrhoea - Benign gestational trophoblastic disease - Past PID (with subsequent pregnancy)¹ - Cervical ectropion, cervical intraepithelial neoplasia - Breast disease (except current) - Sterilization concurrent w/ cesarean section • Cardiovascular conditions <ul style="list-style-type: none"> - History of high blood pressure during pregnancy - Personal or family history of DVT/PE² - Major surgery w/o prolonged immobilization or minor surgery without immobilization - Known thrombogenic mutations - Superficial venous thrombosis - Known hyperlipidaemias • Chronic diseases/other conditions <ul style="list-style-type: none"> - Headaches (any type, any age) - Schistosomiasis (uncomplicated) - Malaria - Tuberculosis (nonpelvic) - History of gestational diabetes - Thyroid disease (simple goitre) - Treated or asymptomatic gallbladder disease - Past cholestasis (pregnancy or past COC-related) - Viral hepatitis (carrier, not active case) • STI/HIV (advise condom use) <ul style="list-style-type: none"> - Vaginitis - Increased risk of STI/HIV - Other STIs (excluding HIV and hepatitis) - HIV-infected 	<ul style="list-style-type: none"> • Young age³ • Obesity (BMI > 30 kg/m²)⁴ • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Current breast cancer - Past PID (without subsequent pregnancy)¹ - Uterine fibroids with/without distortion of the uterine cavity - Sterilization concurrent with abdominal surgery (elective) • Cardiovascular conditions <ul style="list-style-type: none"> - Hypertension: adequately controlled or elevated BP (systolic 140-159 or diastolic 90-99)⁵ - History of ischaemic heart disease or stroke - Uncomplicated valvular heart disease (requires antibiotics) • Chronic diseases/other conditions <ul style="list-style-type: none"> - Epilepsy - Depressive disorders - Diabetes(insulin or noninsulin dependent) - Hypothyroid - Thalassaemia - Sickle-cell disease - Liver tumours (benign or malignant) - Schistosomiasis with fibrosis of liver - Moderate iron deficiency anaemia (Hb 7-10 g/dl) - Mild cirrhosis (compensated) - Diaphragmatic hernia - Kidney disease - Severe nutritional deficiencies - Previous abdominal or pelvic surgery

¹ A careful pelvic examination must be performed to rule out recurrent or persistent infection and to determine the mobility of the uterus.

² To reduce the risk of DVT/PE, early ambulation is recommended.

³ Young women, like all women, should be counselled about the permanency of sterilization and the availability of alternative, long-term, highly effective methods.

⁴ The procedure may be more difficult. There is an increased risk of wound infection and disruption. Obese women may have limited respiratory function and may be more likely to require general anaesthesia.

⁵ Elevated blood pressure should be controlled before surgery. There are increased anaesthesia-related risks and an increased risk of cardiac arrhythmia with uncontrolled hypertension.

DELAY: Procedure is delayed until condition is evaluated or corrected	SPECIAL: Undertake procedure with experienced staff and extra support
<ul style="list-style-type: none"> • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Pregnancy - Postpartum <ul style="list-style-type: none"> • Between day 7 and day 42 • Severe pre-eclampsia/eclampsia • Prolonged rupture of membranes: 24 hours or more • Puerperal sepsis, intrapartum or puerperal fever • Severe antepartum or postpartum haemorrhage • Severe trauma to the genital tract: cervical or vaginal tear at time of delivery - Post-abortion <ul style="list-style-type: none"> • Sepsis or fever • Severe haemorrhage • Severe trauma to genital tract: cervical or vaginal tear at time of abortion • Acute haematometra - Unexplained vaginal bleeding (before evaluation)¹ - Malignant gestational trophoblastic disease - Endometrial, ovarian, or cervical cancer - Current PID - Sterilization concurrent with abdominal surgery (emergency or infectious condition) • Cardiovascular conditions <ul style="list-style-type: none"> - Current DVT/PE² - Major surgery with prolonged immobilization - Current ischaemic heart disease • Chronic diseases/other conditions <ul style="list-style-type: none"> - Symptomatic, current gallbladder disease - Active viral hepatitis - Severe iron deficiency anaemia (Hb < 7 g/dl) - Abdominal skin infection - Acute lung disease (bronchitis, pneumonia) - Systemic infections or gastroenteritis • STI/HIV (advise condom use) <ul style="list-style-type: none"> - Current purulent cervicitis or chlamydial infection or gonorrhoea² 	<ul style="list-style-type: none"> • Obstetric/gynaecologic conditions <ul style="list-style-type: none"> - Postpartum/post-abortion uterine rupture or perforation³ - Fixed uterus due to previous surgery or infection - Endometriosis - Hernia (abdominal wall or umbilical)⁴ • Cardiovascular conditions <ul style="list-style-type: none"> - Multiple risk factors for cardiovascular disease - Hypertension: elevated BP (systolic > 160 or diastolic > 100) or vascular disease⁵ - Valvular heart disease⁵ - Diabetes with nephropathy/retinopathy/neuropathy, other vascular disease, and/or diabetes of 20+ years • Chronic disease/other conditions <ul style="list-style-type: none"> - Tuberculosis (known pelvic) - Severe cirrhosis (decompensated) - Hyperthyroid - Coagulation disorders - Chronic respiratory diseases: asthma, bronchitis, emphysema, lung infection • STI/HIV (advise condom use) <ul style="list-style-type: none"> - AIDS⁶

¹ The condition must be evaluated before the procedure is performed.

² If no symptoms persist following treatment, sterilization may be performed.

³ If exploratory surgery or laparoscopy is conducted and the patient is stable, repair of the problem and tubal sterilization may be performed concurrently if no additional risk is involved.

⁴ Hernia repair and tubal sterilization should be performed concurrently, if possible.

⁵ The woman is at high risk for complications associated with anaesthesia and surgery. If the woman has atrial fibrillation that has not been successfully managed or current subacute bacterial endocarditis, the procedure should be delayed.

⁶ The presence of an AIDS-related illness may require that the procedure be delayed.

Natural Family Planning (NFP) Methods

Introduction

Natural family planning (NFP) techniques are based on fertility awareness-based methods (FAMs) that teach women how to identify the fertile days of their menstrual cycle. They can then use this information to avoid pregnancy or to become pregnant. FAMs include the calendar or rhythm method, the basal body temperature (BBT) method, the cervical mucus method (Billings ovulation method), and the symptothermal method. These techniques are described below. Lactational amenorrhoea, described in the next section, is also regarded as a NFP method.

Mode of Action

Couples avoid vaginal sex during the days of the woman's fertile period.

Types of NFP

Calendar or Rhythm Method

This method involves calculations based on the length of previous menstrual cycles to predict the first and last fertile day in future menstrual cycles. It relies on retrospective information, which has limited accuracy, unless the length of 12 or more cycles has been accurately recorded and no events that may disrupt the menstrual pattern have occurred. This is the least effective of all fertility awareness techniques.

Basal Body Temperature Method

The basal body temperature method is based on the change in body temperature that occurs during the cycle. A rise of 0.5°C above the mean temperature of the pre-ovulatory phase, sustained for three consecutive days, indicates that ovulation has occurred. The post-ovulatory (late) infertile phase of a woman's cycle begins on the third day after the temperature shift is observed. Women using the basal body temperature method need to record their temperature at the usual waking up time when the body is at rest. A couple should refrain from vaginal intercourse between the first day of menstruation and the third consecutive day of elevated temperature, inclusive.

Cervical Mucus

The cervical mucus method, also called the Billings' or ovulation method, is based on characteristic changes in the cervical mucus discharge that occur during the cycle. A few days following the menstrual period, most women experience a sensation of dryness at the vulva (vaginal opening), which is called the relatively infertile or early infertile phase. Subsequently, sticky mucus will appear, with increasing wetness or lubrication of the vagina. The last day of the lubrication is called the peak day, after which the mucus rapidly changes to become thick or disappearing completely and feeling dry. The fertile phase of the cycle starts at the time of feeling wet or the appearance of the mucus and ends the third day after the peak of mucus wet. The post ovulatory or late infertile phase of the cycle begins on the fourth day after the peak mucus and continues until the last day before the onset of menstruation.

Symptothermal

The symptothermal method combines recording of the BBT with the observation of the characteristics of the cervical mucus and other physiological indicators of ovulation, such as mid-cycle pain tenderness of the breasts, spotting or bleeding, and abdominal heaviness around ovulation. Women may also observe changes related to the cervix in their practice of the method.

Efficacy

Effectiveness depends on the understanding of the method, the training received, and the motivation of the couple to adapt their sexual behavior according to their fertility and family planning intentions. Consistency of use is critical since any slight deviation can give rise to method failure. The reported failure rates of NFP methods range from a 2–30 percent during the first 12 months of use. Among the techniques used to identify the fertility period, the symptothermal method seems to be the most effective, and the calendar method the least effective. Failure rates are lower when intercourse takes place only in the post-ovulatory phase of the menstrual cycle. First year failure rates with *typical* use are approximately 20 percent for NFP methods. With one year of *perfect* use, of every 100 couples that use the calendar method, 9 will become pregnant, of every 100 couples that use the BBT method, 2 will become pregnant, and of every 100 couples that use the cervical mucus method, 3 will become pregnant.

Advantages

- No physical side effects.
- Is of little or no cost.
- Does not require a prescription by a medical person.
- Improves knowledge of the reproductive system.
- Is acceptable to certain religious groups.
- Increases communication and marital bonding for some couples.
- High continuation rates in satisfied users.

Disadvantages

- Requires intensive user education and instruction before confidence is gained in detecting fertility signs.
- Does not provide protection against STI/HIV.
- Effectiveness depends on proper use and motivation of users.
- May interfere with sexual spontaneity.
- Requires cooperation of male partners.
- Requires accurate daily record keeping.
- Has a higher rate of failure than other FP methods.

Side Effects

There are no known side effects associated with NFP methods.

Return to Fertility

Immediate.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

Persons trained to educate and counsel couples about NFP can provide NFP methods:

- Physicians
- Nurses/Midwives
- Clinical Officers
- Trained volunteers, counselors, religious leaders and experienced couples.

Providers must receive special training in order to teach NFP methods to their clients. It is important that NFP trainers maintain contact with their clients for the first few months of method use to help answer questions and monitor progress.

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

Counseling should assist couples in making an informed choice of their methods of contraception. Those who are considering the use of NFP method should be informed of the high failure rate when the rules are not strictly followed. Appropriate counseling and training should be provided to both partners until they feel confident in their ability to recognize the fertile phase and refrain from vaginal intercourse when required. If abstinence is not possible, the couple should be seriously counseled to use another method of contraception.

The basic concept and goal is to learn to identify impending ovulation, using one or more technical and to avoid sexual intercourse during the fertile period. The use of more than one technique of ovulation detection improves effectiveness. If there is a risk of acquiring or transmitting STI/HIV, the service provider should counsel clients about the dual use of condoms with all forms of fertility awareness because NFP does not protect against STI/HIV.

Screening

- Rule out pregnancy
- Find out how often the client communicates with partner and whether partner is ready to accept periods of abstinence
- Ask if client is breastfeeding and whether she was on hormonal contraceptives recently

Instructions for Users

Calendar Method

- For at least eight months before you use this method as a form of family planning, keep a written record of each menstrual cycle. On an ordinary calendar, circle the day the bleeding starts. This is Day 1. Repeat this circling of Day 1 so that you have 8-12 months of information. Then, count the number of days in each menstrual cycle and record these numbers.
- Find the first day you are likely to be fertile. Check your records for the previous months and find the cycle that lasted the shortest number of days. Subtract 18 from that total number of days. For example, if the shortest cycle was 25 days in length, $25 - 18 = 7$. Starting from Day 1 of your current cycle, count ahead 7 days. Place an X on this new date.
- Find the last day you are likely to be fertile. Check your records for the previous months and find the cycle that lasted the longest number of days. Subtract 11 from that total number of days. For example, if the longest cycle was 31 days in length, $31 - 11 = 20$. Starting from Day 1 of your current cycle, count ahead 20 days. Place an X on this date as well.
- You should abstain from sex from the time of the first X to the time of the second X.
- **IMPORTANT:** If your cycles are shorter than 27 days in length, do not use calendar methods at all!

Basal Body Temperature Method

- Changes in BBT are very slight. It is therefore best to obtain a special, large-scale thermometer that is easy to read and only includes the range of normal body temperatures. A rectal or an oral thermometer can be used; rectal readings are typically more reliable.
- Take your temperature the same way every day, before getting out of bed (this means before sex as well). Insert the thermometer into the mouth or rectum for a full five minutes, then read and record the temperature.

- Plot each day's temperature on a graph. These graphs can be obtained from your health care provider. Chart your temperature for at least three months before using this technique as a method of FP.
- You should find that your temperature rises slightly at the time of ovulation, and remains elevated until just before your next period. Your "unsafe," or fertile days, are from the beginning of your period until the start of the fourth day of the temperature rise. You should abstain from sex during this time to avoid pregnancy.
- **IMPORTANT:** Sperm can still fertilize eggs two to three days after ejaculation. Take this into account when engaging in sexual activity.

Cervical Mucus Method

- It is best to avoid intercourse for one entire cycle before initiating the cervical mucus method as a form of family planning.
- Observe and record the quantity and quality of your cervical mucus daily. This can be done by wiping the vaginal opening with toilet tissue before urinating, by observing the discharge on your underpants, or by placing your clean fingers into the vagina to obtain mucus. Specifically, you should record:
 - **The days of your menstrual period.** During this time, the bleeding disguises the appearance of the mucus. It is considered unsafe to have sexual intercourse during menstruation when using the cervical mucus method as a form of family planning.
 - **Dry days.** In the few days following the menstrual period, no mucus is present. It is safe to have sexual intercourse during this period. Dry days occur again after ovulation, just before the menstrual period begins. It is considered safest to engage in sexual intercourse at this time. Fewer pregnancies occur when intercourse takes place only on the dry days following ovulation.
 - **Tacky days.** When an egg begins ripening, there is an increase in mucus in the vagina. It is typically white or yellow in color, cloudy, and sticky or tacky in nature. It is safe to have sexual intercourse in this period. After ovulation, mucus again becomes tacky. Again, intercourse is safe at this phase.
 - **Slippery days.** Just before ovulation, the mucus becomes clear and slippery. This type of mucus has been said to resemble raw egg whites. The peak period of fertility occurs when the mucus can be stretched between your fingers. To avoid pregnancy, avoid sexual intercourse until the slippery phase ends, or until three days after ovulation, whichever is longer.
- **IMPORTANT:** Women who ovulate on Day 7 or 8 may produce too little mucus to use this method.

Symptothermal Method

- Use more than one of the above methods in combination. This will allow you to more accurately predict your safe days.

Instructions For Different Conditions:

A woman or couple can begin using NFP methods any time that they want to be trained.

Eligibility

There are no medical conditions, which restrict use of NFP methods. However, certain conditions may affect ovarian function, the regularity of the menstrual cycle, or signs of fertility. These circumstances may complicate Natural Family Planning use, and include:

- Breastfeeding and postpartum period
- Post abortion period
- Age (around menarche and in pre-menopause)
- Stroke
- Irregular vaginal bleeding patterns

- Vaginal bleeding patterns with heavy or prolonged bleeding
- Unexplained vaginal bleeding
- Cervical intraepithelial neoplasia (CIN)
- Cervical cancer
- Cervical ectropion
- PID - current or within three months
- STIs - current or within three months
- Severe (decompensated) cirrhosis
- Liver tumors (benign or malignant)
- Hyperthyroid
- Hypothyroid
- Schistosomiasis with fibrosis of the liver
- Drug use, including mood-altering drugs, lithium, tricyclic antidepressants, and anti-anxiety therapies

In addition, there are conditions for which the higher range of failure rates for all of these methods may expose the woman to an unacceptable risk of unintended pregnancy, including:

- High blood pressure (~160/100')
- Vascular disease
- Diabetes: insulin dependent or with nephropathy/retinopathy/neuropathy, other vascular disease of diabetes of > 20 years duration
- Current history of ischemic heart disease
- Stroke
- Complicated valvular heart disease
- Current breast cancer
- Cervical cancer
- Endometrial and ovarian cancer
- HIV/AIDS
- Severe (decompensated) cirrhosis
- Malignant liver tumor (hepatoma)
- Malignant gestational trophoblastic disease
- Sickle cell disease
- Schistosomiasis with fibrosis of the liver
- Tuberculosis

For women at an increased risk of PID/STI/HIV, barrier methods, especially condoms, must always be recommended in conjunction with NFP methods.

Table 17. WHO Medical Eligibility Criteria for the Cervical Mucus, Basal Body Temperature and Symptothermal Methods

<p>ACCEPT: No medical reason to deny sterilization with this condition</p> <ul style="list-style-type: none"> • Postpartum nonbreastfeeding > 4 weeks 	<p>CAUTION: Procedure conducted normally, extra preparation/precautions</p> <ul style="list-style-type: none"> • Post-menarche or peri-menopause¹ • Breastfeeding >6 weeks postpartum or after menses begin • Post-abortion • Use of drugs which affect cycle regularity, hormones, and/or fertility signs³ • Chronic diseases which elevate body temperature
<p>DELAY: Procedure is delayed until condition is evaluated or corrected</p> <ul style="list-style-type: none"> • Breastfeeding <6 weeks postpartum • Postpartum nonbreastfeeding < 4 weeks • Irregular vaginal bleeding² • Vaginal discharge • Use of drugs which affect cycle regularity, hormones, and/or fertility signs³ • Acute diseases which elevate body temperature 	<p>SPECIAL: Undertake procedure with experienced staff and extra support</p> <ul style="list-style-type: none"> • None

Table 18. WHO Medical Eligibility Criteria for the Calendar Method

<p>ACCEPT: No medical reason to deny sterilization with this condition</p> <ul style="list-style-type: none"> • Vaginal discharge • Chronic or acute diseases which elevate body temperature 	<p>CAUTION: Procedure conducted normally, extra preparation/precautions</p> <ul style="list-style-type: none"> • Post-menarche or peri-menopause¹ • Breastfeeding after menses begin • Use of drugs which affect cycle regularity, hormones, and/or fertility signs³
<p>DELAY: Procedure is delayed until condition is evaluated or corrected</p> <ul style="list-style-type: none"> • Breastfeeding <6 or >6 weeks postpartum • Postpartum nonbreastfeeding • Post-abortion • Irregular vaginal bleeding² • Use of drugs which affect cycle regularity, hormones, and/or fertility signs³ 	<p>SPECIAL: Undertake procedure with experienced staff and extra support</p> <ul style="list-style-type: none"> • None

¹ Menstrual irregularities are common in these two stages and may complicate the use of NFP methods.

² Presence of this condition makes NFP methods unreliable.

³ Use of certain mood-altering drugs such as lithium, tricyclic antidepressants, and anti-anxiety therapies, as well as certain antibiotics and anti-inflammatory drugs, may alter cycle regularity or affect fertility signs.

Male Condom

Introduction

The male condom is a thin, usually latex sheath that a man wears over his penis during sexual intercourse. Latex condoms prevent pregnancy and STIs including prevention of HIV, the precursor to AIDS. Condoms made of other materials may not offer protection against STIs and HIV. Latex condoms are currently the only widely available barrier method for men, although polyurethane condoms are becoming more accessible. Many are pre-lubricated.

Condoms must be used correctly and consistently to be highly effective. They should be provided to all individuals who request them for contraceptive and/or STI/HIV protective purposes without restriction, medical consultation, or approval. They must be provided to both men and women.

One example of a male condom in Zambia is “MAXIMUM”.

Mode of Action

The condom creates a barrier between the man's penis and the woman's vagina. Upon ejaculation, it prevents sperm and/or any disease-causing organisms that may be contained in a man's semen from entering the vagina or the uterine cavity. The condom also helps keep disease-causing organisms in the vagina from entering any cuts or abrasions on the penis.

Efficacy

As contraceptives, condom efficacy depends on correct and consistent use. Condoms need to be used with every act of sexual intercourse in order to be effective. If used perfectly, three out of every 100 women will become pregnant in the first year of use (97% effectiveness). With typical use, anywhere from 10-15 out of every 100 women will become pregnant in the first year (85-90% effectiveness). Oftentimes condoms are used incorrectly or inconsistently, putting individuals at risk of pregnancy and STI transmission.

Advantages

- Effectively prevent pregnancy when used correctly and consistently with every act of sexual intercourse.
- Offer occasional contraception with no daily upkeep.
- May be used immediately after childbirth or abortion, when infection occurs easily.
- Enable a man to take responsibility for preventing pregnancy and disease, thereby encouraging male involvement in reproductive health.
- Can be used with other contraceptive methods.
- Prevent STIs, including HIV/AIDS, when used correctly and consistently with every act of sexual intercourse.
- Help protect against conditions caused by STIs, including PID, infertility, and chronic pain.
- Help prevent cervical cancer.
- Have no hormonal side effects.
- Can be used for STI prevention during pregnancy.
- Have no effect on breast milk quality or quantity.
- Are easy to use with practice.
- Can easily be kept on hand in case sex occurs unexpectedly.
- Can be used regardless of age.
- Are relatively inexpensive and sold in many places, making them easier to obtain than some other methods.
- Do not require medical consultation or contact with health providers.

- Are lightweight and disposable.
- May help relieve premature ejaculation and/or help a man stay erect longer.
- May enable a couple to focus on sexual pleasure.

Disadvantages

- Require correct and consistent action during each act of sexual intercourse.
- Must be available and accessible in the event of unexpected/unplanned sex.
- May briefly interrupt sexual excitement when couple stops to put on.
- May dull sensation.
- Could slip off or tear during sex, although the possibility of this is very low.
- Can weaken if stored in too much heat, sunlight, or humidity, and may break when used.
- Require a man's cooperation for a woman to protect herself from pregnancy and disease.
- May be embarrassing to buy, suggest using, put on, take off, or throw away.
- Have a higher failure rate than non-barrier methods.

Side Effects

Male condom may cause allergic reactions to latex rubber or the condom lubricant used are occasionally encountered. If it is determined that irritation is not due to infection, recommend use of polyurethane condoms or non-allergenic condoms made of purified latex if they are available. Advise another method if the problem persists.

Return to Fertility

Immediate. Condom use does not interfere with fertility.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

- Physicians
- Nurses/Midwives
- Clinical officers
- Trained community workers, CBDs, EBDs
- Pharmacists
- Social marketing retailers
- Social service providers.

Condoms can be provided through health centres, referral hospitals, family planning clinics, MCH clinics, STI clinics, postpartum clinics, pharmacies, social marketing outlets, youth clubs, shops, and markets.

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

Proper counseling must be provided before and after selecting the method whenever possible and convenient to the client. Counseling helps to ensure informed choice and proper condom use and should be provided to both men and women. However, counseling should not be prerequisite for providing condoms. It should include the need for consistent and correct use for maximum efficacy. If a condom breaks or tears during intercourse, clients should be advised to use emergency contraception for protection against pregnancy.

Screening

None.

Instructions for Users

Before Sexual Intercourse

- Check the expiration date on the package; discard and use a new condom if expired.
- Condoms should be stored in a cool, dry, and dark place. If this is done, the condom can last up to five years.
- Condoms should not be stored close to the body (such as in a pocket or wallet) for long periods of time. Heat weakens the material and may result in breakage.

Putting on the Condom

- The penis must be erect before a condom can be put on.
- Ensure that the room is bright enough for you to be able to inspect the condom and be able to put it on correctly.
- Condoms should be put on before the penis enters the vagina.
- Open the package carefully so that the condom does not tear. Inspect the condom. If discolored or malodorous, discard and use a new one.
- If uncircumcised, pull back the foreskin.
- Check to make sure the condom is placed with the side that is able to roll down otherwise if you place it wrongly on the penis and it does not roll down, discard this condom and use another one.
- Place the unrolled condom at the tip of the penis.
- Pinch the tip of the condom so that it does not fill with air and burst, then unroll it all the way over the penis as far as it will go. Either the man or woman can do this. If the condom is torn or has holes, discard and use a new one.

After Sexual Intercourse

- After ejaculation, but while the penis is still firm and inside the woman's vagina, hold the condom at the base of the penis and withdraw from the vagina, being careful not to spill any semen.
- Carefully remove the condom from the penis using tissue and avoid direct contact with it.
- Dispose of it properly in the waste bin or garbage pit.
- Wash the penis with soap and water.

Additional Information

- A new condom must be used with each act of sexual intercourse.
- If the condom breaks during intercourse:
 - Pull out quickly and replace it.
 - If semen leaks out, wash it away with soap and water.
 - Consider starting emergency contraception within 120 hours.
 - Never use two condoms at the same time.

Instructions For Different Conditions

Condoms should be put on an erect penis prior to penile-vaginal contact.

Eligibility

There are no restrictions or contraindications to use except allergy or sensitivity to latex.

Barrier methods are especially useful for certain individuals, including:

- Persons who are at risk of contracting or transmitting STI/HIV infection.
- Persons who have intercourse infrequently.
- Women experiencing lactational amenorrhoea.

They are also particularly useful in certain situations, such as when:

- Women using natural family planning methods are in the fertile phase of the menstrual cycle.
- There are contraindications to other reversible methods, and voluntary surgical contraception is not desired.
- IUD threads cannot be felt.
- Drugs that interfere with oral/injectable contraceptive efficacy are being used.
- A temporary alternative or backup method is needed.
- Investigating for gynaecologic symptoms.
- A man has just had a vasectomy.

Female Condom

Introduction

The female condom is a strong, soft, odorless, transparent sheath that transmits heat and lines the vagina to create a barrier against sperm and sexually transmitted infections. It is made of polyurethane. A small ring at the closed end is used for insertion and helps to maintain the device at the upper end of the vagina. A larger and thinner outer ring remains outside the vagina when the condom is inserted, and anchors the condom so that the sheath covers the external genitalia as well as the base of the penis during intercourse. It is pre-lubricated with a non-spermicidal silicone fluid. Additional lubrication may be used. This single-use disposable device is not biodegradable. The female condom is inserted manually into the vagina before intercourse and removed afterwards, although not necessarily immediately.

This method is particularly attractive to those who experience side effects from hormonal methods, are at risk of STIs, are spacing children, or are dissatisfied with or cannot use the male condom. Women may choose the female condom when they require a back-up barrier contraceptive, for example, when a pill is missed. It can also be used for protection during the postpartum period. Additionally, women with vaginal dryness can use it to increase lubrication and reduce painful intercourse.

Mode of Action

The female condom creates a barrier between the penis and the vagina. It keeps sperm and any disease-causing organisms in the semen out of the vagina. The condom also helps to keep any disease-causing organisms in the vagina from entering any cuts or abrasions on the penis.

Efficacy

Over a one-year period, the accidental pregnancy rate for the female condom has been found to be in the range of 15-25 percent. This is similar to the use-effectiveness reported for other barrier methods, since people do not always use female condoms consistently and correctly. However, when the female condom is used correctly at every act of intercourse, it is estimated that the accidental pregnancy rate could be as low as 5 percent. Laboratory studies have shown that the female condom is an effective barrier to sperm, bacteria, and viruses (including HIV), so the device should effectively protect consistent users against pregnancy and STI/HIV transmission.

Female condom breakage has not been reported and research is under way to determine whether reuse reduces the structural strength of the device and therefore increases the risk of pregnancy and/or disease transmission. Until further research results are available, re-use of female condoms cannot be recommended.

Advantages

- Female-controlled form of contraception.
- Protect against STI/HIV transmission as well as pregnancy.
- Can be inserted up to eight hours before sex, thereby not interfering with intercourse.
- Are made of polyurethane, which is stronger than the latex in male condoms, odorless, biologically inert, demonstrating no allergenic potential, and able to transfer heat, allowing more sensation.
- Can be used by breast-feeding women.
- Are pre-lubricated, and can be additionally lubricated by water and oil-based products.
- Protect the vagina, cervix, and part of the vulva, affording extensive barrier protection.

- Do not require the women to be fitted for the method.
- Require negotiation skills and communication between partners.
- Have an inner ring that allows for simple insertion.

Disadvantages

- Require correct use at each sexual encounter in order to be effective.
- May make noise during sexual intercourse if not correctly put on.
- Have an outer ring that is visible outside the vagina.
- May cause irritation if allergic to polyurethane.
- Have a higher failure rate than non-barrier methods.
- Require a woman to be comfortable with her body in order to insert and remove, and can be difficult to insert when first beginning use.
- May improve communication between men and women and sexual and reproductive health matters, and increase women's negotiating capacity.
- Should not be re-used.
- Are more expensive and less widely available than male condoms.

Side Effects

Research indicates that the female condom has no side effects and does not cause genital lesions or trauma to the vagina. The polyurethane has not been found to produce irritation or allergic reactions in people sensitive to latex, the material from which most male condoms are made.

Return to Fertility

Immediate. Female condoms do not interfere with fertility.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

- Physicians
- Nurses/Midwives
- Clinical officers
- Trained community workers, community based distributors, employer based distributors
- Pharmacists
- Social marketing retailers
- Social service providers.

Female condoms can be provided through health centres, referral hospitals, family planning clinics, MCH clinics, STI clinics, postpartum clinics, pharmacies, social marketing outlets, youth clubs, shops, and markets.

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

Both men and women should receive counseling, and discussions should highlight the need for consistent and correct use in order to achieve maximum efficacy. Counseling, however, is not a prerequisite for female condom provision. It should be explained to women that use of this method increases knowledge about their bodies and STIs, improves communication between men and women on sexual and reproductive health matters, and increases women's negotiating capacity.

Screening

Screen for client's readiness to use method and whether to use for prevention of STI including HIV.

Instructions for Users

Before Sexual Intercourse

- Check the expiration date on the package. If not expired, carefully open the package. If discolored or malodorous, dispose and use a new condom.
- The female condom can be inserted up to 8 hours before sexual intercourse.

Inserting the Female Condom

- Choose a position that will facilitate insertion, such as squatting, raising one leg, sitting, or lying down.
- Hold the pouch so that the open end is hanging down. Squeeze the inner ring with the thumb and middle finger of one hand so that it becomes long and narrow.
- Gently insert the inner ring and sheath into the vaginal opening. Place the index finger inside the condom and to push the inner ring as far into the vagina as it will go, making sure that it is inserted straight and does not twist. The outer ring should be outside the body, lying against the outer lips of the vagina.
- During sexual intercourse, guide the penis into the condom so that it does not slip outside into the vagina.

After Sexual Intercourse

- Remove the female condom immediately after intercourse (before standing up) by squeezing and twisting the outer ring, then pulling gently. This will keep the sperm inside the pouch.
- Wrap the condom in its package or in a tissue and dispose of it.

Instructions For Different Conditions

Female condoms can be inserted up to eight hours before sexual intercourse.

Eligibility

There are no medical reasons for restricting use of female condoms. Women with serious medical conditions who would be placed at high risk in the event of unintended pregnancy, however, may not want to use this method alone. In such cases the simultaneous use of another contraceptive method should be advised.

The female condom may be particularly relevant for:

- Women who experience side effects when using hormonal methods.
- Individuals who are at risk of STIs.
- Those wishing to space or limit children.
- Those who are dissatisfied with or cannot use the male condom.
- Women needing a back-up barrier contraceptive, for example when a pill is missed.
- Those needing protection during the postpartum period.
- Women experiencing vaginal dryness, since it can be used to increase lubrication and thereby reduce painful intercourse.

Lactational Amenorrhea Method (LAM)

Introduction

Although the benefits of breastfeeding for infant health are universally recognized, the use of breastfeeding for family planning has only been acknowledged more recently. The programmatic guidelines for lactational amenorrhoea (LAM) as a family planning method include the following three criteria, all of which must be met to ensure adequate protection from an unplanned pregnancy:

- Amenorrhoea,
- Exclusive breastfeeding, and
- Less than 6 months postpartum.

When women no longer meet any of these three criteria, or when women no longer wish to rely on lactation amenorrhoea, use of another family planning method to avoid pregnancy should be initiated.

Mode of Action

Hormones released during continuous breastfeeding suppress ovulation. Without the release of an egg, pregnancy is not possible.

Efficacy

LAM is up to 98% effective, provided that the rules are followed strictly during the first six months postpartum. After the six-month period, effectiveness is reduced.

Advantages

- Is universally available.
- Is free.
- Provides protection immediately postpartum.
- Requires no supplies.
- Has no health risks or side effects.
- Does not interfere with sexual activity.
- Provides nutrients for growth, development, and survival of infants.
- Improves infant's immunity and decreases likelihood of infection from germs in water, milk, or formula.
- Improves bonding between mother and infant.

Disadvantages

- Necessitates exclusive breastfeeding, which may be difficult for some women.
- Does not provide protection against STI/HIV.
- Only provides protection for the 6-month postpartum period.

Side Effects

There are no known side effects associated with LAM.

Return to fertility: Fertility returns 6 months postpartum.

Service Provision

All *Service Delivery Requirements* apply.

Who Can Provide

All trained providers;

- Physicians
- Nurses/Midwives
- Clinical Officers
- Trained non-medical service providers community-based service providers and traditional birth attendants

Counseling

Counseling should also focus on STI, VCT for HIV and dual protection.

Providers should advise mothers that use of an alternative method is recommended if supplementary feeding begins or the baby does not breastfeed frequently, if menstruation begins, or if the mother is more than six months postpartum. Another method should be initiated when any of the three LAM criteria are not met; providers should assist mothers in selecting a suitable alternative method. Breastfeeding mothers can safely use the following methods: male and female condoms, IUDs, male and female sterilization, pills, injectables and implants.

Screening

None.

Instructions for Users

- You must breastfeed exclusively. This means that no other liquids or solids can be substituted for a breast-milk meal.
- Suckle the baby at least eight (8) times every day on both breasts. The infant should be breastfed every 4 hours during the day, and every six hours at night. Do not let the baby sleep through the night.
- If you have had your period since you delivered, LAM will not be an effective method of FP.
- Similarly, if it has been more than six months since delivery, LAM is not a reliable form of pregnancy prevention.

Instructions For Different Conditions

All postpartum women who are willing to exclusively breastfeed their infant can use LAM.

Eligibility

Most postpartum women who are willing to exclusively breastfeed their infant can use this family planning method. There are no medical conditions for which the use of LAM is restricted. However, certain conditions or obstacles affecting breastfeeding may also affect the duration of amenorrhoea, making this a less useful choice for family planning purposes. These include:

- Infectious conditions such as active viral hepatitis, open syphilitic lesions on the breast, and HIV. Breastfeeding may not be the best infant feeding option for mothers at high risk of contracting HIV and mothers living with HIV/AIDS. In circumstances in which the risk of infectious diseases constitutes the main cause of infant mortality, women should be advised to breastfeed irrespective of their HIV status. When such a risk is low

and a safe, and an affordable alternative to breastfeeding is available; women should be advised to use an alternative mode of infant feeding.

- Conditions affecting the newborn that may also affect breastfeeding, such as a congenital deformity of the mouth, jaw, or palate, or certain metabolic disorders. Small-for-date or premature newborn needing intensive neonatal care would also be included in this category.

In order to protect infant health, breastfeeding is not recommended for women using such drugs as: reserpine, ergotamine, anti-metabolites, cyclosporin, corticosteroids (high doses), bromocriptine, radioactive drugs, lithium, certain anticoagulants, and mood altering drugs.

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