

NATIONAL FAMILY PLANNING STANDARD



Reproductive, Maternal and Newborn Health Programme

Department of Public Health

Ministry of Health

ROYAL GOVERNMENT OF BHUTAN

June 2018

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FOREWORD

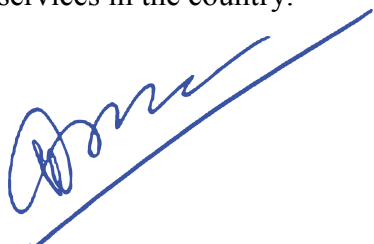
We are pleased to bring forth the fifth edition in series the *National Family Planning Standard 2018*. This publication is a result of consultation with UN development partners, Program Managers and healthcare providers in the field. As such, efforts have been made to align this standard with the international best practices while at the same time considering lessons from the field to make it inclusive and user-friendly.

Family Planning Services was introduced in 1974 in Bhutan as per the resolution of the 34th National Assembly. This resolution received further priority upon the issuance of the Royal Decrees on population planning in 1984 and 1995 wherein family planning was adopted as one of the measures to promote sustainable population plan in Bhutan. These services are entirely voluntary and are provided free of charge by the government to the people.

Family Planning Services are crucial to promote sexual and reproductive health of population. Access to these services would enable the couples to delay and avoid unplanned pregnancies, maintain birth space and help them to plan a desired size of the family. The family planning methods in Bhutan include contraceptives such as injectables (DMPA), oral pills, condoms, Copper T (IUCD), and male and female sterilization.

The contraceptive prevalence rate has increased from a low of 18.8 percent in 1994 to 65.5 percent in 2010. Correspondingly, reproductive health services and its outcomes, including maternal, infant and under-five deaths have progressively decreased over the years. Despite these achievements, the country continues to grapple with challenges such as the high burden of adolescent birth rate (28.4 per 1000 women), younger population, unmet need of family planning (12%), and reaching services to the hard-to-reach groups with rugged terrains.

As we aspire for higher contraceptive prevalence rate of 70 percent in the 12 Five Year Plan, concerted efforts must be made in terms of building capacity of healthcare providers. In line with this, this edition is built on recent evidences to enhance the knowledge and skills of the health care providers providing family planning services in the country. It is hoped that our healthcare providers would use this standards as a reference as a result improving quality family planning services in the country.



(Dr. Karma Lhazeen)
Director

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CONTENTS

FOREWORD	1
ACKNOWLEDGEMENT	2
CHAPTER 1: REPRODUCTIVE HEALTH AND FAMILY PLANNING COUNTRY SCENARIO.....	4
CHAPTER 2: CLIENTS’ RIGHTS AND PROVIDERS’ NEEDS.....	9
CHAPTER 3: OVERVIEW OF FAMILY PLANNING METHODS AND SERVICE PROVISION	13
CHAPTER 4: COUNSELLING AND INFORMED CHOICE.....	21
CHAPTER 5: CLIENT ASSESSMENT.....	27
CHAPTER 6: ESSENTIALS OF CONTRACEPTION	33
CHAPTER 7: BARRIER METHOD.....	36
CHAPTER 8: HORMONAL CONTRACEPTIVES	41
CHAPTER 9: INJECTABLE CONTRACEPTIVES	51
CHAPTER 10 : INTRA UTERINE CONTRACEPTIVE DEVICE(IUD).....	64
CHAPTER 11: TRADITIONAL FAMILY PLANNING METHODS INCLUDING FERTILITY AWARENESS BASED METHODS.....	82
CHAPTER 12: CONTRACEPTION FOR POST-PARTUM WOMEN AND FOR ADOLESCENTS	87
CHAPTER 13: EMERGENCY CONTRACEPTION	97
CHAPTER 14: PERMANENT METHODS OF FAMILY PLANNING.....	106
CHAPTER 15 FAMILY PLANNING IN POST-ABORTION CARE.....	127
CHAPTER 16: FAMILY PLANNING FOR DIVERSE GROUPS	130
CHAPTER 17: TRAINING	133
CHAPTER 18: MONITORING AND SUPERVISION:.....	134

CHAPTER 1: REPRODUCTIVE HEALTH AND FAMILY PLANNING COUNTRY SCENARIO

“Reproductive Health” is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity, in all matter relating to the reproductive system and to its function and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the right for men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choices. Unintended pregnancy, resulting from unmet need for contraception, threatens the lives and wellbeing of women and their families globally. Unmet need for contraception is highest among the most vulnerable groups like adolescents, the poor, those living in rural areas and urban slums, people living with HIV and hard to reach people. With more than 60% of Bhutanese population below 25 years, it is imperative that FP services address the adolescent sexual behaviour and teenage pregnancy to reduce the negative or deleterious impact on the health of young women. Proper and adequate information, education and counselling are the key elements for successful implementation and continuation of the FP services.

Recognizing the need to contain population explosion, reduce maternal and infant mortality, enhance the quality of life and encourage economic self-sufficiency, the Royal Government of Bhutan adopted the small family norm as early as 1971. The 34th National Assembly Resolution (1971) directed the Royal Government to introduce FP services in the country. In 1974 FP services was formally introduced within limited geographic areas and with limited methods of contraception. The newly adopted 2030 Agenda for Sustainable Development Goals sets a global target to ensure universal access to sexual and reproductive health services including Family Planning under Target 3.7 and Target 5.6. Global Strategy for women's children's and adolescent's health (2016-2030)

As a follow up to the recommendation of the International Conference on Population and Development (ICPD) held in Cairo in 1994, FP services were accorded high priority. One of the most significant actions taken was the issuance of the Royal Decree on population planning by His Majesty the 4th King in 1995. The Royal Decree highlights the importance of population planning in the context of sustainable development.

Royal Decree on Population Planning

“For the Royal government of Bhutan, where the spiritual and temporal system exists in harmony: “To ensure continuing peace, prosperity and happiness for our people, to ensure successful implementation of the government’s policies and development plans, and to avoid complications of the population explosion faced by other countries in the near future, it is very important for every Bhutanese, high and low, to understand and support the population planning activities initiated by the health services.”

Her Majesty the Queen Mother, Ashi Sangay Choden Wangchuk, became the Goodwill Ambassador of UNFPA in 1999. Under the farsighted and dynamic leadership of Her Majesty the Queen Mother, reproductive health messages have continued to reach to the remotest corner of the country.

UNFPA's assistance to Bhutan's FP services began in 1981. The funds enabled the program to provide high quality FP services and training of the providers. Contraceptives, conforming to WHO standards were imported. Over the years FP services have been expanded to all the districts. A range of contraceptives have been introduced and made available through the health services delivery network. In all health facilities the contraceptive methods available are: condoms, Oral Contraceptive pills and injection DMPA, and IUCD. However, permanent Surgical Contraception is restricted to Hospitals and Health Camps.

The present FP policy has been adopted by the Royal Government of Bhutan:

1. FP is entirely on voluntary basis and every individual or couple has to have access to its information and services.
2. Families should have right to choose their family size.
3. The general public should have access to information and education regarding pregnancy risks and the benefits of delaying, spacing and limiting family size.
4. Ensure counselling regarding the advantages and disadvantages of each individual FP methods and help the client to have his/her choice of contraceptive.
5. Surgical Contraception (TL and NSV) may be offered for couples who have completed their families.
6. Infertility should be addressed with proper investigations and necessary treatment

Population planning is an essential component of the Government's overall development strategy. It is desired that population growth should be commensurate with the country's progress, especially considering the limited available resources and geo-political situation of the country. It is the responsibility of Bhutanese people to safeguard the happiness and prosperity of the future generations.

The National FP Standard is designed and developed to strengthen planning, supervision and provision of quality services at par with Regional and International standards. The FP program will maintain this standard as a living document, updating and revising at regular intervals. This standard is intended to be used at all levels of service delivery for FP. This document carries updated information available at the time of compiling on contraceptives and related areas per 2015 WHO's Medical Eligibility Criteria (MEC) and Standard Practice Recommendations (SPR), 2016. Post partum contraception and post abortion FP has been included in this edition.

CONTRACEPTIVE AND HEALTH SCENARIO IN BHUTAN

Table 1.1 Selected Demographic and Health Indicators for Bhutan

Indicators	
Total Population, 2018	7,90215 ¹
Annual Population Growth Rate	1.3
Population density (persons per square km), 2006	19
Urban population, 2015	38.6%
Population below 15 years of age, 2006	26.21%
Total Fertility Rate, 2017	1.9 ²
Contraceptive prevalence rate, Bhutan National Statistics Bureau, 2010 and Bhutan Multiple Indicator Survey (BMIS)	66%
- Pills	7.5%
- IUD	3.7%
- Female sterilization	7.1%
- Male sterilization	12.6%
- Condom	5.5%
- Injectable	28.9%
- Any modern method	99.8%
- Any traditional method	0.2%
Not currently using	34.4%
Unmet need for family planning (in women aged 15-19 yrs)	27.4%
- Unmet need for spacing	4.7%
- Unmet need for limiting	6.9%
Crude birth rate (per 1000 population) 2016 est.	17.5
Maternal Mortality Ratio (per 100, 000 live births) NHS 2012	86
Infant Mortality Rate (per 1000 live births) NHS 2012	30
HIV adult prevalence rate (age 15-49 years), 2013 est.	0.13

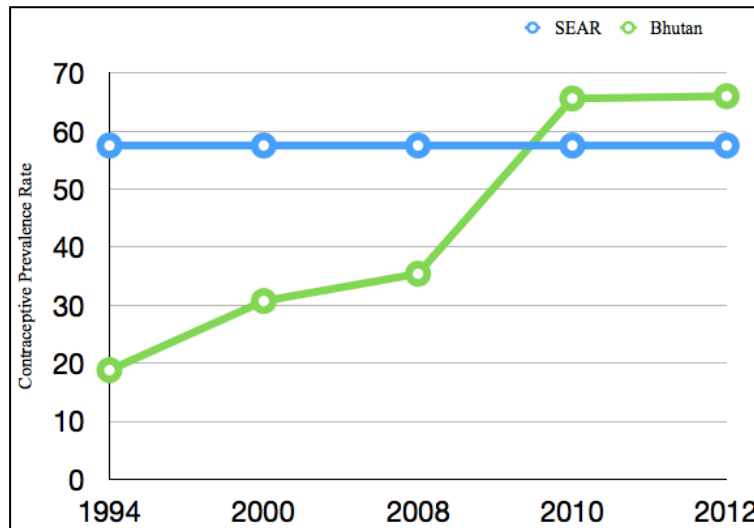
¹ National Statistical Yearbook 2013, Projected population in 2018

² Bhutan Living Standard Survey 2017

* Bhutan Multiple Indicator Survey, 2010; Bhutan National Statistics Bureau 2007; CIA World Facebook, July 2017

Contraceptive Prevalence Rate (CPR)

Bhutan has shown a steady rise in Contraceptive Prevalence Rate in the last four decades that has led to a sharp decline in the Total Fertility Rate. In 2007 CPR was only 36% (National Statistics Bureau Bhutan, 2007). The 2010, Bhutan Multiple Indicator Survey reported a CPR of 66%. This



rate is much higher than many other countries in South East Asia.

Contraceptive Method Mix

Despite limited availability of contraceptive choices, Bhutan has managed a consistent decline in TFR and increase in CPR. According to the 2010 Bhutan Multiple Indicator Survey, (BMIS), 66% of women in their reproductive age were using a method of contraception. Of these, almost all were using a modern method of contraception. Only 0.2% of women were using any traditional method. Unlike other countries in the region where female sterilisation is the most preferred method of contraception, majority (46%) of the users in Bhutan were using a spacing method. A high percentage of spacing method users could attribute to the decline in TFR. Injectables were the most popular contraceptive among users, irrespective of their educational or economic status. Bhutan also shows an unusual trend in the use of limiting methods, with vasectomy rate (12.6%) far exceeding tubaligation rate (7.1%). This depicts a good male participation and responsibility. IUD use is only 3.7%.

Total Fertility Rate (TFR)

Bhutan has shown a rapid decline in TFR from 2.8 in 2005 (National Statistics Bureau) to 1.9 in 2017 (Bhutan Living Standard Survey 2017).

Unmet need for Family Planning

Unmet need for FP is much lower than that in other SEAR countries. As per BMIS 2010, unmet need for spacing was 4.7% and unmet need for limiting was 6.9%. The combined unmet need (for spacing and limiting) among 15-19 years women was 27.4% compared to only 6.5% in women aged 45-49 years

Adolescent Fertility

BMIS 2010, revealed that 57% of women in the age group 20-24 years were using a FP method. Among married adolescents (15-19 years), only 30% were using a method.

These revised National Standards for Family Planning Services that include updates from the Fifth Edition of the WHO, Medical Eligibility Criteria, 2015, and Selected Practice Recommendations for Contraceptive Use, Third Edition, 2016, are aimed to provide updated technical information for family planning service providers to help address contraceptive needs of the couples. Improved family planning indicators in Bhutan will further contribute in achieving the Sustainable Development Goals.

CHAPTER 2: CLIENTS' RIGHTS AND PROVIDERS' NEEDS

2.1 INTRODUCTION

Reproductive and sexual health care, including family planning, aims to improve the quality of life of an individual. A rights-based approach to the provision of contraceptives assumes a holistic view of clients, which takes into account clients' needs and considering all appropriate eligibility criteria in helping clients choose and use a family planning method.

The rights of the clients availing family planning services should be center of providing care to them. The fulfillment of the rights of FP clients should be a goal for programme managers and service providers. This goal is directly related to the availability and quality of FP information and services while at the same time meeting the providers' needs.

2.2 CLIENTS' RIGHTS

The following are the rights of clients:

2.2.1 Right to information

Clients should be given adequate information in order to make an informed voluntary choice of a contraceptive method. Information given to clients to help them make this choice should include: understanding of the relative effectiveness of the method; correct use of the method; safety of the method, signs and symptoms that would necessitate a return to the clinic; information on return to fertility after discontinuing method use; and information on STI protection. They have the right to know where and how to obtain more information and services for planning their families.

2.2.2 Right to access

All clients have the right to receive services from FP programmes, regardless of their social status, economic situation, ethnic origin, geographical location or any other characteristics which may place individuals in certain groups. This means a right of availability and access through various health care providers as well as other service delivery systems. FP programmes should take the necessary steps to ensure that services will reach all eligible individuals who need them, even those for whom the normal health services are not easily accessible.

2.2.3 Right to choose

Eligible individuals or couples have the right to decide freely whether or not to practise family planning and the choice of contraceptive method. Family planning programmes should assist people in the practice of informed free choice by providing unbiased information, education and counseling as well as an adequate range of contraceptive methods.

A client's concept of acceptability and appropriateness changes with circumstances. Therefore, the right of choice also involves the client's decisions concerning discontinuation of a method of contraception, method switching and also where practical, a right to choose where to go for FP

services and the type of service provider with whom they feel most comfortable. This choice may involve a choice of physical location of health service delivery and providers.

2.2.4 Right to safe and quality commodities and services

Family planning clients have a right to safety in the practice of family planning. This implies the following:

- Although it is well recognized that the benefits to health from family planning outweigh the risks, clients have a right to protection against any possible negative effects of a contraceptive method on their physical and mental health.
- Since all pregnancies represent a risk to health, the right of the client to safety also includes the right to effective contraception.
- When receiving family planning services, clients have a right to protection against other health risks which are not related to a method of contraception, for example, protection against the possibility of acquiring an infection through the use of contaminated instruments.

Safety relates to quality of commodities and service provision, including both the adequacy of the service delivery facility itself and the technical competence of the service providers.

Ensuring the client's right to safety includes:

- assisting the client in making an appropriate choice of contraceptive.
- screening for contraindications.
- using the appropriate techniques for providing the method if possible.
- teaching the client about the proper use of the method and ensuring proper follow-up.
- ensuring that the conditions in service delivery sites together with the equipment are adequate for the provision of safe services.
- ensuring that any complications or major side effects receive appropriate treatment.
- If this treatment is not available at a particular health center, the client should be referred to another facility.

2.2.5 Right to privacy

When discussing his/her needs or concerns the client has a right to privacy in an environment in which she/he feels confident. The client should be aware that her/his conversation with the counsellor or service provider will not be overheard by other people. When a client is undergoing a physical examination it should be carried out in an environment in which his/her right to bodily privacy is respected. The client's right to privacy also involves the following aspects related to quality of services:

1. When receiving counseling or undergoing a physical examination, the client has the right to be informed about the role of each individual inside the room, besides those providing services, e.g. training students, supervisors, instructors, researchers, etc. Where the presence of individuals undergoing training is necessary, prior permission of the client should be obtained.

2. A client has a right to know in advance the type of physical examination which is going to be undertaken. The client also has a right to refuse any particular type of examination if she/he does not feel comfortable with it or to request this examination to be done by another provider.
3. Any case-related discussion held in the presence of the clients (particularly in a training institution) should involve and acknowledge the client and not talk over the client. It is, after all, the client's sexual and reproductive organs and functions that are under discussion.

2.2.6 Right to confidentiality

The client should be assured that any information she/he provides or any details of the services received will not be communicated to third party without his/her consent. The right to confidentiality is protected under the Hippocratic Oath. As such, family planning services should be performed in conformity with the local legal requirements and in accordance with ethical values.

A breach of confidentiality could cause the client to be shunned by the community or negatively affect the marital status of the client. It may also lessen a target group's confidence and trust in the staff of a service delivery programme. In accordance with the principle of confidentiality, service providers should refrain from talking about clients by name or in the presence of other clients. Clients should not be discussed outside the service site. Clients' records should be kept closed and filed immediately after use. Similarly, access to client records should be controlled.

2.2.7 Right to dignity

Family planning clients have a right to be treated with courtesy, consideration, attentiveness and with full respect for their dignity regardless of their level of education, social status or any other characteristics which would single them out or make them vulnerable to maltreatment. In recognition of this right of clients, service providers must be able to put aside their own personal gender, marital, social and intellectual prejudices and attitudes while providing services.

2.2.8 Right to comfort

Clients have a right to feel comfortable when receiving services. This right of the client is closely related to adequacy of service delivery sites which should have proper ventilation, lighting, and seating and toilet facilities, especially IUD services. The client should spend only a reasonable amount of time at the premises to receive the required services. The environment in which the services are provided should conform to cultural values, characteristics and demands of the community.

2.2.9 Right to continuity of care

Clients have a right to receive services and supply of contraceptives for as long as they need them, as long as there are no adverse side effects. The services provided to a particular client should not be discontinued unless this is a decision made jointly between the provider and the client. In particular, a client's access to other services should not depend on whether she/he continues or

discontinues the contraceptive services. The client's right to continuity of service includes referral and follow-up.

2.2.10 Right to opinion

Clients have a right to express their views on the service they receive. Clients' opinions on the quality of services, be they in the form of appreciation or complaint, together with their suggestions for changes in the service provision, should be viewed positively in a programme's ongoing effort to monitor, evaluate and improve its services.

2.3 PROVIDERS' NEEDS

The program will need to have systems and capacity in place to support the work of the providers, which include:

- information, training and skills development
- adequate supplies, equipment and infrastructure
- good quality management and supervisory support at the facility and regional levels

2.3.1 Need for information, training and skills development

Service providers should have access to competency-based training so they can acquire the knowledge, skills and confidence needed to perform family planning services – counseling, client assessment, ensuring eligibility to use family planning methods, techniques of providing the methods and follow-up care in a holistic way. They should also be trained and skilled in identifying side effects and complications and managing them effectively. Training and refresher training should emphasize both technical and communication skills.

2.3.2 Need for adequate supplies, functioning equipment and infrastructure

Service providers need to have the appropriate physical facilities and organization to provide quality services. Providers also need continuous and reliable supplies of family planning methods, expendable and non-expendable supplies (refer to Appendix A), counselling and educational material, and appropriate job aids to enable them to provide safe and effective services.

2.3.3 Need for quality management and supervisory support, at the facility and district levels

To meet this need, supervisors (CMO/DHO) should use the approach of facilitative supervision which emphasizes the supervisor's role in facilitating quality improvement among a team of staff. It also emphasizes mentoring, joint problem solving and two-way communication between a supervisor and those being supervised. In order to facilitate change and improvement and to encourage staff to solve problems, supervisors must have the solid technical knowledge and the skills needed to perform tasks, know how to access additional support as needed, and have time to meet with the staff they supervise. Supervisors, after attending a training session, should train other staff and also ensure that service providers have opportunities to refresh and update their knowledge and skills periodically.

CHAPTER 3: OVERVIEW OF FAMILY PLANNING METHODS AND SERVICE PROVISION

3.1 INTRODUCTION

Table 3.1 lists family planning methods available in Bhutan. Couples can choose a method that is most suitable for them. The role of the provider is to assist the client to make an informed decision and provide the chosen method.

Table 3.1: Available Contraceptive Choices Under the National FP Programme, Bhutan

Reversible/ Spacing Methods	
Long Acting Reversible Contraceptive (LARC)	IUD (380 A) for interval and post-partum insertions Progesterone Only Injectables/ Depo -Medroxy Progesterone Acetate (DMPA) I/M -Implanon/ progesterone only implant (availability in Bhutan is under consideration)
Short Acting Reversible Contraceptives	- Combined Oral Contraceptive Pill (COC) - Emergency Contraceptive Pill (ECP) - Condom (barrier method)
Fertility Awareness Based Methods	- Standard Days Method - Cervical Mucus Method (Two Day Method) - Sympto-thermal Method - Withdrawl method
Limiting Methods	
Female Sterilization	Laparoscopic Sterilization Mini-lap Sterilization Post-Partum Sterilization
Male Sterilization	Non-Scalpel Vasectomy (NSV)

None of the contraceptive methods is perfect and side effects are seen with all methods of contraception. A brief description of modern methods, how they work, their effectiveness in preventing pregnancy and their advantages and disadvantages are given in Table 3

Table 3.2 Selected characteristics of modern family planning methods and effectiveness

Method	What is it and how it works	Effectiveness % Use		Advantages	Disadvantages/ Limitations
		Perfect	Typical		
Male Condom	<ul style="list-style-type: none"> • A sheath made of latex, which when put on the erect penis during sexual intercourse and taken off carefully after intercourse prevents the ejaculate from spilling inside the woman and thus prevents pregnancy and STIs including HIV/AIDS • A fresh condom is to be used with each act of intercourse 	98%	85%	<ul style="list-style-type: none"> • Easy to use • Readily reversible birth control method for men • Protects against STIs including HIV/AIDS and infertility (triple protection) • Dual method use refers to using a barrier method for protection against STI/HIV and another method for contraception • Fairly effective if used correctly and consistently • Can be used with other contraceptives where risk of STI / HIV is present 	<ul style="list-style-type: none"> • A fresh condom is to be used with each act of intercourse • Failure rate is high if not used correctly and consistently • May interfere with sexual activity • High level of motivation required to use a condom consistently and correctly • Small risk of slipping, tearing and semen spillage, if not used correctly • Difficulty in disposing used condoms • Quality of condom can deteriorate if not stored properly • Allergy to latex (very rare) • Need Privacy

<p>Combined Oral Contraceptives (COCs)</p>	<ul style="list-style-type: none"> • COCs are tablets/pills that contain female sex hormones (estrogen and progestogen) similar to the ones naturally present in the body. COCs should be taken daily • COCs prevent pregnancy by suppressing the release of ovum and thickening the cervical mucus, which prevents sperm from passing through 	<p>99.7%</p>	<p>92%</p>	<ul style="list-style-type: none"> • Very effective when used correctly and consistently • Easy to use • Safe for most women • Non invasive • Reversible (can stop the pill on her own whenever desired by the client with no loss of fertility) • Does not interfere with sexual act • Can improve menstrual problems • Protects from cancers of the uterus and ovary and benign breast disease 	<ul style="list-style-type: none"> • COC should be taken for 21 continuous days in order to suppress ovulation. The effect of each tablet lasts only for 48 hours • Not appropriate for mothers who are breastfeeding infants less than 6 months old as it may decrease the quantity of milk • Does not protect against STIs/ HIV • Effectiveness of the pill decreased in women who are on treatment for tuberculosis (rifampicin), anti-convulsants and on certain antibiotics (griseofulvin) • Minor side effects (such as headache, Amenorrhea/ Oligomenorrhea, Bleeding in between periods or spotting, Nausea, weight gain, high BP, etc.) are most common during the first 3 months of use and these usually disappear with continued use • Serious side effects (heart attack, stroke) with low-dose pill are rare • High risk for women who smoke and above 35 years • Women, who smoke, whether they use the pill or not, are at increased risk for heart attack or stroke.
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<p>Progesterone only injectable</p> <p>(Depo Provera / DMPA is the POI commonly available in Bhutan)</p>	<ul style="list-style-type: none"> • POI contains a female sex hormone (progestogen) similar to the one in the body • The injectable provides effective protection against pregnancy mainly by: <ul style="list-style-type: none"> - making it difficult for the sperm to pass through. - making the endometrium thin, which is not suitable for pregnancy. - Single injection of Depo Provera prevents pregnancy for 3 months . 	99.7%	97%	<ul style="list-style-type: none"> • Very effective method. • Reversible. • Does not interrupt sexual activity. • Can be used by breastfeeding women. • Does not inhibit lactation. • Can be used from 6 weeks after delivery. • Effective within 24 hours of receiving the injection. • No daily pill taking . • Decreases menstrual blood loss and duration, thus reduces anemia. • PID less common as compared to non-users due to cervical mucus thickening. 	<ul style="list-style-type: none"> • Disruption in menstrual bleeding patterns. • Provider dependant. • Does not protect against RTIs/STIs including HIV/AIDS. • Delayed return of fertility (median delay 10 months for Depo Provera). • Menstrual irregularities/Amenorrhea / Prolonged bleeding (for more days than normal) in the first month of use. • Weight gain (less common) Headaches or dizziness (less common).
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Method	What is it and how it works	Effectiveness % Use		Advantages	Disadvantages/ Limitations
		Perfect	Typical		
<p>Intrauterine contraceptive device (IUD) Cu T 380A is the commonly available Copper IUD in Bhutan.</p>	<p>Cu T 380 A is a T-shaped device with copper wires on the arms and a vertical stem.</p> <p>CuT is placed in the uterine cavity.</p> <p>Mechanism of action:</p> <ul style="list-style-type: none"> • prevents pregnancy by interfering with the movement of the sperm • reducing the ability of the sperm to fertilize an egg • preventing implantation of the embryo. <p>IUD can be inserted in the post partum period and during the interval period, during or within 12 days of the menstrual cycle</p>	99.4%	99.2%	<ul style="list-style-type: none"> • Very effective for long-term reversible contraception. • Cu T 380 A Effective for 10 years. • Effective immediately after insertion. • Does not interfere with sexual intercourse. • One time insertion procedure and does not require re- supplies. • Cost effective as no expenses for re-supplies. • Can be used by breastfeeding women. • Does not interact with any medicines that the client might be taking. • Return of fertility immediately after removal. 	<ul style="list-style-type: none"> • Does not protect from STIs including HIV/AIDS. • In the first week: mild cramps, bleeding or spotting. • In the first 3 months: longer and heavier periods, increased cramps during periods, bleeding or spotting between periods and expulsion of Copper T (partial or complete). • Dependent on provider. • Perforation of uterus. • Lost Copper T thread. • Infections of the genital tract due to poor infection prevention practices..

Method	What is it and how it works	Effectiveness % Use		Advantages	Disadvantages/ Limitations
		Perfect	Typical		
Female sterilization (Tubal occlusion)	Female sterilization is performed through a small cut in the lower part of the abdomen. The tubes that transport ovum from the ovary to the uterus are cut /occluded so that the fertilisation does not occur. The procedure can be performed laparoscopically and also through the conventional surgical method. In laparoscopic procedure, a small ring is applied on each tube to occlude the tubes or the tubes can be coagulated.	99.5%	99.5%	<ul style="list-style-type: none"> • Very effective • Usually safe surgical procedure • Permanent method of family planning • No need to take pills daily, go for repeat injections or reinsertions • Effective immediately after the procedure • Does not interfere with sexual act • No effect on breast feeding • Mini-laparotomy can be performed immediately after the birth of a child 	<ul style="list-style-type: none"> • Provider dependent • Uncommon complications of surgery: infection or bleeding at incision, internal infection or bleeding, injury to internal organs, risk of anaesthesia • Does not protect from RTI/STIs including HIV/AIDS • Irreversible method

Method	What is it and how it works	Effectiveness % Use		Advantages	Disadvantages/ Limitations
		Perfect	Typical		
Male sterilization (Non Scalpel Vasectomy/ NSV)	NSV in men is performed through a small opening on the scrotal skin, the tube that carries the sperm is cut so that sperm cannot reach the ovum and fertilisation is prevented	99.9%	99.85%	<ul style="list-style-type: none"> • Very easy to perform, small, quick procedure leads to life-long, safe and effective family planning • Very effective permanent method of family • No interference with sex • Does not affect the man's ability to have sex • Safer than female sterilization procedure 	<ul style="list-style-type: none"> • Trained provider dependent surgical procedure • NSV is effective only after 3 months of the procedure, and during this period condoms or another effective family planning method should be used until semen analysis confirms azoospermia • Does not protect from RTI/STI including HIV infections

***Source:** Adapted from World Health Organization, *Medical Eligibility Criteria for Contraceptive Use*, 5th edition WHO, Geneva, Switzerland. 2015 and Selected practice recommendations, WHO 2016.

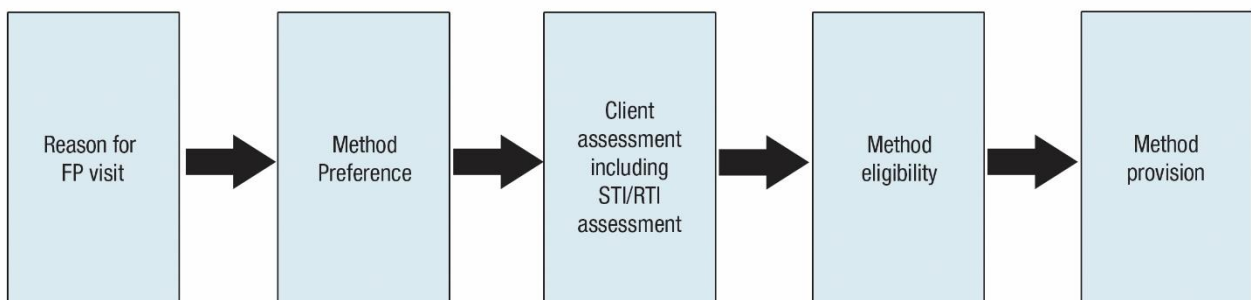
3.4 FAMILY PLANNING SERVICE PROVISION

Women attending a family planning clinic are usually interested in a method of contraception that they may have in mind and they might have other concerns as well. Often there are other issues that need to be discussed before a client can choose and be provided a contraceptive method that meets her needs.

3.4.1 Steps in decision making at a family planning visit

Starting with the reason for the visit to the family planning clinic, a health care provider then goes through a sequence of steps to assist a client to reach a decision about a suitable family planning method and provides the method. Figure 3.1 illustrates the sequence of steps in decision making. These steps include determining the client's preferred method, clinical assessment including Sexually Transmitted Infections and Reproductive Tract Infections including reproductive tract infections (STI/RTI) assessment, reviewing client's medical eligibility for that method and providing the chosen method. However, a provider might need to adapt the approach to meet an individual client's need. The steps used in decision making are described below.

Figure 3.1: Overview of steps involved in deciding a method during initial FP visit



Determine preferred FP method by:

- Asking if the client has any particular method in mind (Women who are given their preferred method use it longer and with greater satisfaction)
- Assessing STI protection needs
- Describing options and helping client make a choice. (For further details refer to Chapters 6 to 14)

Refer to Chapter 4 for discussion on client provider interaction and counseling.

Clinical assessment including STI/RTI assessment by:

- Taking a history and performing relevant clinical examination and laboratory tests, if indicated.

Review medical eligibility for providing a FP method by:

- 1) using WHO's MEC Wheel as a tool to select a suitable FP method
- 2) Evaluating suitability of the preferred method or methods.

CHAPTER 4: COUNSELLING AND INFORMED CHOICE

4.1 INTRODUCTION

Counselling is a critical element of quality family planning services. Family planning counselling is the process of **two-way face to face communication** by which the counsellor assists the client to make a decision about fertility and contraceptive options. The counselor provides accurate and complete information, addressing the client's particular reproductive health needs, concerns and goals.

Informed choice is the process by which a client makes a voluntary, well considered decision about his/her reproductive health (RH) needs. The client arrives at this decision based on accurate information in an environment of full information about available methods and resources.

4.2 OBJECTIVES OF CONTRACEPTIVE COUNSELLING

The purpose of family planning counselling is to assist individuals or couples to:

- decide whether they need and want contraception
- freely make the choice of contraception needed
- learn, understand and use the chosen method properly
- reduce anxieties, if any
- initiate the use of appropriate contraceptive method
- use the contraceptive method effectively and continuously
- switch to another method to avoid pregnancy if one method does not suit
- prevent STIs, including HIV/ AIDS, and seek early treatment for STIs.
- confidentiality and privacy should be ensured at all counseling sessions. Encourage spouse to accompany for counseling. Wherever possible the spouse should also be counseled.

4.3 CATEGORY OF PROVIDERS

Counselling can be done by any staff member with appropriate training, or a counsellor per se. General and method-specific family planning counselling can be provided by specialists (gynaecologists, surgeons) medical officers, staff nurses, community level health workers including family health workers (FHW). It is important that providers is trained on reproductive health prior to service provision.

4.4 PRIVACY AND CONFIDENTIALITY

Privacy and confidentiality are essential for all aspects of family planning services - counselling, client assessment and method provision and follow-up care. Clients will avoid a health care facility, sometimes travelling to a distant clinic, to preserve anonymity if they feel that their privacy and confidentiality are not respected or that service providers are critical and judgemental.

Visual and auditory privacy should be ensured and family planning services should be provided in an area separate from the waiting area, so that people in the waiting area cannot see or hear the discussion after the services being provided.

4.5 CLIENT-PROVIDER INTERACTIONS

Verbal interactions and sharing of information between the provider and client during each step of a family planning procedure help alleviate client fears and concerns. When a client feels safe and is confident in the provider's skills, the client will be more cooperative. Educating the client about potential side effects and relieving concerns correlate positively with long-term use of temporary family planning methods. The following are the behaviours to be modelled by staff when interacting with clients:

- Treat the client with respect, exhibiting friendly, calm behaviour and an unrushed manner.
- Listen attentively to assist clients to discuss their family planning
- Treat all clients equal, without preferential treatment by age, gender, religion, values, economic or marital status.
- Remain non-judgemental
- Speak in a language understood by the client and use simple terminology understood by the client.
- Assure confidentiality concerning the client's information.
- Use open ended questions, giving the client opportunity to give more information.
- Describe how the client can be helpful during the procedure and what to expect before, during and after the procedure.
- Provide the client an opportunity to ask questions and address concerns.
- Assure that client's modesty is maintained.
- Address doubts, fears, myths or misconceptions held by the client
- Minimize the client's anxiety.

4.6 COUNSELLING PROCESS

Family planning counselling is to be provided wherever family planning methods are available. The counselling session may be an individual session (client and service provider) or a couple counselling session (client with partner and service provider). If a client requests and desires it, a close friend or family member may be present in the counselling session.

Family planning counselling is provided using either the GATHER (an acronym for **Greet, Ask, Tell, Help, Explain, Return visit**) approach or the REDA (an acronym for **Rapport building, Explore, Decide, Act**) approach, and what clients'/ their family planning needs are, i.e. birth spacing, delaying pregnancy or limiting births. Appropriate job aids such as flip charts, samples of available FP methods etc. should be used to conduct the counselling session.

4.6.1 Choice of method

Clients should make their own informed choice of method. It is the counsellor's duty to assist them to make the right choice. Often the client has a particular method in mind. The counsellor could start by asking whether the client has any particular method in mind

4.6.2 Method-specific counselling

Once a client has chosen a FP method, method-specific counselling should be done as described below:

- Counsel every time a client visits: during the first visit and each subsequent visit.
- Ensure that privacy and confidentiality are maintained at all times.
- Establish rapport with the client.
- Ask the client what s/he knows about the specific method, assess if she has any myths and misconceptions about the method and if s/he has any past experience with the method.
- Provide information as relevant and clarify doubts. If the client is new, provide the information given below (**show the contraceptive chosen while providing information**):
 - effectiveness and return to fertility
 - side effects and what to do
 - mechanism of action
 - advantages, disadvantages
 - clarify myths and misconceptions
 - when to start using the contraceptive (in relation to menstrual period)
 - instructions on use (where relevant) emphasizing the importance of following instructions and what to do if the instructions are not followed
- If the client is convinced about the decision to use the method, assess the client for medical eligibility as detailed in Chapters 4, 5 and 6 to 14 on specific contraceptive methods. MEC wheel should be used.
- Record history and findings in the client record.
- If found eligible for using the method as described in Chapters 4, 5 and 6 to 14, demonstrate the use of the contraceptive or describe the procedure as described in specific sections in Chapters 6 to 15.
- Ask the client to repeat instructions (where relevant).
- Tell the client about:
 - Likely problems/side effects especially in the first three months and what to do in such situations
 - Situations when condom use (as back up method) is advised (risk of pregnancy due to non-compliance, conditions that affect the effectiveness of the method or exposure to STIs)
 - If condom use is advised, explain how to use the condoms (ask to repeat the instructions on the use of condoms). Explain how to store and dispose off the used condom.
 - Storing the contraceptive (where relevant)
 - Follow up.

4.6.3 If client has not considered a particular method

Assess the level of knowledge the client has about contraceptive or family planning methods that are available at the clinic.

Assess what her needs are: is it for birth spacing, delaying births or to limit births? Explain the methods available to the client and give additional information on the method chosen by the client. The following should be included:

- effectiveness of the method
- return to fertility
- how the method works and how it should be taken
- health and contraceptive advantages
- disadvantages
- possible side-effects
- encourage questions to discover and address the client's specific concerns and worries about myths and misconceptions she has heard about methods
- focus discussion on the advantages and disadvantages of the method chosen by the client
- specify the chosen method once the client has made up her mind, by asking a direct question: "Which method would you prefer?"
- if a client needs more time to think and decide, then reassure him/her that he/she can return at his/her convenience. Counsel him/her to use condoms in the meantime.
- Explain to the client about availability of Emergency Contraception (EC). Explain that EC is not a substitute for regular contraception.

4.6.4 Special situations

If the client chooses a method that is contraindicated to her health conditions then she should be assisted in choosing another method.

If the method chosen by the client is not available at the centre or clinic, then a referral should be made to another clinic where such facilities are available.

Offer the client an alternative method to be used until such time that the client can get the desired method.

If the client wants a permanent method (surgical method) then it must be explained that it is permanent and reversal may be impossible. One must not forget that informed consent should be taken.

Age and parity specifications for sterilization should be followed. Refer to Chapter 14 and 15 on voluntary surgical sterilization.

4.7 COUNSELLING DURING FOLLOW-UP VISIT

At each follow-up visit it is important to counsel the client to ensure the continuation of the method:

- Ask the client whether she and her spouse are satisfied with the method.
- Check if the client is still using the method and whether the method is being used correctly or not.

- Discuss any health changes that might have arisen since the client's last visit and confirm/rule out problems reported or identify any new conditions that are contraindications for use of the method. Record findings.
- Ask about any history of pelvic pain or discharge from the vagina or any history suggestive of STIs in the spouse.
- Check if she wishes to become pregnant and assist her to stop the method.
- Assist the client to choose another method if the client has developed conditions that are contraindications for the method.
- Ask about problems and reassure/resolve as required. (Refer to method specific Chapters 6 to 15 for further information.)
- If the client is continuing with the method, ask them to repeat the instructions and what to do if problems arise.
- Provide supplies (where relevant) and record this in the Client Card. Tell clients what to do in case they are late for supplies or inj

4.8 COUNSELLING A CLIENT WHO WANTS TO CHANGE OR STOP USING A METHOD

It is important to counsel a client who wants to change or stop using a method. Couple counselling should be encouraged where possible. If client's partner is not available, conduct the counselling anyway:

- If the client wants to stop the method because of wanting another child, tell them about return of fertility. Provide information on antenatal care and childbirth, and discuss postpartum FP.
- If the client is stopping the method because of dissatisfaction with the method, provide counselling (repeat the benefits and side effects for method of use). If still not convinced, counsel about other contraceptive methods.
- If the client is stopping the method due to side effects that have persisted in spite of management of the problem, counsel for other methods.
- If the client develops conditions that are contraindications for use of the method, counsel about other methods.
- Record findings, reasons for stopping the use of method/switching over to another method, and advice given.

4.9 SPOUSE'S WRITTEN CONSENT IS MANDATORY FOR PERFORMING THE SURGICAL STERILIZATION PROCEDURE IN BHUTAN

Below are the essential elements of voluntary surgical sterilization that the client must fully understand to obtain an informed consent:

- Temporary contraceptive methods are available.
- Voluntary sterilization is a surgical procedure.
- Risks as well as benefits are associated with the procedure, both of which must be explained.
- The procedure is permanent.
- Successful procedures result in the inability to bear any more children.
- There is a small possibility of method failure.
- The client can decide against the operation at any time (without losing the right to other medical, health, or other services or benefits).

Box 4.1 INFORMED CONSENT

Informed consent is the client's voluntary decision to undergo a family planning procedure, in full possession and understanding of the relevant facts.

In Bhutan, informed consent is taken verbally for temporary methods. Written consent should be taken for permanent methods i.e. female and male surgical sterilization. The consent form is a legal authorization for the procedure to be performed.

The consent form becomes a legal document when signed/marked by the client. A consent is valid and binding only if the client was fully informed and knowledgeable about the content of the consent before signing. Include a checklist in the informed consent about key information.

If a client is unable to read the consent form, staff must read or explain in detail the contents of the document in a language understood by the client.

Since surgical sterilization procedures are permanent, it is important that counselling is provided to both the client and spouse. It is mandatory to obtain a jointly signed consent.

The person executing the consent also must sign the document. The physician is the person ultimately responsible for ensuring that the informed consent is obtained with proper client understanding. Thus the physician's role is to see that the family planning staff have ensured that the client and spouse signed the informed consent form with full understanding.

CHAPTER 5: CLIENT ASSESSMENT

5.1 INTRODUCTION

Client assessment is necessary to ensure that clients are eligible for the use of the chosen method, and to ensure continuity of the method. The revised Medical Eligibility Criteria, 2015 and Selected Practice Recommendations for contraceptive use, 2016, WHO, have updated and removed a number of old contraindications and clinical tests/assessments that were previously required before initiating a contraceptive, based on the latest evidence and Guideline Development Group (GDG) recommendations. The revised recommendations for tests and examinations and eligibility criteria are also included in separate chapters with the methods.

Classification of examinations and tests before initiation of contraceptive methods- Selected Practice Recommendations (SPR), WHO 2016

Following classification (Box 5.1) is recommended by WHO in differentiating the applicability of the various examinations and tests before initiating a contraceptive:

Box 5.1: STANDARD PRACTICE RECOMMENDATIONS (WHO, 2016)

(Classification for conducting physical examination/ laboratory tests prior to initiating a contraceptive):

Class A = The examination or test is essential and mandatory in all circumstances for safe and effective use of the contraceptive method (for example, sterilisation procedures, pelvic examination for IUD insertion).

Class B = The examination or test contributes substantially to safe and effective use, but implementation may be considered within the public health and/or service context. The risk of not performing the examination or test should be balanced against the benefits of making the contraceptive method available (For example for initiating OCPs, DMPA Injection).

Class C = The examination or test does not contribute substantially to safe and effective use of the contraceptive method (For example Condoms, LAM).

These SPR recommendations apply to persons who are presumed to be healthy. Those with known medical problems or other special conditions may need additional examinations or tests before being confirmed as appropriate candidates for a particular contraceptive method.

Client assessment for contraceptive use also provides an opportunity to counsel women on reproductive health including RTI/STI and preventive healthcare.

5.2 CLIENT ASSESSMENT

5.2.1 History

In the case of new clients, a history should include the following:

Personal history:

Name, Age of the client, marital history

Reproductive health history:

Number of children ever born, mode of delivery, number living and their sex, age of last child, desire for more children.

If the last child is less than 6 months of age, history of breastfeeding, frequency, any supplementary feeding, etc.

Pap smear done or not? Though history of Pap smear is not a pre-requisite for adopting a FP method, it is an opportunity to discuss about it, wherever possible.

Menstrual history:

Date of last menstrual period, duration of cycles, regularity, etc.

Medical history:

History of heart disease, stroke, hypertension, diabetes, liver disease, cancer of the breast and genital tract, convulsions, migraine and mental illness, history of tuberculosis and convulsions, as some of the medicines affect the effectiveness of the oral contraceptives.

Surgical history

History of planned major surgery with possibilities of prolonged immobilization is important as the risk of deep vein thrombosis is high among such people. While the latest MEC recommends COC/ CHC use among women with superficial venous thrombosis and varicose veins (MEC Category 1) and women with superficial venous thrombosis (SVT) can generally use CHCs (MEC Category 2). COC/CHCs are not recommended in Deep Vein Thrombosis. History of abdominal major surgery will also be useful to decide the type of female sterilization, type of and the level of facility where female sterilization should be performed.

Contraceptive history:

History of contraceptive use and past experience with the method – this information is important while advising on a particular contraceptive.

History of Sexually Transmitted Infections (STI) and sexual history:

Women at increased risk of STIs can get an IUD inserted (MEC 2015 Category 2). However, women with very high individual risk of STI should not have an IUD inserted unless appropriate testing and treatment occur (MEC Category 3).

Follow-up clients: In case of revisiting clients, menstrual history, exposure to/risk of STIs, and any new medical problem/treatment and other information as relevant should be asked and recorded.

5.2.2 Physical examination

- **General and systematic examination** (e.g., pallor, jaundice, pulse, blood pressure- if possible)
- **Abdominal and pelvic examination** to rule out liver disease, pelvic inflammatory disease, determine eligibility for use of IUDs and pre-operative assessment for female sterilization
- **Breast examination** – Though breast examination is not mandatory, all clients should be educated on how to perform breast **self-examination** and advised to consult a doctor if any abnormality is noted.

5.3 RECORD

Findings should be recorded legibly in the client card / hospital/ clinic records. Tickler filing system to be maintained in all BHU and CHU of hospitals.

5.4 RULING OUT PREGNANCY

Pregnancy should be ruled out prior to the provision of contraceptive methods.

Indications for a pregnancy test

A pregnancy test is indicated in all clients who have one or more of the following:

- missed period/s
- abnormal vaginal bleeding
- irregular cycles
- lactating with irregular bleeding or amenorrhea
- Signs and symptoms of pregnancy such as (early morning nausea, vomiting, breast tenderness).

If it is not possible to perform a pregnancy test, Tool 5.1 can be used to be reasonably sure that the woman is not pregnant.

Tool 5.1: Checklist to determine with reasonable accuracy that the client is not pregnant

Tool 5.1: Client history to determine/ exclude pregnancy		
NO	Did your last menstrual period start within the past 7 days?	YES
NO	Were you abstaining from sexual intercourse since your last menstrual period or delivery?	YES
NO	Have you been using a contraceptive method consistently since your last menstrual period or delivery?	YES
NO	Have you had a baby in the last 4 weeks?	YES
NO	Are you fully or partially breastfeeding your newborn baby, who is less than 6 months old? Do you have lactational amenorrhoea?	YES
NO	Have you had a miscarriage or abortion in the past 7 days?	YES

↓

If the answer to all of the questions is "NO", pregnancy cannot be ruled out

Rule out pregnancy by other means such as pregnancy tests. Give her condoms until pregnancy is ruled out or her menstruation returns

↓

If the client answered "YES" to any of the above questions, and she is free from signs and symptoms of pregnancy, one can be reasonably sure that the client is not pregnant.

5.5 INTERPRETATION OF CONTRAINDICATIONS AND PRECAUTIONS

The definitions given below are more relevant for higher level facilities where specialists are available. In the case of BHUs and Health Centers, the classification provides guidance to the health worker on conditions that need a consultation with a specialist before providing the specific method.

Contraindications

A contraindication is any condition where there is unacceptable health risk if the contraceptive method is used. In such conditions, the method should not be advised. (MEC Category 4)

Precautions

A precaution is condition where the risk outweighs the advantages of the method. However, the method can be provided after consultation with a specialist and requires follow up. (MEC Category 3)

5.6 MEDICAL ELIGIBILITY CRITERIA -WORLD HEALTH ORGANIZATION (WHO)

The fifth edition of Medical Eligibility Criteria (MEC) 2015, the latest in the series of periodic updates by WHO, provides revised guidance on the safety of various contraceptive methods, for use in specific health conditions. The revised WHO MEC wheel can be used to identify whether the contraceptive method worsens the medical condition or whether the medical circumstance makes the contraceptive method less effective.

Box 5.2 MEC categories for contraceptive eligibility- WHO

Category 1 A condition for which there is no restriction for the use of the contraceptive method

Category 2 A condition where the advantages of using the method generally outweigh the theoretical or proven risks

Category 3 A condition where the theoretical or proven risks usually outweigh the advantages of using the method

Category 4 A condition which represents an unacceptable health risk if the contraceptive method is used.

Depending on the individual, more than one condition will need to be reconsidered before providing contraceptives. Characteristics, such as, age, weeks/ months after delivery, breastfeeding status, superficial venous thrombosis, hyperlipidemia, history of cardio-vascular disease, or liver disease etc., are to be considered for medical eligibility of a contraceptive.

Adherence to eligibility criteria helps in proper selection of clients, contributes to reducing the chances of side effects, leading to improved continuation of the method. The safety of the method should be weighed along with the benefits of preventing unintended pregnancy.

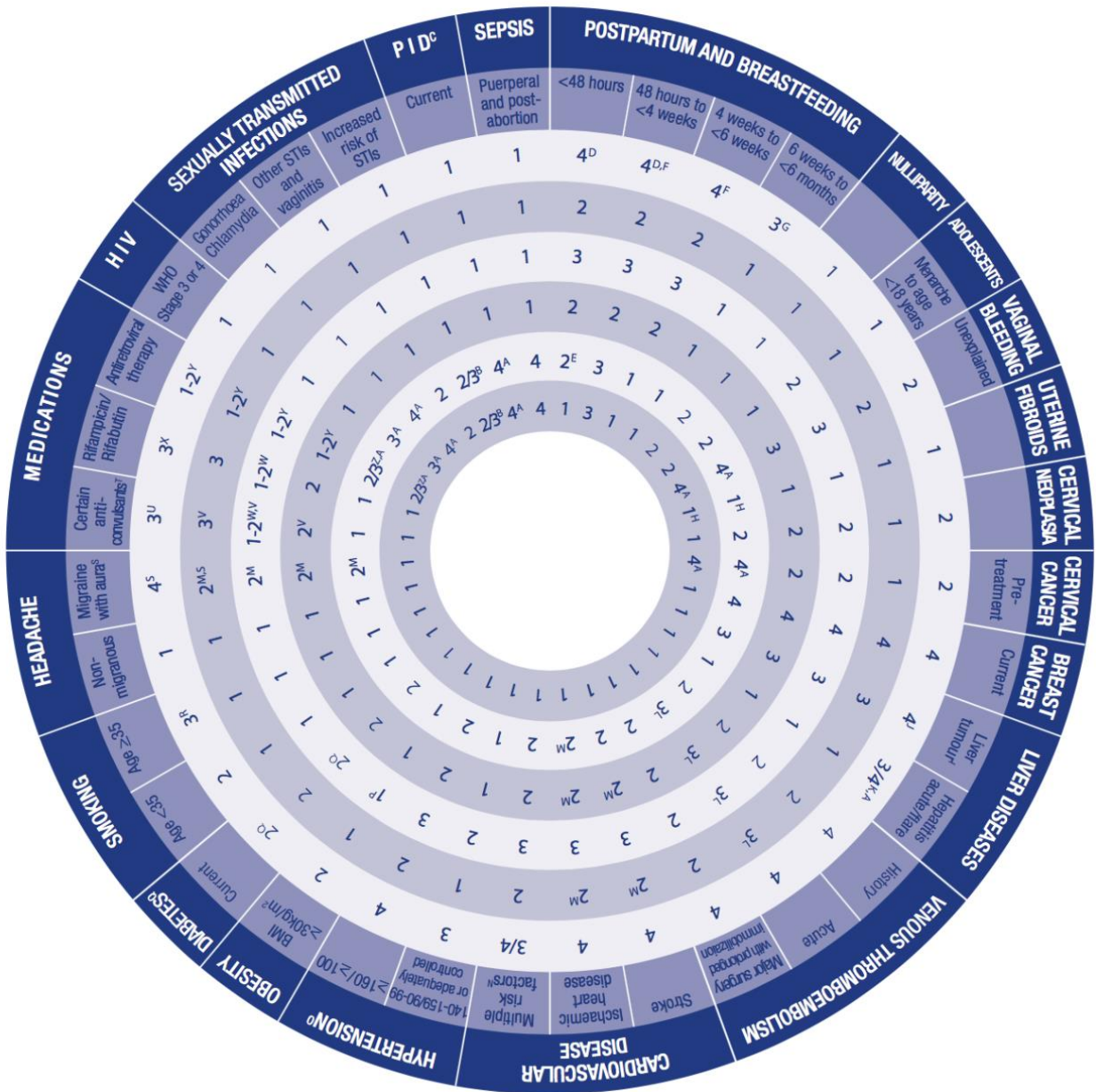
The eligibility criteria are based on evidence from studies, research and clinical experiences and are classified by WHO into four categories:

The Medical Eligibility Criteria wheel

The MEC wheel (Tool 5.2) guides family planning providers in recommending safe and effective contraception methods for women (and men) with medical conditions or medically-relevant characteristics, to find a contraceptive method that works for them. For each medical condition or medically relevant characteristic, contraceptive methods are placed into one of the four numbered categories (Box 5.2).

This simple classification enables family planning providers to provide contraception safely to clients who previously may have been excluded from methods because of a lack of clinical guidance.

Tool 5.2: Medical Eligibility Criteria (MEC) Wheel for Contraceptive Use 2015



CHAPTER 6: ESSENTIALS OF CONTRACEPTION

6.1 Physiology of Reproduction.

To understand most of the contraceptives methods that are to be discussed in the following sections, it is fundamental to understand the basic of female fertility, which unlike male, is cyclic. Menstruation, ovulation, fertilization and implantation are fundamental before the conception (pregnancy) takes place. These processes are described briefly below to help health care providers understand better of how contraceptives methods help to prevent pregnancy.

6.1.1 Menstruation and Ovulation:

A normal menstrual cycle consists of 28 days' cycle on average. At the beginning of each cycle, a group of follicles (small cysts) develop in both ovaries. One of them become bigger than the others and rupture on the 14th or 15th day of the menstruation, releasing an egg/oocyte (ovulation). This is picked up by the fimbrial end of the tubes. The egg/oocyte survives for 72 hours in the genital tract. During the pre-ovulatory phase or first half of the cycle, ovaries produce a hormone called estrogen, which induces the lining of uterus to grow (proliferative phase). After ovulation the burst follicle become corpus luteum, which produce progesterone. This hormone makes the glands in uterine lining ripen (secretory phase), making the uterus ready to receive the fertilized ovum. When there is no fertilization, the corpus luteum degenerates and does not produce any hormones. This leads to shedding of the uterine lining leading to menstruation.

6.1.2 Fertilization and implantation:

Female gamete (oocyte) is picked up by the fimbrial end of the Fallopian tube. Sperms are deposited in the posterior fornix during intercourse from where they penetrate the cervical mucous and swim up the uterine cavity. Sperms can survive for 2 to 7 days in the genital tract and the ovum up to 72 hours after ovulation. Some of the sperm reach the ampulla of the fallopian tube and meet the oocyte. Fertilization takes place here. The fertilized ovum then travel towards uterine cavity reaching there after 3 days. For 3 more days, it floats in the cavity of uterus before finally getting implanted. After implantation, it produces a hormone called Human Chorionic Gonadotropin (HCG), which will prevent degeneration of corpus luteum. This helps the pregnancy to go on till placenta is formed. Pregnancy test is positive because of this hormone and it is also responsible for morning sickness.

6.2 Choosing Contraception

A contraceptive selection is an important decision. An ineffective method can lead to serious consequences of an undesired pregnancy. An unsafe method can create unfortunate medical consequences. A method that does not fit the individual's personal life style is not likely to be accepted by the users. Contraceptives selection should be done by the user, taking into account the feelings and attitude of their partners. Counselling will help the clients decide and select contraceptives of their choice. The choice of contraceptive will depend upon several major factors like effectiveness, safety, personal considerations and additional non-contraceptive benefits and availability.

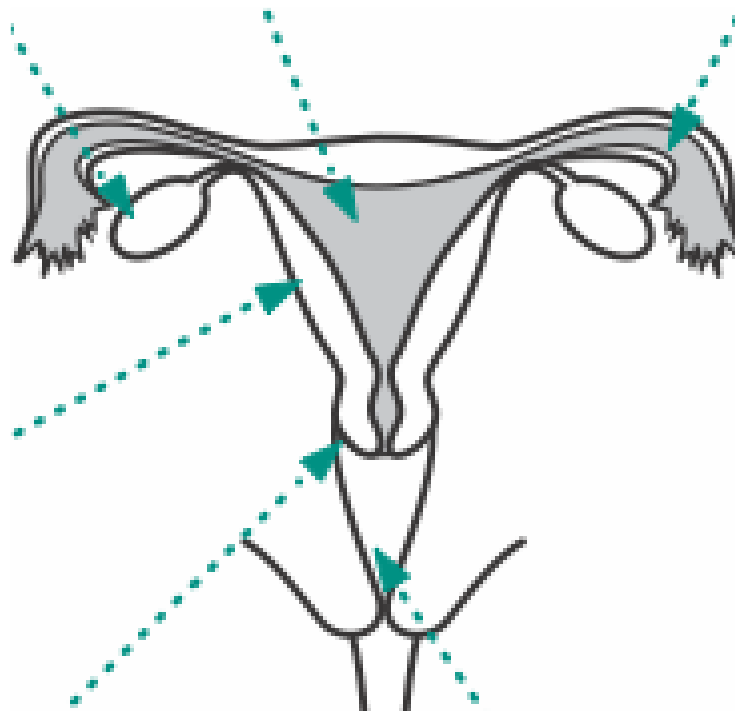
Figure 6.1: Female Anatomy and how contraceptives work in woman

Ovary: egg is developed here. One egg is released each month. Hormonal contraceptives prevent release of egg. Fertility awareness methods require avoiding unprotected sex around egg release

Uterine Cavity: fertilised egg grows here into a foetus. IUD is placed here. Cu ions in IUD prevents fertilisation in tubes and kills sperms and fertilized ova

Fallopian Tube: carries an ovum from the ovary each month. Fertilization (if sperm meets an ovum) happens here. These tubes are cut/blocked in sterilisation procedure

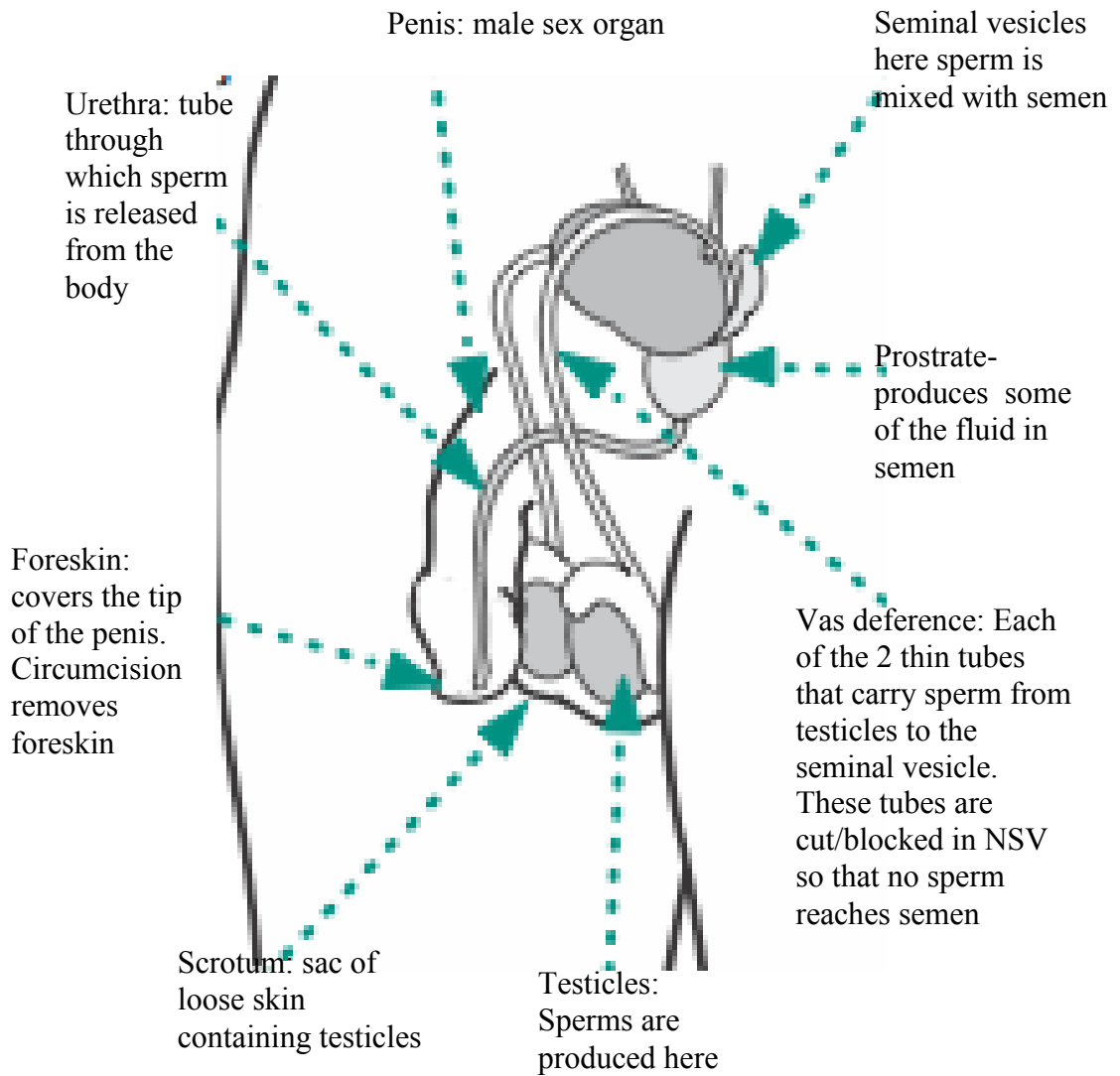
Endometrial lining: that gradually thickens and then shed each month



Cervix: Lower portion of uterus that extends into the vagina. It secretes mucus. Hormonal methods thicken the mucus, preventing sperm entry. Some natural methods require monitoring of this mucus.

Vagina: Connects outer sexual organs with the uterus. Female condom is placed here. Spermicides inserted into the vagina, kill sperms.

Figure 6.2: Male anatomy and how contraceptives work in men



CHAPTER 7: BARRIER METHOD

A. MALE CONDOMS

7.1 INTRODUCTION

Male condoms are sheaths manufactured from latex to be worn by the male partner over the erect penis and used throughout the sexual act.

7.2 MECHANISM OF ACTION

Work by forming a barrier that keeps sperm out of the vagina, preventing pregnancy. Also keep infections in semen, on the penis, or on the vagina from infecting the other partners

Box 7.1: Key Points for Providers and Clients

- Male condoms help protect against sexually transmitted infections, including HIV. Condoms are the only contraceptive method that can protect against both pregnancy and sexually transmitted infections.
- Require correct use with every act of sex for greatest effectiveness
- Require both male and female partner's cooperation
- Talking about condom use before sex can improve the chances one will be used.
- May dull the sensation of sex for some men. Discussion between partners sometimes can help overcome the objection

7.2 EFFECTIVENESS

Effectiveness depends on the user: Risk of pregnancy or sexually transmitted infection (STI) is greatest when condoms are not used with every act of sex.

7.2.1 PROTECTION AGAINST PREGNANCY

Effective with a first year failure rate of 2% for perfect user and 15 % for typical user. Pregnancy occurs because of inconsistent use and also due to breakage or slippage of condoms which are not so frequent.

7.2.2 PROTECTION AGAINST HIV AND OTHER STIS

- Male condoms significantly reduce the risk of becoming infected with HIV when used correctly with every sexual act.
- When used consistently and correctly, condom use prevents 80% to 95% of HIV transmission that would have occurred without condoms.
- Condoms reduce the risk of becoming infected with many STIs when used consistently and correctly

- Protect against STIs spread by discharge, such as HIV, gonorrhoea, and Chlamydia
- Also protects against STIs spread by skin-to-skin contact, such as herpes and human papillomavirus

7.3 ELIGIBILITY

No medical assessment is necessary except for those having severe allergic reaction to latex rubber which is very uncommon.

7.4 INDICATIONS

- Prevention of unwanted pregnancy
- Need for contraception is infrequent
- Back up method during other contraceptive use
- Following vasectomy operation for 3 months
- During lactational Amenorrhoea
- Protection from STIs/HIV

7.5 CONTRAINDICATION

- Allergy to latex or previous history of allergy to the latex

7.6 ADVANTAGES

- Easily available
- Encourages male participation in contraception
- Protect against PID, cervical cancer and male and female infertility
- Easy to use
- Prevents STIs/AIDS
- Prevent semen allergy in the female (where applicable)
- Avoids messy post coital discharge

7.7 DISADVANTAGES

- Interrupts the sexual act
- Disposal of used condoms sometimes is a problem
- Require to maintain stock
- Less effective as a contraceptive as compared to other contraceptives

7.8 HOW TO USE THE CONDOM

- Condoms must be used consistently and correctly.
- Use a new condom for each sexual act
- Avoid tearing the condom while opening. Do not use scissor, knife, blade and even teeth to open the packet
- Put the condom on erect penis before it comes into contact with female genitals.
- Roll it all the way to the base of the penis
- Leave ½ inch of empty space at the tip of the condom by pinching the tip while rolling

- After intercourse, withdraw the penis immediately holding the rim of the condom towards the male body, to avoid semen escaping on to the vulva/vagina.
- Discard properly after use by wrapping in a piece of paper and throw it into a dustbin. Make a knot in the middle before wrapping to prevent spillage

7.9 METHOD FAILURE MAY BE DUE TO

- Breakage of condom (accidental)
- Inconsistent and improper use
- Careless removal of the condom

If any of the above happens, report to the nearest health facility for advice and backup emergency contraceptive pills

7.10 STORAGE

Store condom in a cool place, away from sunlight and children and remove from the package only at the time of use. A condom is usually damaged if the packet is open; color has changed and is more than 5 years from the manufacturing date.

Correcting Myths and misunderstandings of male condoms:

- Do not make men sterile, impotent, or weak
- Do not decrease men's sex drive
- Cannot get lost in the woman's body
- Do not have holes that HIV can pass through
- Are not laced with HIV
- Do not cause illness in a woman because they prevent semen or sperm from entering her body
- Are used by married couples. They are not only for use outside marriage

B. FEMALE CONDOM

Sheaths, or linings, that fit loosely inside a woman's vagina, made of thin, transparent, soft plastic film.

- have flexible rings at both ends
- One ring at the closed end helps to insert the condom
- The ring at the open end holds part of the condom outside the vagina

- This method is intended to be used in selected high-risk population like those at high risk at STIs/HIV

Box 7.2: KEY POINTS FOR PROVIDERS AND CLIENTS

- Female condoms help protect against sexually transmitted infections, including HIV. Condoms are the only contraceptive method that can protect against both pregnancy and sexually transmitted infections.
- Require correct use with every act of sex for greatest effectiveness
- A woman can initiate female condom use, but the method requires her partner’s cooperation.
- May require some practice. Inserting and removing the female condom from the vagina becomes easier with experience

7.12.1 MECHANISM OF ACTION:

It acts as a barrier and prevents sperms from entering the vaginal canal. Before sexual intercourse the women places the closed end of the condom high up in the vagina, therefore, the condoms works as a barrier and prevents sperms from entering the vaginal canal.

7.12.2 EFFECTIVENESS

It is an effective method, with First Year failure rate of 5% for correct and consistent use and 21% for typical use.

7.12. 3 ELIGIBILITY:

No medical assessment is necessary.

7.12.4 INDICATIONS

- Prevention of unwanted pregnancy
- Protection from STI/HIV
- Male partner refuses to use condom

7.12.5 CONTRA INDICATION

- None

7.12.6 ADVANTAGES

- Prevents both STIs and unwanted pregnancy.
- Controlled by the women
- No contra indication to use
- No apparent side effect, no allergic reaction.
- Does not interrupt sexual act

7.12.7 DISADVANTAGES

- Access is limited
- Women must touch her genitals during insertion
- Partner must agree
- Must keep sufficient stock
- Need Privacy

7.12.8 HOW TO USE FEMALE CONDOM

- One condom for one use
- Tear open a packet and pull out the condom
- Rub the condom to spread lubricant
- Choose a comfortable position— squat, raise one leg, sit or lie down
- Squeeze the inner ring at the closed end
- Gently insert the inner ring into the vagina
- Place the index finger inside condom, and push the inner ring up as far as it will go
- Make sure the outer ring is outside the vagina and the condom is not twisted
- Be sure that the penis enters inside the condom and stays in it during intercourse
- To remove, twist the outer ring and gently pull
- Dispose the condom properly

CHAPTER 8: HORMONAL CONTRACEPTIVES

8.1 INTRODUCTION

Hormonal contraceptives are prepared from synthetic female hormones. These groups of contraceptives act primarily by suppressing ovulation. These hormones also alter the normal response of uterus during the menstrual cycle. The currently available hormonal contraceptives are for female use only. The following are the contraceptives offered through the program:-

- Combined Oral contraceptive pills
- Injectable hormonal Contraception - DMPA

8.2 COMBINED ORAL CONTRACEPTIVE PILLS (COCS)

- Pills that contain low doses of 2 hormones: a progestin and an estrogen, like the natural hormones progesterone and estrogen in a woman's body.
- Combined oral contraceptives (COCs) are also called "the Pill," low-dose combined pills, OCPs, and OCs.
- Work primarily by preventing the release of eggs from the ovaries (ovulation).

Currently used combined pills are supplied in strip of 28 tablets. The 21 white tablets contain hormone and the rest (red tablet) are placebo containing iron. The hormone content of the "white pills" are as follows:

- Ethinyl oestradiol (Synthetic Steroidal estrogen) - 30 microgram (0.03mg)
- Levonorgestrel (Progesteron Derivative) 150 microgram (0.15mg).

8.3 EFFECTIVENESS

Effectiveness depends on the user: Risk of pregnancy is greatest when a woman starts a new pill pack 3 or more days late, or misses 3 or more pills near the beginning or end of a pill pack.

- As commonly used, there are about 8 pregnancies per 100 women using COCs over the first year. This means that 92 of every 100 women using COCs will not become pregnant.
- When no pill-taking mistakes are made, there are less than 1 pregnancy per 100 women using COCs over the first year (3 per 1,000 women).

8.4 MECHANISM OF ACTION

- Inhibits ovulation and accelerates ovum transport through the fallopian tubes
- Thickens cervical mucus thus inhibiting sperm entry
- Inhibits endometrial growth thereby reducing the receptivity of the endometrium to the blastocyst (fertilized ovum).

8.5 ADVANTAGES

- Easy to use
- Very effective if taken regularly
- Does not interfere with sexual intercourse
- Fertility returns immediately when discontinued
- Can be given to nulliparous women
- It is extremely safe for young women

- Relieves menstrual cramps
- Decreases the amount of menstrual blood loss (improves anaemia)
- Regularizes the menstrual cycle
- Offers some protection against symptomatic Pelvic Inflammatory Disease
- Gives some protection for ovarian/endometrial cancer
- Polycystic Ovarian Disease (PCOD) and Acne improved
- Relieves premenstrual syndrome

8.6 DISADVANTAGES

- Pill must be taken every day, at the same time (compliance)
- Not recommended for lactating mothers before six months
- No protection for HIV/AIDS¹¹
- Associated with side effects (headache, weight gain, breast tenderness, nausea, missed periods, spotting and breakthrough bleeding especially in the initial period of use.
- Diarrhoea and vomiting reduces efficacy due to reduced absorption
- Can cause thrombo embolism, stroke and heart attack etc

8.7 WOMEN CAN BEGIN USING COCS

- Without a pelvic examination
- Without any blood tests or other routine laboratory tests
- Without cervical cancer screening
- Without a breast examination
- Even when a woman is not having monthly bleeding at the time, if it is reasonably certain she is not pregnant

8.8 RETURN TO FERTILITY

- Immediate after discontinuation

8.9 PROTECTION AGAINST STI /HIV –

- COC has no protection against STI/HIV
- For women at high risk of HIV:WHO recommends no restrictions for COC

Box 8.1: Combined Oral Contraceptive for Women with HIV

- Women can safely use COCs even if they are infected with HIV, have AIDS, or are on antiretroviral (ARV) therapy unless their therapy includes ritonavir. Ritonavir may reduce the effectiveness of COCs
- Urge these women to use condoms along with COCs. Used consistently and correctly, condoms help prevent transmission of HIV and other STIs. Condoms also provide extra contraceptive protection for women on ARV therapy.

8.11 GIVING ADVICE ON SIDE EFFECTS

8.11.1 Describe the most common side effects

- In the first few months, bleeding at unexpected times (irregular bleeding). Then lighter, shorter, and more regular monthly bleeding.
- Headaches, breast tenderness, weight change, and possibly other side effects.

8.11.2 Explain about these side effects

- Side effects are not signs of illness.
- Most side effects usually become less or stop within the first few months of using COCs. Common, but some women do not have them.

8.11.3 Explain what to do in case of side effects

- Keep taking COCs. Skipping pills risks pregnancy and can make some side effects worse.
- Take each pill at the same time every day to help reduce irregular bleeding and also help with remembering.
- Take pills with food or at bedtime to help avoid nausea.
- The client can come back for help if side effects bother her.

Phase	Recommended Guidelines
Woman having a menstrual cycle	Within 5 days of the start of her menstrual cycle
5 days after her menstrual cycle	She can start COCs but will need to abstain from sexual intercourse or use contraceptive protection for the next 7 days.
Breastfeeding and more than six months after giving birth	<u>If she has lactational amenorrhoea:</u> She can start COCs if it is reasonably certain that she is not pregnant. She will need to abstain from sexual intercourse or use contraceptive protection for the next 7 days <u>If her monthly bleeding has returned:</u> she can start start COCs as above
Amenorrhoea	Any day if reasonably certain that she is not pregnant She will need to abstain from sexual intercourse or use contraceptive protection for the next 7 days

Table 8.1: When to start COCs	
Phase	Recommended Guidelines
Switching from another hormonal method	<p>If she is using a hormonal method consistently and correctly, and it is reasonably certain that she is not pregnant, she can start COCs immediately</p> <p>If her previous method was injectable depo-provera, she can start COC from the time when repeat injection would have been due. No additional protection is required</p>
Switching from non-hormonal methods	<p>She can start COCs within 5 days of the start of her menstrual cycle. If it has been more than 5 days after the menstrual cycle and it is reasonably certain that she is not pregnant, COCs can be started with a backup contraceptive for the next 7 days</p>
Switching from IUD (including hormonal IUD)	<p>If she is switching from an IUD, she can start COCs immediately. Follow similar instructions as for post-menstrual</p>
After taking Emergency Contraceptive pills	<p>She can start COCs the day after the same day she finishes taking the ECPs. There is no need to wait for her next monthly bleeding to start her pills. Woman will need a backup contraceptive method for 7 days .</p>

Thorough counseling about bleeding changes and other side effects is an important part of providing the method. Counseling about bleeding changes may be the most important help a woman needs to keep using the method.

8.12 ELIGIBILITY CRITERIA

Combined oral contraceptive pills (COCs) should be provided to any woman who requests COC, receives appropriate counselling, makes an informed decision and who does not have any contraindications for its use.

8.12.1 Eligibility criteria for low dose combined contraceptive pills (which women can safely use COCs)

In general, most women can use low dose combined oral contraceptives safely and effectively in the following circumstances:

- If they have or do not have children
- Are fat or thin
- Are of any age, including adolescents and over 40 (upto 40 years MEC cat 1 and > 40 years MEC Cat 2)
- Smoke cigarettes but are under 35 years of age
- Have just had an abortion or miscarriage (can be provided COCs before discharge)
- Are infected with HIV, whether or not on antiretroviral therapy, unless that therapy includes ritonavir
- Are married or not
- Have heavy, painful menstrual periods or iron deficiency anaemia (condition may improve)
- Have irregular menstrual periods
- Have benign breast disease
- Have diabetes **without** vascular, kidney, eye or nerve disease and for less than 20 years
- Have mild headaches (non-migraine headache)
- Have Varicose veins
- Have Superficial venous thrombosis (MEC cat 2)
- Women who are more than 42 days postpartum can use COCs, if they are not breastfeeding. (Cat 1). If breastfeeding, follow criteria as below in table 8.1
- Women with known dyslipidemias without other cardio-vascular risk factors (MEC Cat 2)
- Thyroid disease
- Pelvic inflammatory disease
- Endometriosis
- Benign ovarian tumour
- Uterine fibroids
- Past ectopic pregnancy
- Tuberculosis, and not taking Rifampicin
- Past history of molar pregnancy

8.12.2 Women with following conditions have an unacceptable health risks with Combined Oral Contraceptives (COCs) and such women should NOT use COCs

- Breastfeeding women within 6 weeks to 6 months of postpartum
- Women aged more than 35 years, who smoke more than 15 cigarettes per day
- Multiple risk factors for arterial cardiovascular disease
- Having hypertension with systolic BP 140-159 and diastolic 90-99 and more and those having vascular disease.
- Women with a clear history of deep vein thrombosis (DVT), pulmonary thrombosis or current DVT
- Women having known thrombogenic mutations.
- Current history of ischemic heart disease or known hyperlipidaemias
- Those suffering from complicated pulmonary hypertension, risk of atrial fibrillation, history of subacute bacterial endocarditis
- Migraine with aura
- Current breast cancer

- Current uterine cancer
- Diabetes with neuropathy, retinopathy, nephropathy and other vascular disease
- Acute hepatitis or severe cirrhosis of the liver or benign or malignant liver tumours

8.12.3 Important clarifications and evidences regarding eligibility criteria

1. COC users who smoke are at increased risk of cardiovascular diseases, especially myocardial infarction, compared to those who do not smoke. Risk of myocardial infarction increases with the increase in the number of cigarettes smoked per day.
2. It is desirable to have the blood pressure measured before initiation of COC. However, if it is not possible to measure the blood pressure, and or risks due to pregnancy morbidity / mortality are higher, women should not be denied use of COCs, just because blood pressure cannot be measured. Such women can be advised to have their blood pressure measured within three months of initiation of COCs.
3. In women with a history of high blood pressure, evaluation of the cause and level should be done as soon as possible. Women with known hypertension should NOT use COCs unless other more appropriate methods are unavailable/unacceptable.
4. Women with thrombogenic mutations, using COCs, are known to have 2 to 20 times higher risk of thrombosis than non users. Therefore, COCs are not recommended for women having thrombogenic mutations. However, COCs can be safely given to women with superficial venous thrombosis.
5. Among women with migraine, women who had aura had a higher risk of stroke than women without aura. Therefore, in women having migraine with aura, and who are more than 35 years, should not be given COCs.
6. Women with depressive disorders can safely take COCs as the evidence suggests that COCs do not increase depressive symptoms.
7. In women with heavy and prolonged bleeding and unexpected vaginal bleeding, underlying pathological conditions (such as pelvic malignancy) should be excluded before COC.
8. COCs may worsen existing gall bladder disease.
9. COCs can be safely used in women with dysmenorrhea. In some COC users dysmenorrhoea symptoms were reported to be reduced.
10. COCs can be safely used in women with trophoblastic disease, benign breast disease, family history of cancer, women with pelvic inflammatory disease and STI and HIV.

11. Women with diabetes and with non-vascular disease can generally use COCs. But those women having diabetes with neuro/ retinopathy and other vascular diseases should not use COCs.
12. Women taking Rifampicin or certain anti-convulsants (phenytoin, carbamazepine, barbiturates, rimidone, topiramate, oxcarbamazepine) should be prescribed COCs only if other appropriate contraceptives are either unavailable or unacceptable. Although interaction of these drugs with COCs are not harmful, these drugs are likely to reduce the effectiveness of COCs. Women on long term use of any of these drugs should be provided other contraceptive choices. Whether increasing the dose of hormones in COCs is useful in these cases is still not clear.
13. Contraceptive effectiveness of COCs is not affected by co-administration of most of the broad spectrum antibiotics.
14. Women who are breastfeeding and more than 6 months postpartum can take COCs.(MEC Cat 2/ WHO's latest 2015 Guidelines) Women who are breastfeeding and less than 6 months postpartum, should not take COCs.

8.13 COUNSELLING AND INFORMED CHOICE

All COC clients must receive appropriate counselling for selecting and using the method. Encourage clients to ask all their questions so that any uncertainties, misunderstandings and rumours can be cleared up. Counsel clients that COCs do not protect against STI or HIV/AIDS.

8.13.1 Method specific counselling includes

- Effectiveness, the need to use correctly and consistently, and the return to fertility (a woman who stops COC can become pregnant soon after stopping)
- Mechanism of action, disadvantages and advantages
- Alternative methods of family planning
- Rumours about oral contraceptive pills (*refer to Appendix 4*)
- How to take the pill consistently and correctly (provide written instructions as well); not to stop COC when husband is away
- How to take the pill based on the type of packaging, i.e. 28 day package or 21 day package
- What to do if
 - she misses pills or has vomiting and diarrhoea
- Side effects: minor side effects are most common in the first three months of use of the pill. These disappear with continued use of the pill
- The client should use condoms in addition if she thinks there is any chance that she or her partner are at risk for exposure to STI, including HIV/AIDS
- Counsel clients that breast self examination should be done regularly and that hormonal contraceptives are contraindicated in women with breast cancer
- Where to go for repeat supplies and follow up support

8.13.2 Instruction for users

One pill from a packet to be taken daily preferably at the same time without interruption. For the first time users of OCP provide one cycle of the pills in the first visit and arrange for re visit two to three days before the tablets are finished. Pills should be taken daily regardless of sexual activities. (Some women think they need not take pills when their husband is away)

8.14 FOLLOW UP SCHEDULE AND RE- SUPPLY

The first follow up visit should be two to three days before the pill cycle is completed. After the first follow up visit the women may be provided with three cycles of pills.

Planning the Next Visit

1. Encourage her to come back for more pills before she uses up her supply of pills.
2. Some women can benefit from contact after 3 months of COC use. This offers an opportunity to answer any questions, help with any problems, and check on correct use.

Helping Continuing Users

1. Ask how the client is doing with the method and whether she is satisfied. Ask if she has any questions or anything to discuss.
2. Ask especially if she is concerned about bleeding changes. Give her any information or help that she needs (see Managing Any Problems).
3. Ask if she often has problems remembering to take a pill every day. If so, discuss ways to remember, making up missed pills, and ECPs, or choosing another method.
4. Give her more pill packs—three months supply. Plan her next resupply visit before she will need more pills.
5. Every year or so, check blood pressure if possible (see Medical Eligibility Criteria).
6. Ask a long-term client if she has had any new health problems since her last visit. Address new health problems that may require switching methods.
7. Ask a long-term client about major life changes that may affect her needs—particularly plans for having children and STI/HIV risk. Follow up as needed.

8.15 MANAGING MISSED PILLS

It is easy to forget a pill or to be late in taking it. COC users should know what to do if they forget to take pills. **If a woman misses one or more pills, she should follow the instructions below.** Use the tool on the inside back cover to help explain these instructions to the client.

8.15.1 Making Up Missed Pills

Key message

- **Take a missed hormonal pill as soon as possible.**
- Keep taking pills as usual, one each day. (She may take 2 pills at the same time or on the same day.)

Missed 1 or 2 pills? Started new pack 1 or 2 days late?

- Take a hormonal pill as soon as possible.
- Little or no risk of pregnancy.

Missed pills 3 or more days in a row in the first or second week? Started new pack 3 or more days late?

- Take the pill as soon as possible.
- Use a backup method for the next 7 days.
- Also, if she had sex in the past 5 days, can consider ECPs (see Emergency Contraceptive Pills).

Missed 3 or more pills in the third week?

- Take a hormonal pill as soon as possible.
- Finish all hormonal pills in the pack. Throw away the 7 non hormonal pills in a 28-pill pack.
- Start a new pack the next day.
- Use a backup method for the next 7 days.
- Also, if she had sex in the past 5 days, can consider ECPs (see Emergency Contraceptive Pills).

Missed any non hormonal pills? (Last 7 pills in 28-pill pack)

- Discard the missed non hormonal pill(s).
- Keep taking COCs, one each day. Start the new pack as usual.

Severe vomiting or diarrhoea

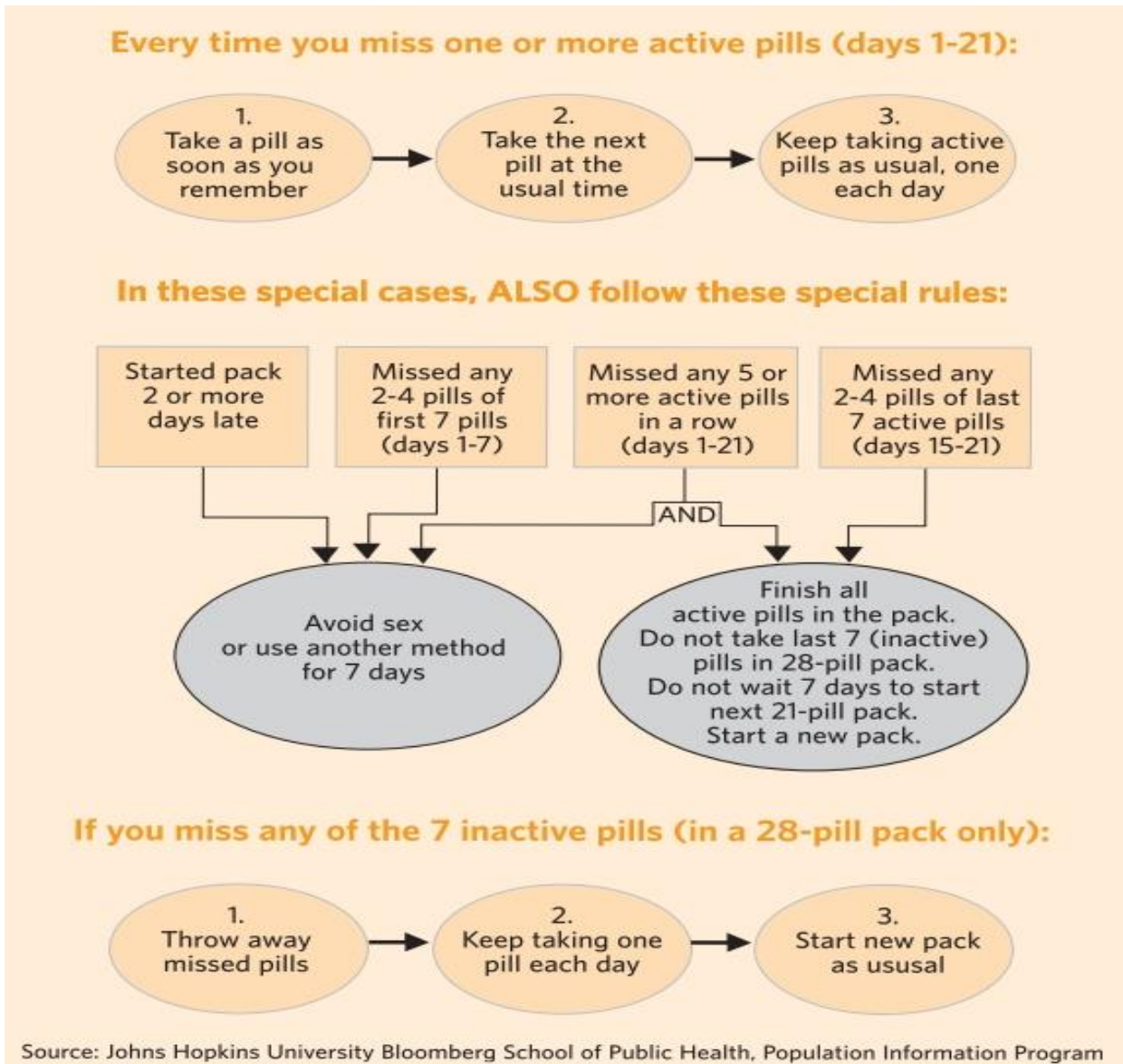
- If she vomits within 2 hours after taking a pill, she should take another pill from her pack as soon as possible, then keep taking pills as usual.
- If she has vomiting or diarrhoea for more than 2 days, follow instructions for 3 or more missed pills, above.
- If required, provide an anti-emetic.

“Come Back Any Time”: Reasons to Return

Assure every client that she is welcome to come back any time—for example, if she has problems, questions, or wants another method; she has any major change in health status; or she thinks she might be pregnant. Also if:

- She lost her pills or started a new pack more than 3 days late and also had sex during this time. She may wish to consider ECPs (see Emergency Contraceptive Pills).

General health advice: Anyone who suddenly feels that something is seriously wrong with her health should immediately seek medical care from a nurse or doctor. Her contraceptive method is most likely not the cause of the condition, but she should tell the nurse or doctor what method she is using.



CHAPTER 9: INJECTABLE CONTRACEPTIVES

9.1 INTRODUCTION

The progestogen-only injectable contraceptives (POI) are synthetic steroid hormones resembling the female hormone progesterone produced by the ovaries. The injectable hormone is released slowly into the bloodstream from the site of the injection.

About 12 million women are using POIs worldwide. Women prefer POIs because they are safe, effective, do not require daily action, maintain privacy and can be used by women who are breastfeeding.

The most widely used and extensively studied preparation is the 3 monthly Depo-medroxy Progesterone Acetate (DMPA). NET-EN (Norethidrone enanthate) 2 monthly injection is also available. Both these are highly effective, reversible and reliable contraceptives. DMPA-SC, available in some countries, is given subcutaneously.

Alternate, monthly injectable contraceptives, containing long acting progesterone with short acting oestrogen Cyclofem (25 mg DMPA + 15 mg estradiol cypionate) and Mesigyna (50 mg NET EN + 5 mg estradiol valerate) are available.

9.2 TYPE OF PROGESTOGEN-ONLY INJECTABLE (POI) USED IN BHUTAN

Currently depot-medroxy progesterone acetate (DMPA) known as Depo-Provera is the injectable contraceptive widely available in Bhutan. Each dose of DMPA/Depo- Provera contains 150 mg of medroxy progesterone acetate and is given every 3 months (12 weeks) as deep intramuscular injection.

9.3 MECHANISM OF ACTION

Progesterone only Injectables act as a contraceptive by:

- inhibiting ovulation by preventing LH surge and lowering FSH and LH
- thickening the cervical mucus
- rendering endometrium less suitable for implantation
- reducing mobility of fallopian tubes causing reduction in rate of ovum transport

9.4 EFFECTIVENESS AND RETURN TO FERTILITY

Effectiveness

- Progestogen-only injectables i.e. DMPA/ Depo-Provera are effective reversible contraceptive methods.
- DMPA/ Depo-Provera (150 mg) given every 3 months has an effectiveness of 99.7% on correct use.
- Typical use effectiveness of POI is 97%.
- Delayed return of fertility, usually about 10 months after the last dose of DMPA.

9.5 MEDICAL ELIGIBILITY CHECKLIST

DMPA/Depo-Provera can be safely provided to most women who:

- prefer a method that does not require taking contraceptive action every day or before having intercourse, or want long-term birth spacing or have the number of children they want but do not want or cannot have a permanent method (voluntary surgical sterilization) at this time
- have or do not have children
- are **breastfeeding** and **more than 6 weeks postpartum**. For women who are less than 6 weeks postpartum and breastfeeding, DMPA is not a safe choice (WHO Category 3).
- cannot use estrogen containing contraception i.e. COC, or have developed estrogen related complications while taking COCs
- smoke cigarettes, regardless of the number of cigarettes smoked per day and age of the woman
- at any age including adolescents and women over 40 years of age.
- have just had an abortion or miscarriage
- are infected with HIV, whether on anti-retroviral treatment or not.
- have benign breast disease
- have mild headaches
- have mild or moderate blood pressure
- history of ectopic pregnancy
- endometriosis
- iron deficiency anaemia
- varicose veins
- valvular heart disease
- irregular menstrual periods
- sickle cell disease
- thyroid disease
- uterine fibroid
- epilepsy
- tuberculosis

9.6 CONTRAINDICATIONS FOR DMPA:

- pregnancy
- breastfeeding less than 6 weeks baby
- severe liver disease (jaundice, cirrhosis, tumour)
- history of very high blood pressure (> 160/100 mm Hg)
- history of diabetes for more than 20 years with damage to arteries, nervous system and kidneys
- history of stroke, heart attack
- history of breast cancer
- unexplained irregular vaginal bleeding (DMPA may interfere in proper diagnosis)

9.7 COUNSELLING AND INFORMED CHOICE

All clients must receive appropriate counselling for selecting and using the method. Encourage clients to ask all their questions so that any uncertainties and misunderstandings can be cleared up. Counselling and informed decision helps client in accepting and continuing a contraceptive

method. It is important to address her queries and explain advantages, disadvantages and side effects of the method including menstrual irregularities.

Counsel clients that hormonal injectables do not protect against STIs or HIV/AIDS. For selecting the method, counsel about:

- Effectiveness and the delay to return to fertility
- Advantages and disadvantages
- Alternative family planning methods
- Timing of injection
- Ensure that the client has understood the importance of regular injections and how often they should be taken.
- Make sure that the woman understands about the side effects such as amenorrhea, bleeding/spotting and delayed return of fertility.
- The client should use condoms in addition if she thinks there is any chance that she or her partner are at risk for exposure to STIs, including HIV/AIDS.

9.8 CLINICAL ASSESSMENT

The purpose of the health assessment is to determine the client's suitability for the use of the method. In healthy women, no examination, laboratory tests are required or mandatory before initiating DMPA. However, there is special consideration for blood pressure screening. It is desirable to have blood pressure measurements taken before initiating DMPA. It is important to note that in situations where blood pressure measurement is not possible, the client should not be refused the method. They can still get the first dose of DMPA and get blood pressure checked later.

Pregnancy should be ruled out prior to the provision of contraception. A pregnancy test should be done if there is any suspicion of pregnancy.

It is also an opportunity to assess for any STI/RTI related concerns and if the client has any symptoms related to STI/RTI and to offer other available sexual and reproductive health services as appropriate.

9.9 PROVISION OF DMPA/ PROGESTOGEN-ONLY INJECTABLES

9.9.1 Starting POI

POI should be initiated only after ruling out pregnancy. A pregnancy test should be done if there is any suspicion of pregnancy. If pregnancy test is not possible, follow "Tool/ Checklist to determine with reasonable accuracy that the client is not pregnant)

Table 9.1: When to start DMPA/ POI

Situation	When to start DMPA/ POI Injection
Having menstrual cycles	<ul style="list-style-type: none"> - Within 7 days of the menstrual cycle: she can take the first dose of DMPA injection. No other protection is required. - More than 7 days since the start of menstrual bleeding: She can still take the DMPA injection, if it is reasonably certain that she is not pregnant. She will need to abstain or use a backup contraceptive for the next 7 days.
Amenorrhoea	<ul style="list-style-type: none"> - She can take the DMPA injection, if it is reasonably certain that she is not pregnant. She will also need to abstain or use a backup contraceptive (for example condom) for the next 7 days.
Breastfeeding	<ul style="list-style-type: none"> - From 6 weeks to 6 months after delivery, exclusive breastfeeding and having amenorrhoea: First DMPA injection can be given. No backup required. - More than 6 weeks after delivery and menstruation has returned: First dose of DMPA can be given as for women with menstrual cycles. - Less than 6 weeks after delivery and breastfeeding: DMPA/POI is not recommended. Advise another method.
Postpartum and not breastfeeding	<ul style="list-style-type: none"> - Less than 21 days after delivery: DMPA/ POI can be started. No backup is required. - More than 21 days after delivery and menstrual cycles have not returned: DMPA can be started if it is reasonably certain that she is not pregnant. Backup method for 7 days will be required. - Menstrual cycles have returned: DMPA/POI to be given as advised for women with menstrual cycles
Post-abortion/miscarriage	<ul style="list-style-type: none"> - The first DMPA/POI injection can be given immediately after abortion. No additional backup is required.
Switching from another hormonal method	<ul style="list-style-type: none"> - If the woman is using another hormonal method correctly and consistently or if it is reasonably certain that she is not pregnant: DMPA/POI can be given immediately. No need to wait for her menstrual cycle . - If her previous method was another injectable contraceptive: DMPA/POI to be given when the repeat injection of the previous method would have been due.

Table 9.1: When to start DMPA/ POI

Situation	When to start DMPA/ POI Injection
Switching from a non-hormonal method (other than IUD)	<ul style="list-style-type: none"> - She can take the DMPA injection immediately if it is reasonably certain that she is not pregnant. No need to wait for the next menstrual cycle. - Within 7 days of start of her menstrual cycle: Can take DMPA/ POI. No need for additional contraceptive protection. - More than 7 days since start of menstruation: Can take DMPA/POI. Will need to abstain from sex or use a backup contraceptive for the next 7 days.
Switching from IUD (including LNG IUD)	<ul style="list-style-type: none"> - Within 7 days of start of her menstrual cycle: Can take DMPA/ POI. No need for additional contraceptive protection. The IUD can be removed at that time. - More than 7 days since start of menstruation: Can take DMPA/POI if reasonably sure that she is not pregnant. If sexually active in this cycle, IUD should be removed at her next cycle for contraceptive protection over the period. - If the woman has amenorrhoea: Can have the DMPA/ POI injection as advised for other amenorrhoeic women.
After taking the Emergency contraceptive pills(ECPS)	<ul style="list-style-type: none"> - On the same day as the ECP, or if preferred within 7 days after the start of her monthly bleeding. Need to provide the back up method for the first 7 days after the injection. - Ask women to return if she has signs or symptoms of pregnancy other than not having monthly bleeding

Remark:

In the context of switching from an IUD to an injectable contraceptive, experts had some concerns about the risk of pregnancy when removing an IUD within a cycle where there has already been intercourse. That concern led to the recommendation that IUD should be left in place until the next menstrual period.

Explain how to use DMPA

- Give the injection
 - Plan a return visit after 3 months for the repeat injection
- Ask the client to come back anytime if she has any questions/ problems or wants to switch to another method

9.9.2 Give advice on common side effects/ problems:

Repeat the advice about when to return for a repeat injection and if she has any concerns (verbal and written).

Repeat the side effects and advise to return anytime to the provider. Advise her to report if she experiences any of the symptoms or side effects.

9.10 ROUTINE FOLLOW-UP CARE

All clients initiated on DMPA injectable are advised to make regular follow up visits every three months (12 weeks)

Return to the facility earlier if she has any concerns, side-effects or if she wants to change the method.

Contact a doctor immediately if she has any of the warning signs such as extremely heavy bleeding, very severe headaches, yellow skin or eyes or possible pregnancy

At follow-up:

- Assess the client's satisfaction with the method.
- Determine if the client has had any problems or side effects and if so, record them in the client clinical card/record.
- Check if the client is experiencing any new headaches or marked changes in headaches.
- Assess for any STI/RTI related concerns and if the client has any symptoms related to STI/RTI.
- Update the medical history; measure blood pressure and perform any examination indicated by the history.
- Provide appropriate counselling and/or treatment as required.
- Refer the client to an appropriate referral facility/speciality if any serious problems or side effects cannot be managed at the facility where the client has attended for follow up care. Provide referral slip.
- Update client's contact information (address, telephone number etc).
- Provide date for next follow up visits for repeat injection.

9.10.1 Repeating progestogen-only injectables

Repeat injections of DMPA/Depo-Provera should be provided every 3 months (12 weeks).

9.10.2 Early for an injection: The repeat injection of DMPA/Depo-Provera can be given up to 2 weeks early.

9.10.3 Late for an injection: The repeat injection for DMPA/Depo-Provera can be given upto 4 weeks late without additional contraceptive protection.

If she is more than 4 weeks late for DMPA/Depo-Provera repeat injection, she can be given the repeat injection if pregnancy has been ruled out. Provide additional contraception as back up for the next 7 days. If appropriate, use emergency contraception.

9.10.4 Unknown timing of injection (lost card): Provide available injectable if pregnancy has been ruled out. Provide backup contraception such as condoms for the next 7 days.

9.11 SIDE EFFECTS AND MANAGEMENT

Table 9.2 Side effects and their management for the use of DMPA/Depo-Provera

Clients should be routinely counselled about common side effects and what to do if certain problems occur. When a client presents with side effects or complications, they should be assessed, counselled and managed appropriately.

Table 9.2: Side Effects and their management for the use of DMPA

Side effects	Assessment	Management
Amenorrhoea	Rule out pregnancy. Do a per vaginal /bimanual examination, pregnancy test, etc.	<ul style="list-style-type: none"> • Periods of amenorrhoea are common with DMPA users (80%) • If pregnancy is ruled out, counsel the client. • If amenorrhoea is unacceptable to client, discontinue DMPA/ given another choice. • If intrauterine pregnancy is confirmed, counsel the client and refer for antenatal care. Discontinue DMPA and reassure the client that small progesterone hormone will have no adverse effect on her child. • If ectopic pregnancy is suspected, refer immediately for further evaluation.
Weight gain	<p>Check if the weight gain occurred while on the injectable. Assess food intake.</p> <p>If no reason found, rule out pregnancy (as above)</p>	<p>If pregnant, advise as under amenorrhoea in this table.</p> <p>If not pregnant and the injectable is being taken regularly, counsel.</p>

Table 9.2: Side Effects and their management for the use of DMPA

Side effects	Assessment	Management
Nausea	<p>Find out if the injectable is being taken regularly as instructed.</p> <p>Rule out pregnancy (as under amenorrhoea in this table).</p>	<p>If pregnant, advise as described under amenorrhoea in this table.</p> <p>If not pregnant and the injection is being taken regularly, counsel</p> <p>Refer to specialist if nausea continues; to rule out other causes.</p>
Lower abdominal pain	<p>Rule out pregnancy by checking symptoms, pelvic exam (speculum and bimanual) and pregnancy test.</p>	<p>If ectopic pregnancy is suspected refer promptly for complete evaluation.</p>
Headache	<p>Assess if the headache is new or there are marked changes in the headache.</p>	<p>Refer for evaluation if the headache is new or there are marked changes in the headache.</p>
Breast fullness/ tenderness	<p>Rule out pregnancy as in the section under amenorrhoea.</p> <p>Rule out breast lumps and infection in the breast - if breastfeeding</p>	<p>If pregnant, advise as under amenorrhoea in this table.</p> <p>If not pregnant and no breast lumps, counsel.</p> <p>Refer to a specialist in case of breast lumps/ infection.</p>

Table 9.2: Side Effects and their management for the use of DMPA

Side effects	Assessment	Management
<p>Bleeding/Spotting</p> <p>prolonged spotting: >8 days</p> <p>Moderate bleeding: same as normal menses or prolonged spotting</p> <p>Heavy or prolonged bleeding (more than 8 days) or twice as much as her menstrual periods</p>	<p>Perform a pelvic exam (speculum and bimanual) to be sure bleeding is not due to another cause (e.g., genital tract lesion such as vaginitis, cervicitis, cervical polyps, cervical cancer or uterine fibroids).</p> <p>If heavy bleeding rule out incomplete abortion</p>	<p>Reassure her that light inter-menstrual bleeding or spotting occurs in a large percentage of women using DMPA (15– 20%). It is not harmful and usually does not require treatment. If not satisfied, NSAIDs/ Mefenamic Acid can be given for 5 days.</p> <p>In women with persistent spotting or bleeding after a period of amenorrhoea, exclude gynaecological problems when clinically warranted. If a gynaecological problem has been identified treat the condition or refer for care.</p> <p>If haemoglobin less than 9 g/dl, or conjunctival pallor significant, give iron or iron folate (1 tablet daily for 1 to 3 months) and nutritional counselling. If anaemia persists, or client requests, discontinue DMPA and help client choose another method.</p> <p>If a STI or PID is diagnosed, she can continue her injection while receiving treatment for STI and be counselled on condom use.</p> <p>If no gynaecological problems are found and she finds the bleeding unacceptable: - discontinue the injectable help her choose another method.</p> <p>- If wants to continue using DMPA and spotting bothers the client, give: A cycle of COCs (with 30 mcg estrogen) OR Ibuprofen (800 mg three times daily for 5 days)</p>

9.12 ADVANTAGES

- Does not interfere with breast feeding
- Easy to administer (any trained health worker can prescribe and administer DMPA)
- Less side effects compared with OCP
- Does not interfere with sexual intercourse

- It is suitable for couples who have completed family size but not yet ready for permanent contraceptive methods.
- Long lasting
- Non-contraceptive benefits
 - Scantly menses or no menses, thereby decreasing anemia
 - Decreased menstrual pain and cramps
 - Suppression of pain associated with ovulation
 - Decreased risk of developing endometrial or ovarian cancer
 - Reduced chances of PID.
- Reversible
- Low risk of ectopic pregnancy
- Requires less visit to health centers

9.13 DISADVANTAGES

- Require visit to the clinics every three months
- Menstrual cycle disturbance – Menstrual cycle disturbances associated with DMPA are commonest causes of discontinuation of the method. These disturbances include:-
 - Prolonged menstruation
 - Spotting between periods
 - Amenorrhoea
 - Heavy bleeding is rare (1-2 % of users)
 - Other side effect are less frequent and less severe which includes
 - Breast Tenderness
 - Headache
 - Bloating
 - Dizziness
 - Fatigue
 - Nervousness
 - Mood change
 - Weight gain

9.14 PROTECTION AGAINST /STI/HIV

- No protection against STI and AIDS
- Women at high risk of HIV infection can use DMPA (IM or SC) and NET-EN (DMPA and NET-EN injectables are now MEC category 2)

9.16 GIVING THE INJECTION

9.16.1 Obtain one dose of injection DMPA, needle, and syringe

- Injection DMPA: 150 mg I/M. NET-EN: 200 mg I/M (under process for introduction)
- Injection DMPA: A 2 ml syringe and a 21–23 gauge intramuscular needle.
- For each injection use a disposable auto-disable syringe and needle from a new, sealed package (within expiration date and not damaged)
- Always give injections under aseptic technique
- Donot rub the injection site

Planning the Next Injection

1. Agree on a date for her next injection in 3 months (12 weeks). Discuss how to remember the date, perhaps tying it to a holiday or other event.
2. Ask her to try to come on time. With DMPA she may come up to 2 weeks earlier or 4 weeks late and still get an injection.
3. She should come back no matter how late she is for her next injection. If she is more than 2 weeks late for injection DMPA she should abstain from sex or use condoms, or withdrawal until she gets the next injection. Also, if she has had sex in the past 5 days without using another contraceptive method, she can consider emergency contraceptive pills (see Emergency Contraceptive Pills)

9 A HORMONAL IMPLANTS

9 A1 INTRODUCTIONS

Hormonal implants are a long acting reversible low-dose progestin only implants inserted sub-dermally, preferably in the inner side of the upper arm.

9 A2 TYPES OF HORMONAL IMPLANTS

The various types of progesterone only implants available are:

1. Levonorgestrel (LNG): The LNG containing implants are Norplant, Jadelle and Sino-implant(II)
 - i. Norplant is a 6 -rod implant, each rod containing 36 mg of LNG (Norplant is no longer in production)
 - ii. Jadelle is 2 rod implant, each rod containing 75 mg of LNG
 - iii. Sino-implant (II) is a 2 rod implant, each rod containing 75 mg of LNG
2. Etonogestrel (ETG)-The ETG containing implants are Implanon and Nexplanon

Implanon is currently not available in the Bhutan Family Planning programme. It will be introduced in future.

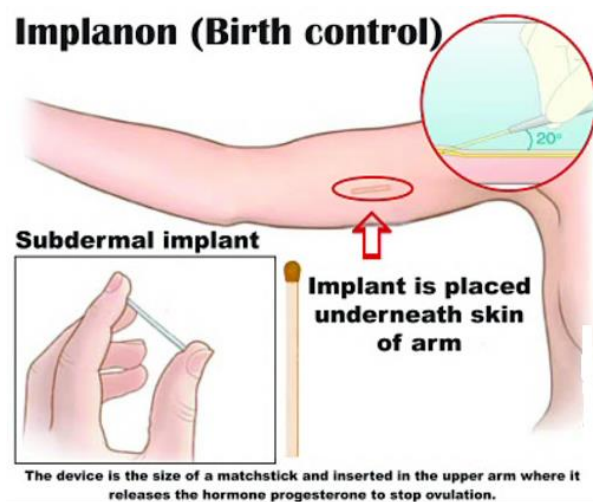


Fig.9a Implanon

Implanon is a single-rod hormonal implant that contains etonogestrel (a synthetic progestin). It is one of the most highly effective contraceptive methods. The single non biodegradable rod measures 2 mm in diameter and 40 mm in length and contains 68 mg of Etonogestrel with a release rate of 40 microgram per day. Implanon is effective for **3 years**.

9A3 MECHANISM OF ACTION

Implanon acts as a contraceptive by:

- inhibiting ovulation by preventing LH surge and lowering FSH and LH
- thickening the cervical mucus
- rendering endometrium less suitable for implantation
- reducing mobility of fallopian tubes causing reduction in rate of ovum transport

9 A4 EFFECTIVENESS AND RETURN TO FERTILITY

Effectiveness

Implanon is one of the most effective reversible long term methods, with effectiveness of 99.95% . Contraceptive effectiveness of Implanon decreases substantially after year 3.

Return to fertility

When the capsules are removed, the return of fertility is immediate. If the client does not want another pregnancy and does not want to use implants any longer, she should begin using another contraceptive method right away. Studies show that the blood level of progesterone hormone fall within 7 days of the Implant removal.

9 A5 ADVANTAGES AND SIDE EFFECTS OF IMPLANTS

Advantages

- Very effective
- Longer -term pregnancy protection- but reversible
- No daily pill intake or other action
- Breastfeeding mothers can use the method. Implanon does not affect the quantity or quality of breast milk. Implanon can even be provided to breastfeeding women who are less than 6 weeks postpartum (MEC Cat 2). For women more than 6 weeks postpartum and breastfeeding, Implanon is allowed (MEC Cat 1)
- Helps prevent ectopic pregnancies
- Helps prevent uterine fibroids
- May help prevent ovarian cancer
- May help prevent iron deficiency anaemia

Disadvantages

- Common side effects including headache, breast tenderness, acne, weight change, moodiness, nausea, etc.
- changes in menstrual bleeding patterns, amenorrhoea is common
- rarely heavy bleeding in some
- May cause weight gain.
- Uncommon: infection at insertion site, difficulty in removal
- Does not protect against STI/RTI/HIV

CHAPTER 10 : INTRA UTERINE CONTRACEPTIVE DEVICE(IUD)

10.1 INTRODUCTION

In Bhutan Copper T 380A (CuT) is the only IUD that is being provided in the family planning services at present. The device contains copper fitted on to a T-shaped synthetic non-reactive plastic (polyethylene with barium sulphate). The bottom of the T has a single filament polyethylene clear or whitish string knotted after passing through a hole in the T. Another IUD containing LNG (Mirena) is being used for treatment of abnormal uterine bleeding in women with fibroids and endometriosis.

Box 10.1: Key Points for Providers and Clients

- **Long-term pregnancy protection.** Shown to be very effective for 10 years, immediately reversible.
- **Inserted into the uterus by trained provider.**
- **Little required of the client once the IUD is in place.**
- **Bleeding changes are common.** Typically, longer and heavier bleeding and more cramps or pain during monthly bleeding, especially in the first 3 to 6 months.

10.2 EFFECTIVENESS

The TCu-380A is one of the most cost-effective reversible contraceptive methods available under the Bhutan's' family planning programme. With effectiveness of 99.4% with perfect use and 99.2 % with typical use . IUD is as effective as implants and injectables contraceptives. After insertion, the contraceptive action lasts 10 years. Note that an IUD inserted into a client just before the shelf life of the packaging expires is still effective for up to 10 years.

10.3 MECHANISM OF ACTION

For CuT

- Inhibits sperm migration
- Interferes with ovum transport and fertilization
- Stimulates a sterile foreign body reaction in the endometrium

For Mirena(LNG-IUS)

- Cause endometrial suppression and change in the amount and viscosity of the cervical mucus which produce a barrier to sperm penetration.
- Effective only for 5 years.

10.4 RETURN TO FERTILITY

Immediate

10.5 PROTECTION AGAINST STI

Nil

10.6 CORRECTING MISUNDERSTANDING

Intrauterine devices

- Rarely lead to PID.
- Do not increase the risk of contracting STIs, including HIV.
- Do not increase the risk of miscarriage when a woman becomes pregnant after the IUD is removed.
- Do not make women infertile.
- Do not cause birth defects.
- Do not cause cancer.
- Do not move to the heart or brain.
- Do not cause discomfort or pain for the woman during sex.
- Substantially reduce the risk of ectopic pregnancy.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Long term (up to 12 years) and easily reversible contraceptive • Once removed fertility returns immediately • Highly effective • Does not interfere with sexual intercourse • Does not affect breast feeding • Ideal for clients who have contraindications to hormonal methods • Requires few follow ups • Can also be used in women who had Caesarian section 	<ul style="list-style-type: none"> • Low abdominal pains for few days may occur after insertion • Menstrual bleeding may be slightly increased • Insertion/removal requires the services of a trained staff and a clinic setting. • Offers no protection from HIV/AIDS/STI • Not suitable for women with multiple partners • Need special instruments • Provider needs skills and training • Not suitable for woman at risk of STIs

10.7 SCREENING AND SELECTION: MEDICAL ELIGIBILITY CHECKLIST

10.7.1 Indications

IUD should be provided to any woman who requests it, after appropriate counselling and reaching an informed decision, and who does not have any contraindication to its use.

IUD is appropriate for those who:

- prefer a method that provides highly effective, long-term contraception, but do not want a permanent method such as voluntary sterilisation
- prefer a method that does not require taking contraceptive action daily or before sexual intercourse
- prefer not to use a hormonal contraceptive method such as combined oral contraceptive pills or have contra indications for its use
- IUD can be provided to most women including who:

- are breastfeeding
- have or have not had children
- are married or unmarried
- have had a miscarriage without any risk/evidence of infection
- smoke
- are taking antibiotics and/or anticonvulsants
- are fat or thin
- are postpartum
- have benign breast disease
- have breast cancer
- have headaches
- have high blood pressure
- have varicose veins
- have heart disease
- have history of stroke/liver disease/ diabetes/thyroid disease
- have anaemia
- history of past ectopic pregnancy

10.7.2 Contraindications

- pregnancy
- uterine fibroid- if the cavity is distorted, chances of expulsion/perforation are there
- uterine/ endometrial cancer
- cervical cancer
- known pelvic tuberculosis
- post septic abortion

10.7.3 Major evidences and clarifications regarding medical eligibility for Copper Bearing IUDs

- **Postpartum insertion-** Evidence suggests that immediate postpartum IUD insertion has lesser expulsion rate as compared to expulsion rate with delayed postpartum insertion
- **Post-abortion insertion-** There is no difference in risk of complications for immediate verses delayed insertion after abortion.
- **Valvular heart disease-** In women with valvular heart disease, a course of antibiotics is recommended before IUD insertion
- **STI and IUD:** Many women with increased risk of STIs can generally use an IUD (MEC Cat 2). In some women with very high risk of STI, IUD insertion may further increase the risk of PID. (Medical Eligibility Criteria Fifth Edition 2015 WHO). Women with very high individual risk of STI, should generally not use e an IUD inserted until appropriate testing and treatment is done. MEC 2015 also suggests that current algorithms for determining increased STI risk have poor predictive value.
- **Pelvic Inflammatory Disease (PID) and continuation of IUD -** If a woman with IUD inserted gets PID, complete treatment of PID with antibiotics is recommended. There is no need to

remove the IUD. Studies have shown that there is no added advantage in removing IUD in such cases.

- **High risk of HIV:** Copper IUD use did not increase any risk of HIV acquisition or transmission (MEC 2015 Cat 2).

10.8 COUNSELLING AND INFORMED CHOICE

All IUD clients must receive appropriate counselling for selecting and using the method. Review the woman's history to determine the possibility of existing contraindications to the method, such as high individual risk of STIs, and take this into account when providing counselling. Encourage clients to ask all of their questions so that any uncertainties and misunderstandings can be cleared up.

It is important to counsel clients that IUD do not protect against STI/HIV. If STI/HIV/AIDS protection is needed condoms should be used in conjunction with IUD. Inform that the absolute risk of ectopic pregnancy is extremely low due to the high effectiveness of IUDs. However, when a woman becomes pregnant during IUD use, the relative likelihood of ectopic pregnancy is greatly increased.

10.8.1 Pre-Insertion Counselling

This step is important for an acceptor of the method, in order to dispel any myths, doubts and fears. The CuT is a non-hormonal, static device that does not cause any ailments including the false notion of its moving inside the body, beyond the uterine cavity. Explain to the client mechanism of action, advantages and disadvantages, and answer all questions satisfactorily.

10.9 CLIENT ASSESSMENT

The purpose of the health assessment is to determine the client's suitability for the use of the method. It is also an opportunity to offer other available sexual and reproductive health services as appropriate. All FP clients should be educated and shown how to perform a breast self exam and to report if there are any abnormalities noted. Pregnancy should be ruled out prior to the provision of IUD. A pregnancy test should be done if there is any suspicion of pregnancy.

10.9.1 Medical/social/gynaecological/obstetric history:

History taking should be done as detailed in the earlier chapter. It is mandatory to do STI risk assessment by medical history (history of STIs, including HIV and PID, and risk factors for STI such as multiple sexual partners) and physical examination.

10.9.2 Mandatory physical examination (Class A SPR):

1. Abdominal examination (especially lower abdominal for tenderness, or masses)
2. Pelvic examination – speculum visualization of cervix and bimanual pelvic examination. Bimanual vaginal examination is done to identify the position of the uterus (anteverted or retroverted) and to rule out pregnancy, PID, other pathology of the uterine cavity and overt malignancies.
3. Other examination can be done as indicated by the medical history.

10.9.3 Laboratory tests (Class B SPR) are not routinely required for the use of an IUD except when indicated by medical history and physical examination. If possible, Haemoglobin testing is recommended prior to provision of an IUD to have a baseline result.

10.10 PREPARATORY STEPS TO INSERTION

- Let the client empty her urinary bladder and lie down on the examination table with her legs drawn up (lithotomy position) and her knees spread apart.
- Perform a bimanual pelvic examination (using sterile gloves) to confirm size, condition and position of the uterus
- Clean the perineum and vagina with non-irritant antiseptic solution
- Expose the cervix with a suitable bi-valve (CUSCO’s) speculum
- Clean the cervix with the antiseptic solution
- Apply tenaculum or volsellum to the anterior lip of the cervix and gently pull to steady and straighten the cervix and the uterus.
- Introduce the uterine sound (to measure the length of the uterine cavity and to verify the position of the uterus; this also verifies the patency of the canal

Table 10.1: Time of IUD insertion

Situation	When to start
<p>Having menstrual cycles</p>	<p>Within 12 days after the start of menstrual cycle: IUD can be inserted at woman's convenience. No additional contraception is required (there are certain advantages to insert IUD during menstruation: a) it is confirmed that she is not pregnant and b) insertion may be easy)</p> <p>More than 12 days since the start of the menstrual cycle: IUD can be inserted if it is reasonably certain that the woman is not pregnant.</p>
<p>Amenorrhoeic (not postpartum)</p>	<p>IUD can be inserted if it is reasonably certain that the woman is not pregnant.</p>

Table 10.1: Time of IUD insertion

<p>Postpartum (Breastfeeding and non-breastfeeding including post-caesarean section)</p>	<p>Within 48 hours of delivery and immediately after removal of the placenta: CuIUD can be inserted If delivery is by cesarean section, IUD can be placed in the uterine cavity, before closing the uterus</p> <p>48 hours to < 4 weeks postpartum: IUD is not recommended</p> <p>4 or more weeks postpartum and amenorrhoeic:</p> <ul style="list-style-type: none"> - Breastfeeding: Cu IUD can be inserted if reasonably certain that she is not pregnant. - Non-breastfeeding: Cu IUD can be inserted if certain that she is not pregnant. <p>4 or more weeks postpartum and menstrual cycles have returned: CuIUD can be inserted as in women with MC.</p> <ul style="list-style-type: none"> - Women having puerperal sepsis should not get IUD inserted
<p>Post-abortion</p>	<p>CuT can be inserted immediately after a first-trimester abortion and after a second trimester abortion CuT should not be inserted after a septic abortion</p>
<p>Switching from another method</p>	<p>CuT can be inserted if it is reasonably certain that woman is not pregnant: (no need to wait for her next menstrual period)</p>
<p>For emergency contraception</p>	<p>CuT can be inserted within 5 days of unprotected intercourse as an emergency contraceptive (Women who take CuIUD as an emergency contraceptive should be medically eligible for it)</p>

10.10.1 Loading the CuT 380 A (no touch technique)

Aseptic technique including the use of sterile gloves is recommended

Before opening the package verify

- Expiry date of CuT
- The package is not opened or damaged or discoloured
- That the stem of the T is fully inside the inserter (it can be shifted through the unopened package)
- That the other end of the inserter tube close to the arrow labeled “OPEN” is near to the seal at the end of the package

Follow the steps below to open the package: (Figure 10.2 a-c)

- Place the package on a clean horizontal surface with the clear plastic facing up.
- Open package half way from the end with the arrow labeled “OPEN”
- Pick up the package, holding the opened end up (so that the contents do not drop out) and bend the flaps away from each other
- Use the other hand to remove the white rod from behind the identification card
- Introduce it inside the inserter tube till it touches the bottom of the T

(DO NOT TOUCH THE ROD WITH ANYTHING UNSTERILISED BEFORE PUTTING IT INSIDE THE INSERTER)

Actual loading (Figure 10.2 d-f)

- Release the white bracing flap and again place the package on the flat surface
- Through the overlying clear plastic cover, place your thumb and index finger over the ends of the horizontal arms of the T and hold the T in place
- At the open end, push the identification card with your free hand so that it slides underneath the T, stopping at the top seal of the package.
- While still holding the tips of the horizontal arms, use your free hand to grasp the inserter tube at the opened side of the package.
- Push the inserter tube against the arms of the T (as indicated by the arrows on the identification card)
- Start bending the arms of the T till it has folded enough to touch the side of the inserter tube.
- Push and rotate the inserter tube onto the tip of the arms so that the arms become trapped inside the tube next to the arms
- Insert the folded arms into the inserter tube only as far as necessary to ensure retention of the arms.

Precautions

- Do not force the arms of the T completely into the inserter as they will not fit and they will not come out during insertion.
- Do not keep the arms of the T in the inserter tube for more than 5 minutes before insertion
- Hold the blue depth gauge in place through the clear plastic wrapper with your free hand, and grasp to steady the end of the inserter tube at the end of the package.
- Pull the loaded inserter tube gently to adjust the distance between the top of the folded T and the upper edge of the blue gauge to the depth of the uterine cavity (earlier measured by the uterine sound)
- Rotate the inserter tube so that the long axis of the blue gauge is in the same horizontal plane as the arms of the T.

Preventing Infection at IUD Insertion

Proper insertion technique can help prevent many problems, such as infection, expulsion, and perforation.

- Follow proper infection-prevention procedures.

- Use high-level disinfected or sterile instruments. High-level disinfect by boiling, steaming, or soaking them in disinfectant chemicals.
- Use a new, presterilized IUD that is packaged with its inserter.
- The “no-touch” insertion technique is best. This includes not letting the loaded IUD or uterine sound touch any unsterile surfaces (for example, hands, speculum, vagina, table top). The no-touch technique involves:
 - Loading the IUD into the inserter while the IUD is still in the sterile package, to avoid touching the IUD directly
 - Cleaning the cervix thoroughly with antiseptic before IUD insertion
 - Being careful not to touch the vaginal wall or speculum blades with the uterine sound or loaded IUD inserter
 - Passing both the uterine sound and the loaded IUD inserter only once each through the cervical canal

Inserting the Cu T 380A (Figure 10.2- h-k)

- Carefully peel the plastic cover of the package away from the white backing flap and lift the loaded inserter keeping it horizontal
- Be careful not to touch the inserter against anything un-sterile
- Grasp the tenaculum forceps holding the anterior lip of the cervix and pull it
- Gently introduce the loaded inserter through the cervical canal into the uterine cavity with the blue gauge in the horizontal position till it reaches the external os
- Hold the tenaculum and white rod in one hand (do not move the rod)
- With the free hand, withdraw the inserted tip until it touches the thumb grip of the white rod (WITHDRAWAL TECHNIQUE). By doing this, the arms of the Cu T are released in the uterine cavity.
- Remove the white rod holding the inserter tube stationary.
- Gently and slowly withdraw the inserter tube through the cervical canal and out of the vagina.
- Cut the nylon strings so they protrude 3-4 cm into the vagina
- Now release and remove the tenaculum as well as the speculum.

10.11 REMOVAL OF THE CU T (Figure 10.3)

The same instruments for insertion are used for removal and should be sterile or HLD

- Expose the cervix with the help of the speculum
- Grasp the strings with an artery forceps as close to the cervix as possible
- Apply a gentle and steady pull in the direction of the cervical canal to withdraw the device.

10.12 Post Insertion counselling:

Teaching the client how to check the CuT strings/threads (Figure10.1):

After washing hands with soap or detergent, client should sit in a squatting position and:

- Insert middle finger deep in the vagina and feel for the strings
- Strings felt means IUD is correctly in place. Do not pull on strings!
- If strings are not felt, or if the woman feels the stem of the T (Hard plastic of an IUD), she should report immediately to the clinic for check up.
- Strings should be checked after every menstrual period
- Expect some cramping and pain for few days after insertion. Give her paracetamol or brufen
- Expect some bleeding or spotting for few months which is normal. Give her a follow up card and schedule next visit which is usually after her next period or 3-6 weeks after IUD insertion.



Figure 10.1: Checking the CuT strings/threads

“Come Back Any Time”: Reasons to Return

Assure every client that she is welcome to come back any time for example, if she has problems, questions, or wants another method; or she has a major change in health status. Also if:

- She thinks the IUD might be out of place. For example, she:
 - Feels the strings are missing.
 - Feels the hard plastic of an IUD that has partially come out.
 -
- She has symptoms of pelvic inflammatory disease (increasing or severe pain in the lower abdomen, pain during sex, unusual vaginal discharge, fever, chills, nausea, and/or vomiting), especially in the first 20 days after insertion.
- She thinks she might be pregnant.

General health advice: Anyone who suddenly feels that something is seriously wrong with her health should immediately seek medical care from a nurse or doctor. Her contraceptive method is most likely not the cause of the condition, but she should tell the nurse or doctor what method she is using.

10.13 POST-INSERTION FOLLOW-UP VISIT (3 TO 6 WEEKS)

1. Ask how the client is doing with the method and whether she is satisfied. Ask if she has any questions or anything to discuss.
2. Ask especially if she is concerned about bleeding changes. Give her any information or help that she needs.
3. Ask her if she has:
 - Increasing or severe abdominal pain or pain during sex or urination
 - Unusual vaginal discharge
 - Fever or chills
 - Signs or symptoms of pregnancy
 - Not been able to feel strings (if she has checked them)
 - Felt the hard plastic of an IUD that has partially come out
4. A routine pelvic examination at the follow-up visit is not required. It may be appropriate in some settings or for some clients, however. Conduct a pelvic examination particularly if the client's answers lead you to suspect:
 - A sexually transmitted infection or pelvic inflammatory disease
 - The IUD has partially or completely come out

Any Visit

1. Ask how the client is doing with the method and about bleeding changes
2. Ask a long-term client if she has had any new health problems. Address problems as appropriate. For new health problems that may require switching methods
3. Ask a long-term client about major life changes that may affect her needs particularly plans for having children and STI/HIV risk. Follow up as needed.
4. Remind her how much longer the IUD will protect her from pregnancy.
5. In case of menopause she should come for CuT removal one year after her last menstruation.

10.14 SWITCHING FROM AN IUD TO ANOTHER METHOD

These guidelines ensure that the client is protected from pregnancy without interruption when switching from a copper-bearing IUD or a hormonal IUD to another method. See also When to Start for each method.

Switching to Combined oral contraceptives (COCs), injection DMPA

When to start

- If starting during the first 7 days of monthly bleeding (first 5 days for COCs), start the hormonal method now and remove the IUD. No need for a backup method.

- If starting after the first 7 days of monthly bleeding (after the first 5 days for COCs) and she has had sex since her last monthly bleeding, start the hormonal method now. It is recommended that the IUD be kept in place until her next monthly bleeding.
- If starting after the first 7 days of monthly bleeding (after the first 5 days for COCs) and she has *not* had sex since her last monthly bleeding, the IUD can stay in place and be removed during her next monthly bleeding, or the IUD can be removed and she can use a backup method* for the next 7 days.

Male or female condoms, or withdrawal

When to start

- Immediately the next time she has sex after the IUD is removed.

Fertility awareness methods

When to start

- Immediately after the IUD is removed.

Female sterilization

When to perform

- Within the first 7 days of monthly bleeding, remove the IUD and perform the female sterilization procedure. No need for a backup method.
- After the first 7 days of monthly bleeding, perform the sterilization procedure. The IUD can be kept in place until her follow-up visit or her next monthly bleeding. If a follow-up visit is not possible, remove the IUD at the time of sterilization. No need for a backup method.

** Backup methods include abstinence, male and female condoms, spermicides, and withdrawal. Tell her that spermicides and withdrawal are the least effective contraceptive methods. If possible, give her condoms.*

Switching to Vasectomy

When to perform

- Any time
- The woman can keep the IUD for 3 months after her partner's vasectomy to keep preventing pregnancy until the vasectomy is fully effective.

10.15 MANAGING ANY PROBLEMS

Problems Reported As Side Effects or Complications may or may not be due to the method. Problems with side effects or complications affect women's satisfaction and use of IUDs. They deserve the provider's attention. If the client reports any side effects or complications, listen to her concerns, give her advice, and, if appropriate, treat. Offer to help her choose another method now, if she wishes, or if problems cannot be overcome. (See tables 10.2 and 10.3)

MANAGEMENT OF POSSIBLE PROBLEMS DURING INSERTION AND REMOVAL OF IUD.

Table 10.2: Possible Problems, Assessment and Management During insertion or Removal of IUD		
Problem	Assessment	Management
Fainting (syncope); slow heart rate (bradycardia) or vasovagal episode during IUD insertion or removal	<ul style="list-style-type: none"> • Is woman extremely anxious? • Does she have a small uterus or cervical stenosis? <p>(These characteristics increase risk for fainting and/or vasovagal reaction.)</p>	<p>Every step of IUD insertion and removal should be done slowly and very gently, with an explanation of each step to the client</p> <p>At the earliest sign of fainting, stop the insertion. Resume the procedure once the episode has passed and client desires</p>
Suspected uterine perforation (during uterine sounding or IUD insertion)	<p>Client complains of sudden significant pain during procedure.</p> <p>There is feeling of giving way</p> <p>Sound measures more than 9 centi-meters</p>	<p>If the pulse and blood pressure are normal, make the client lie down and check the pulse and blood pressure every 15 minutes for an hour. Stop the procedure (and remove IUD if inserted)</p> <p>If BP is low or the pain is severe, hospitalise, start IV fluids and refer the client to a specialist.</p>
Missing strings	<p>Ask the client if the IUD has been expelled.</p> <ul style="list-style-type: none"> - check if she is pregnant - If she is menstruating and strings are not visible: rule out lost IUD or perforation. - If she returns with amenorrhoea- check for pregnancy 	<p>If examination/test reveals intra uterine pregnancy, refer to Box: IUD and pregnancy.</p>

Table 10.3 Management of complications/ side effects of IUD

Side Effect	Assessment	Management
<p>Amenorrhoea (absence of vaginal bleeding or spotting)</p>	<p>Ask client: when she had her last menstrual period when she last felt the IUD strings if she has symptoms of pregnancy Rule out pregnancy (intrauterine or ectopic) by checking symptoms, and performing a pelvic exam (speculum and bimanual) and a pregnancy test</p>	<p>If pregnancy is ruled out, no treatment is required except counselling and reassurance.</p> <p>Explain that blood does not build up in the uterus. Advise the client to return to the IUD provider for further evaluation if amenorrhoea remains a concern.</p> <p>If the client is elderly, exclude possible menopause.</p> <p>Refer to section: management of a client who is pregnant with IUD</p>
<p>Irregular bleeding with or without symptoms of pregnancy</p>	<p>Perform abdominal and pelvic (speculum and bimanual vaginal) examination to check for infection, pelvic pain or tenderness, palpable adnexal mass or enlarged uterus (consistent with pregnancy).</p>	<p>If less than 3 months and no evidence of pregnancy or pathology, counsel client that spotting or bleeding is common during the first 3 to 6 months after insertion of Copper IUD and decreases over time.</p> <p>If she desires treatment, a short course of NSAID may be given during the days of the bleeding.</p> <p>If there are no other gynaecological problems and if the client finds bleeding unacceptable, remove the IUD and assist her to choose another method.</p> <p>If PID suspected, manage as explained in previous paras.</p>
<p>Ectopic pregnancy</p>	<p>Must be suspected in clients with irregular bleeding and/or abdominal pain.</p>	<p>Refer promptly to an appropriate facility for complete evaluation if ectopic suspected.</p> <p>If other gynaecological problems are identified, refer for further management.</p>

Table 10.3 Management of complications/ side effects of IUD

<p>Bleeding (heavy/prolonged) Amount: more than normal period Duration: more than 8 days vaginal, cervical or pelvic infection Check for clinical signs of anaemia: Check Hb</p>	<p>Perform pelvic examination (speculum and bimanual) to be sure that client does not have: intrauterine or ectopic pregnancy incomplete abortion</p>	<p>If client has had IUD less than 3 months: If exam is normal, reassure and give iron tablets (1 tablet daily for 1–3 months). Ask client to return in 3 months for another check. Use NSIAD, such as ibuprofen, during bleeding episodes, if available, to decrease bleeding (800 mg 3 times daily for 1 week). <i>NOTE : ASPIRIN SHOULD NOT BE USED AS TREATMENT FOR BLEEDING</i></p>
<p>If strings are missing Partner complains about strings</p>	<p>Do per speculum examination Check to be sure that IUD is in place (i.e., not partially expelled).</p>	<p>Refer to specialist for further evaluation If strings are seen, reassure client that strings are present and help her feel them. Counsel client and cut strings shorter</p>

STEPS: INSERTION OF IUD

Figure 10.2 Steps in insertion of CuT

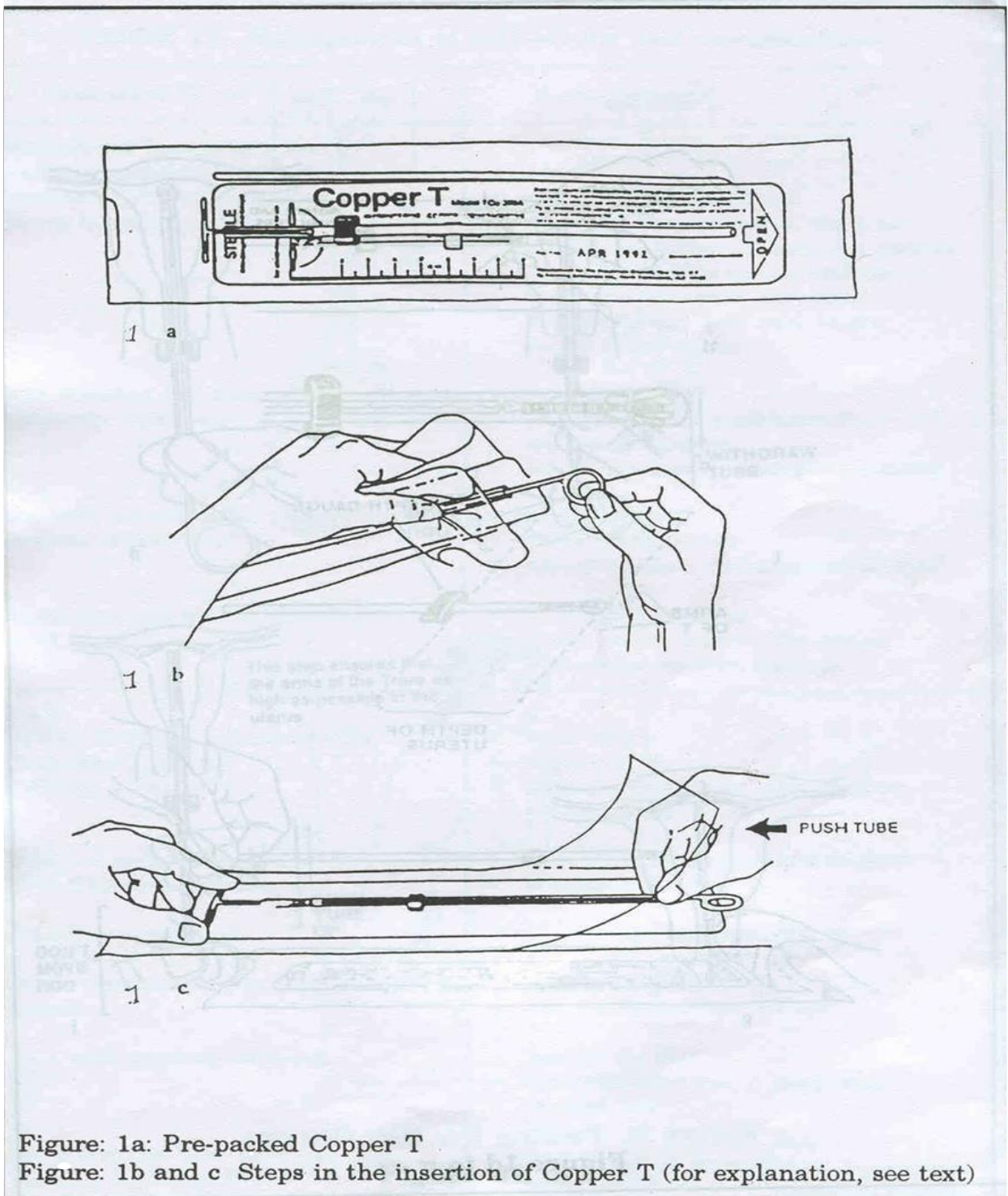


Figure: 1a: Pre-packed Copper T

Figure: 1b and c Steps in the insertion of Copper T (for explanation, see text)

Figure 10.2; Steps in insertion of CuT(a-c)

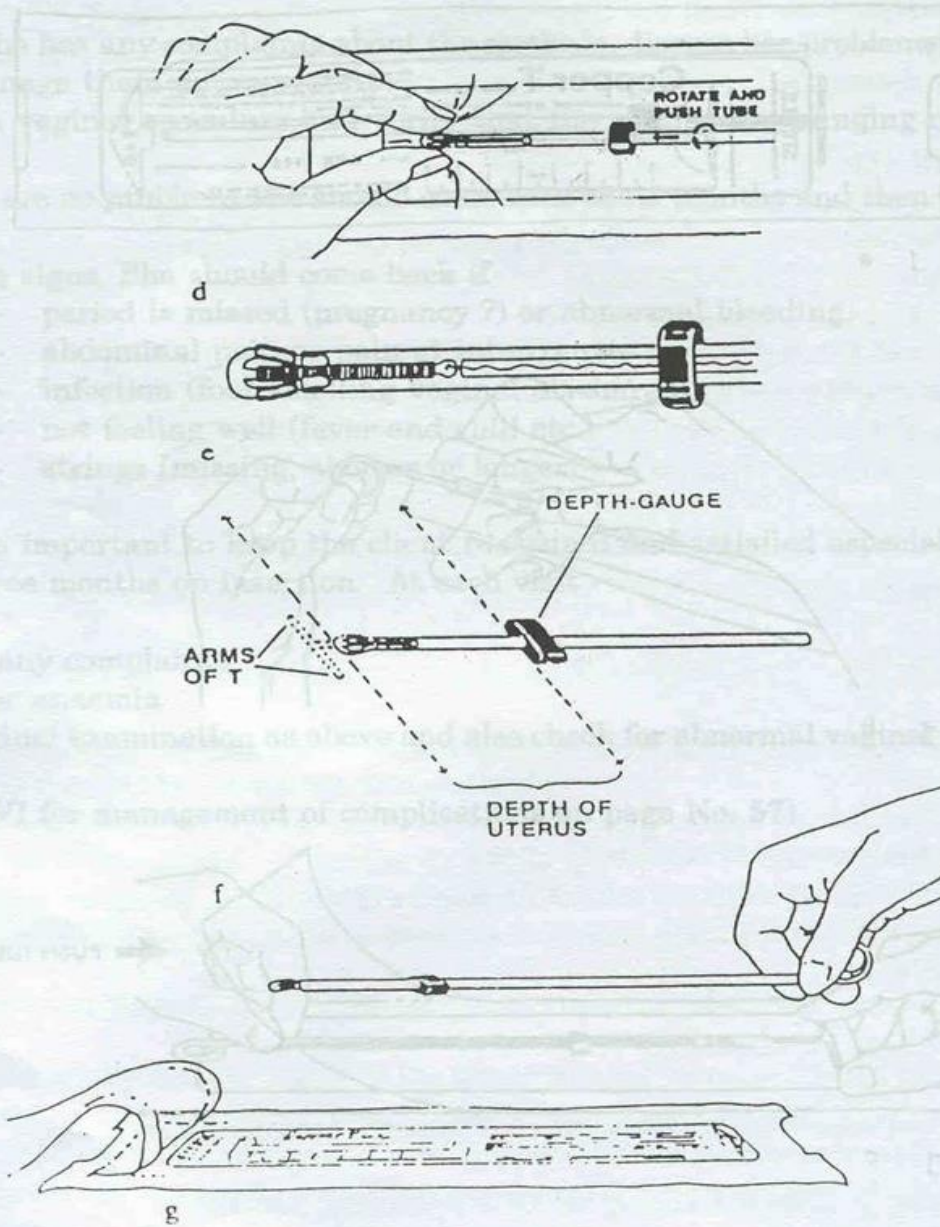


Figure 1d to g

Figure 10.2; Steps in insertion of CuT (d-g)

TABLE VI: Management of side effects and complications

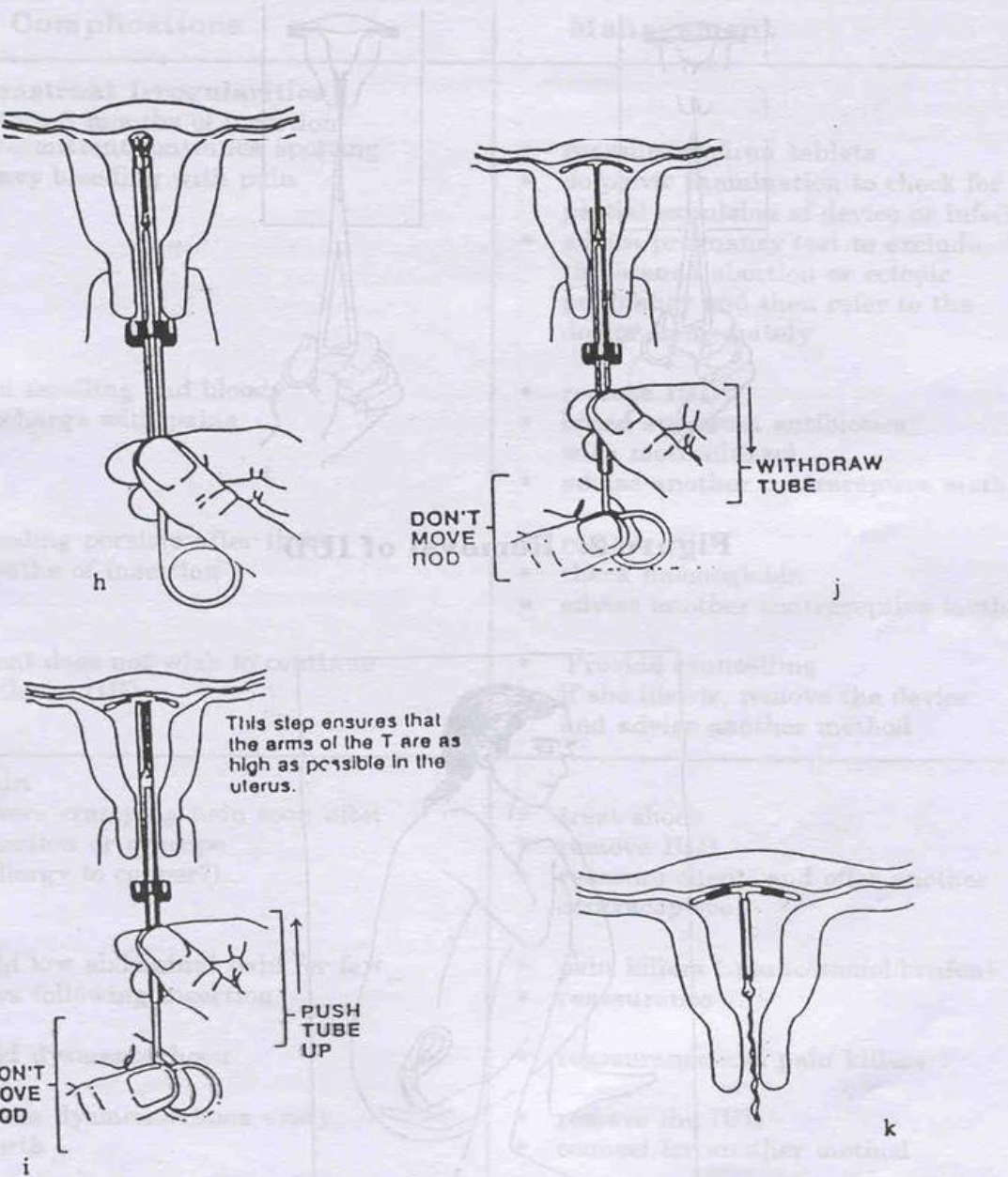


Figure 1h to k

Figure 10.2: Steps in insertion of CuT (h-k)

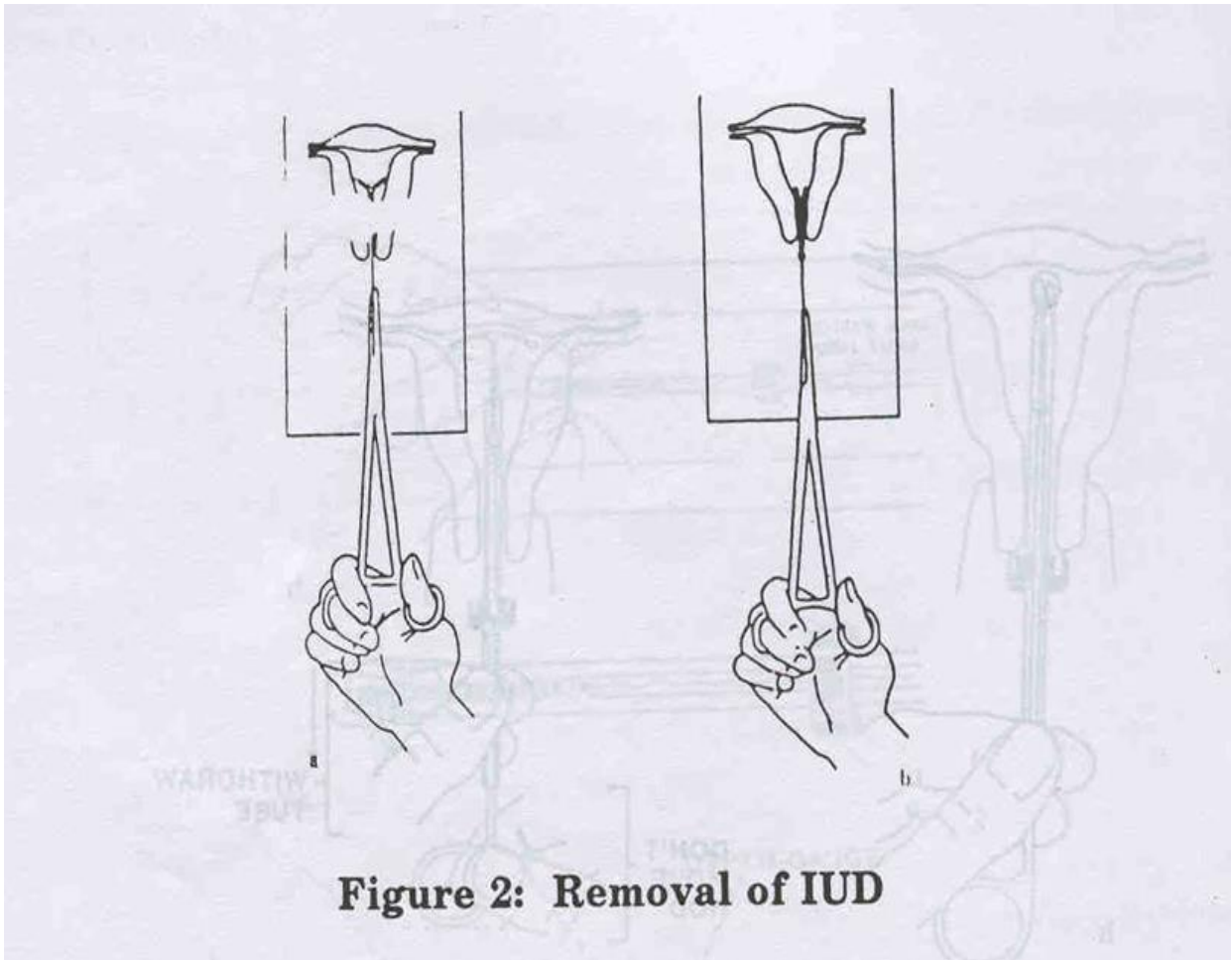


Figure 10.3: removal of IUD

CHAPTER 11: TRADITIONAL FAMILY PLANNING METHODS INCLUDING FERTILITY AWARENESS BASED METHODS

Throughout the history in different societies, some conventional methods for contraception are being practiced. Some of those methods are recognized and even practiced in modern societies and religious groups. These methods require diligence, understanding amongst the partners, self control, knowledge of normal menstrual cycle and reproductive physiology. These methods are practiced for short-term contraception. Some more reliable methods of these can be listed under the National FP Standard. Family Planning Counsellor will get some opportunities to discuss and educate interested and willing couples to practice such methods.

11.1 WITHDRAWAL (COITUS INTERRUPTUS)

In this method the male partner interrupts intercourse and withdraws the penis from inside the vagina of his partner before ejaculation and ejaculates outside.

This is probably one of the oldest and widely practiced methods of contraception throughout history. Failure rate for typical user is about 19% and that for perfect user is 4%.

As ejaculation is not done inside the partner, the chance of meeting of sperm and ovum is reduced. This method has certain distinct advantages. It is cost free requires no devices, involves no hormones or chemicals, has no side effects and is available in any situation. It promotes male involvement and couple communication.

The major disadvantages of this method are high failure rates if not properly used and it does not give protection against STI/HIV transmission.

11.2 FERTILITY AWARENESS BASED METHODS

Fertility awareness is the basic information on human reproduction that helps people to understand how and when a woman can become pregnant. This information can help plan or prevent pregnancies by identifying fertile days of menstrual cycle. Contraception can be achieved by abstaining from intercourse during her fertile days, or using a backup method (condom).

11.2.1 Facts about Fertility Awareness Based Methods:

- Have no side effects
- Can be very effective if used consistently and correctly.
- Do not require literacy or advanced education.
- Do not harm men who abstain from sex.
- Do not work when a couple is mistaken about, when the fertile time occurs, such as thinking it occurs during monthly bleeding.
- Do not require procedures and usually do not require supplies
- Help women learn about their bodies and fertility
- Allow some couples to adhere to their religious or cultural norms about contraception
- Can be used to identify fertile days by both women who want to become pregnant and women who want to avoid pregnancy

11.2.2 Fertility Awareness Based Methods for women with HIV

- Woman who are infected with HIV, have AIDS, or are on antiretroviral (ARV) therapy can safely use fertility awareness methods.

- Urge these women to use condoms along with fertility awareness methods. Used consistently and correctly, condoms help prevent transmission of HIV and other STIs.

11.2.3 Fertility Awareness Based Methods:

- Basal Body Temperature (BBT)
- Cervical mucus (Billing's)
- Calendar (Rhythm)
- Sympto-thermal

a) Basal Body Temperature (BBT)

Most women produce a mature egg (ovulate) approximately two weeks BEFORE the next menstruation. A woman who wants to use this method should know the length of her previous 6 to 12 menstrual cycles. Every morning before getting out of bed, she should take her body temperature and she should take no food or have any intercourse one hour before that. She will notice the rise of temperature (about 0.2C (0.4 F) indicating that ovulation has just taken place. This rise in temperature remains till her next menstrual period. To use this method she should avoid sexual intercourse from day 1 of the menstrual cycle until three days after the temperature rises. She should be taught how to TAKE, READ and RECORD the temperature EVERYDAY. If there is any intercourse during unsafe days, she should use a backup method. Also see figure 11.1

If the woman has fever or any others changes in body temperature, this method will be difficult to use

b) Cervical Mucus Method

Most women experience dryness in the vagina after the menstruation (dry days). As she nears mid cycle the vagina becomes increasing wet with the mucus gradually becoming clear or cloudy and slippery (typical “raw egg white”) and can be stretched between two fingers (wet days). The mucus rapidly becomes thick and sticky, decreasing in quantity to leave the vagina dry after some days (dry days). Couple can have unprotected sex on the fourth day after her peak day and until her next monthly bleeding. Also see figures 11.1 and 11.2.

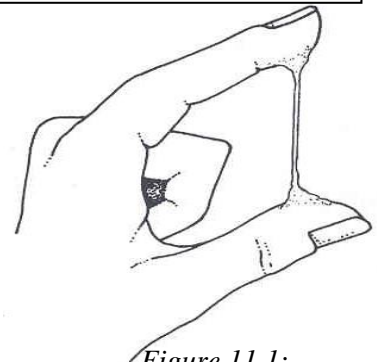


Figure 11.1:
Mid-cycle elastic mucus

Peak day is the last day that cervical secretion is clear and stretchy and wet

Conditions affecting cervical Mucus Pattern

- Vaginal or cervical infection
- Vaginal secretion due to sexual stimulation
- Drugs used for common cold or sinusitis to dry up mucus
- Physical or emotional stress
- Breastfeeding

If a woman has a vaginal infection or any other condition that changes cervical mucus, this method may be difficult to use

This gives a rough estimate of the fertile (unsafe) period. Using records of the last 6-12 months of the cycle, the earliest or first day of the unsafe period is calculated by subtracting 18 days from her previous shortest cycle and the last day of the fertile period by subtracting 11 days from the previous longest cycle. It is easy to use and more reliable for women with regular periods.

Example:

- If the shortest of her last 6 cycles was 27 days, $27 - 18 = 9$. She starts avoiding unprotected sex on day 9.
- If the longest of her last 6 cycles was 31 days, $31 - 11 = 20$. She can have unprotected sex again on day 21.
- Thus, she must avoid unprotected sex from day 9 through day 20 of her cycle.

If mistakes are made by the couple, emergency contraceptive pills should be used

11.2.4 Medical Eligibility Criteria

All women can use calendar-based methods. No medical conditions prevent the use of these methods, but some conditions can make them harder to use effectively.

Caution means that additional or special counselling may be needed to ensure correct use of the method.

Delay means that use of a particular fertility awareness method should be delayed until the condition is evaluated or corrected. Give the client another method to use until she can start the calendar-based method.

In the following situations use caution with calendar-based methods:

- Menstrual cycles have just started or have become less frequent or stopped due to older age (Menstrual cycle irregularities are common in young women in the first several years after their first monthly bleeding and in older women who are approaching menopause. Identifying the fertile time may be difficult.)

In the following situations **delay** starting calendar-based methods:

- When a woman recently gave birth or is breastfeeding (**Delay** until she has had at least 3 menstrual cycles and her cycles are regular again. For several months after regular cycles have returned, use with caution.)
- When a woman recently had an abortion or miscarriage (**Delay** until the start of her next monthly bleeding.)
- Irregular vaginal bleeding

In the following situations delay or use **caution** with calendar-based methods:

- Taking any mood-altering drugs such as anti-anxiety therapies (except benzodiazepines), antidepressants (selective serotonin reuptake inhibitors [SSRIs], tricyclic, or tetracyclic), long-term use of certain antibiotics, or long-term use of any nonsteroidal anti-inflammatory drug (such as aspirin, ibuprofen, or paracetamol). These drugs may delay ovulation.

d) Symptothermal Method

- Users identify fertile and non-fertile days by combining BBT and ovulation method instructions.
- Women may also identify the fertile time by other signs such as breast tenderness and ovulatory pain (lower abdominal pain or cramping around the time of ovulation).
- The couple avoids unprotected sex between the first day of monthly bleeding and either the fourth day after peak cervical secretions or the third full day after the rise in temperature (BBT), whichever happens later.

Effectiveness

High motivation is important to achieve low failure rates, which can be as high as 30%.

11.4 Lactational Amenorrhoea Method

11.4.1 Key message

- Provides contraception for the mother and best feeding for the baby
- **Can be effective for up to 6 months after childbirth**, as long as monthly bleeding has not returned and the woman is fully or nearly fully breastfeeding.
- **Requires breastfeeding often, day and night.** Almost all of the baby's feedings should be breast milk.
- **Provides an opportunity to offer a woman an ongoing method that she can continue to use after 6 months**

11.4.2 What is lactational amenorrhoea method?

A temporary family planning method based on the natural effect of breastfeeding on fertility. ("Lactational" means related to breastfeeding. Amenorrhea" means not having monthly bleeding.)

- **The lactational amenorrhea method (LAM) requires 3 conditions. All 3 must be met:**
 - **The mother's monthly bleeding has not returned**
 - **The baby is fully or nearly fully breastfed and is fed often, day and night**
 - **The baby is less than 6 months old**

To continue preventing pregnancy a woman must switch to another method as soon as any one of the three LAM criteria no longer applies.

- **Fully breastfeeding**" includes both exclusive breastfeeding (the infant receives no other liquid or food, not even water, in addition to breast milk) and almost-exclusive breastfeeding (the infant receives vitamins, water, juice, or other nutrients once in a while in addition to breast milk).
- **Nearly fully breastfeeding**" means that the infant receives some liquid or food in addition to breast milk, but the majority of feedings (more than three-fourths of all feeds) are breast milk.
- Works primarily by preventing the release of eggs from the ovaries (ovulation). Frequent breastfeeding temporarily prevents the release of the natural hormones that cause ovulation.

11.4.3 How Effective?

Effectiveness depends on the user:

Risk of pregnancy is more when a woman cannot fully/ nearly fully breastfeed her child

- As commonly used, about 2 pregnancies per 100 women using LAM in the first 6 months after childbirth. This means that 98 of every 100 women relying on LAM will not become pregnant.
- When used correctly, less than 1 pregnancy per 100 women using LAM in the first 6 months after childbirth.

Return of fertility after LAM is stopped:

Depends on how much the woman continues to breastfeed

Protection against sexually transmitted infections: None

CHAPTER 12: CONTRACEPTION FOR POST-PARTUM WOMEN AND FOR ADOLESCENTS

12.1 POST PARTUM CONTRACEPTION

All postpartum women should be counselled and provided with the family planning method they choose prior to their discharge from the birthing facility. All methods of contraception are appropriate for postpartum women. However, the time for starting each method depends on a woman's breastfeeding status.

12.1.1 Return to fertility postpartum

Following delivery every woman experiences a period of infertility. The period of infertility following delivery in **non-breastfeeding** women may be less than 6 weeks post delivery (on average, the first ovulation occurs around 45 days postpartum). The period of infertility for **breastfeeding** mothers is longer than for non-breastfeeding mothers. The return of fertility, however, is not predictable (conception can occur before the woman has the first menses). This period of temporary infertility is due to the effect of suckling which causes a surge in the hormone prolactin thereby inhibiting ovulation. Ovulation remains disrupted or suppressed, as long as the frequency, duration and intensity of suckling are high. Ovulation in a lactating woman often naturally resumes around 6 months postpartum.

12.1.2 Counselling postpartum women

Contraceptive counselling and service provision should be part of:

- immediate postpartum care for hospital-based birthing services
- initial and follow-up visits to postpartum women during outreach services
- routine postpartum services offered to women in the first 6 weeks following childbirth.

It is best if counselling for postpartum contraception begins in the antenatal period:

12.1.3 When to start contraception

While most methods of contraception are appropriate for postpartum women, the time for starting each method depends on a woman's breastfeeding status. Methods that can be used whenever a couple resumes sexual intercourse, even in the immediate postpartum period, include:

- spermicides
- condoms (lubricated condoms may help overcome vaginal dryness)
- withdrawal (both condoms and withdrawal prevent seminal fluid from being deposited in the vagina)

Figure 12.1 and Table 12.1 show the recommended time of starting contraception for breastfeeding and non-breastfeeding women.

12.1.4 Contraception for non-breastfeeding women

Although most non-breastfeeding women will resume menstrual cycles within 4 to 6 weeks after delivery, only about one-third of first cycles will be ovulatory and even fewer will result in pregnancy. In order to avoid all risk of pregnancy, however, contraception should be started at the appropriate time:

- barriers, spermicides or withdrawal with the resumption of sexual intercourse following delivery
- hormonal contraceptives, IUDs or voluntary female sterilization BEFORE the resumption of sexual intercourse following the delivery.

Figure 12.1: shows the recommended time of starting contraception for postpartum women.

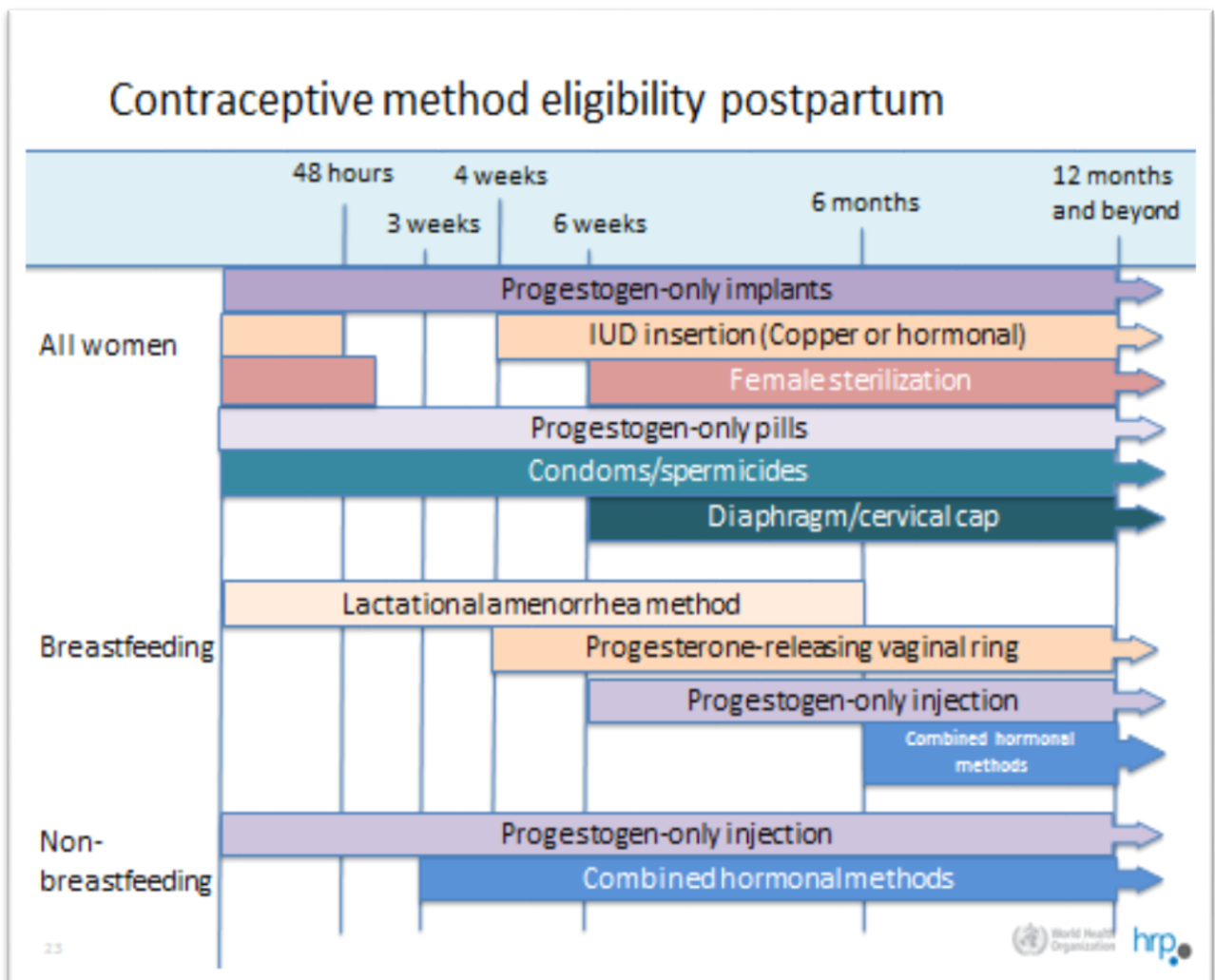


Table 12.1: Recommended Times That a Woman Can Start a Family Planning Method After Childbirth

Family Planning Method	Fully or Nearly Exclusive breastfeeding	Partially Breastfeeding or Not Breastfeeding
Lactational Amenorrhea Method	Immediately	(Not applicable)
Vasectomy	Immediately or during partner's pregnancy	
Male or female condoms	Immediately	
Spermicides		
Copper-bearing IUD	Within 48 hours, otherwise wait for 4 weeks	
Female sterilization	Within 7 days, otherwise wait for 6 weeks	
Fertility awareness methods	Start when normal secretions have returned (for symptoms-based methods) or she has had 3 regular menstrual cycles (for calendar-based methods). This will be later for breastfeeding women than for women who are not breastfeeding	
Progestin-only pills-	< 6 weeks of childbirth*	
Implants		
Progestin-only injectables	6 weeks after childbirth*	Immediately
Combined oral contraceptives	6 months after childbirth	21 days after childbirth if not breastfeeding or 6 weeks after childbirth if partially breastfeeding

Source: Adapted from Family Planning Global Handbook for Providers including WHO's 2017 recommendations*

WHO Postpartum Family planning Compendium

What is Postpartum Family planning Compendium?

The WHO postpartum Family planning Compendium is aimed at Health care providers who are prescribing contraception postpartum women and program managers and policy makers who facilitate the availability of contraceptive methods. Its focuses on the initiation of family planning services within the first 12 months following childbirth to prevent closely-spaced and unintended pregnancies.

Synthesising guidance

The user-friendly digital platform helps health care provider to quickly and easily access WHO recommendations on what contraceptive options are available for postpartum women. The new compendium allows people to select from range of options including health conditions and drug interaction. The new compendium is accessible for all computers, including mobile devices and tablets. Step for accessing are as follows

Step 1: type this link: <http://srhr.org/postpartumfp/>

Step 2: choose option on the women's characteristics



The screenshot shows a web browser window with the URL <http://srhr.org/postpartumfp/>. The page header includes the World Health Organization logo and the title "Compendium of WHO Recommendations for Postpartum Family Planning". The main heading is "Guide women through their postpartum family planning options". Below this, a sub-heading states: "The Postpartum Family Planning Compendium integrates core WHO guidance for clinicians, program managers, and policy-makers."

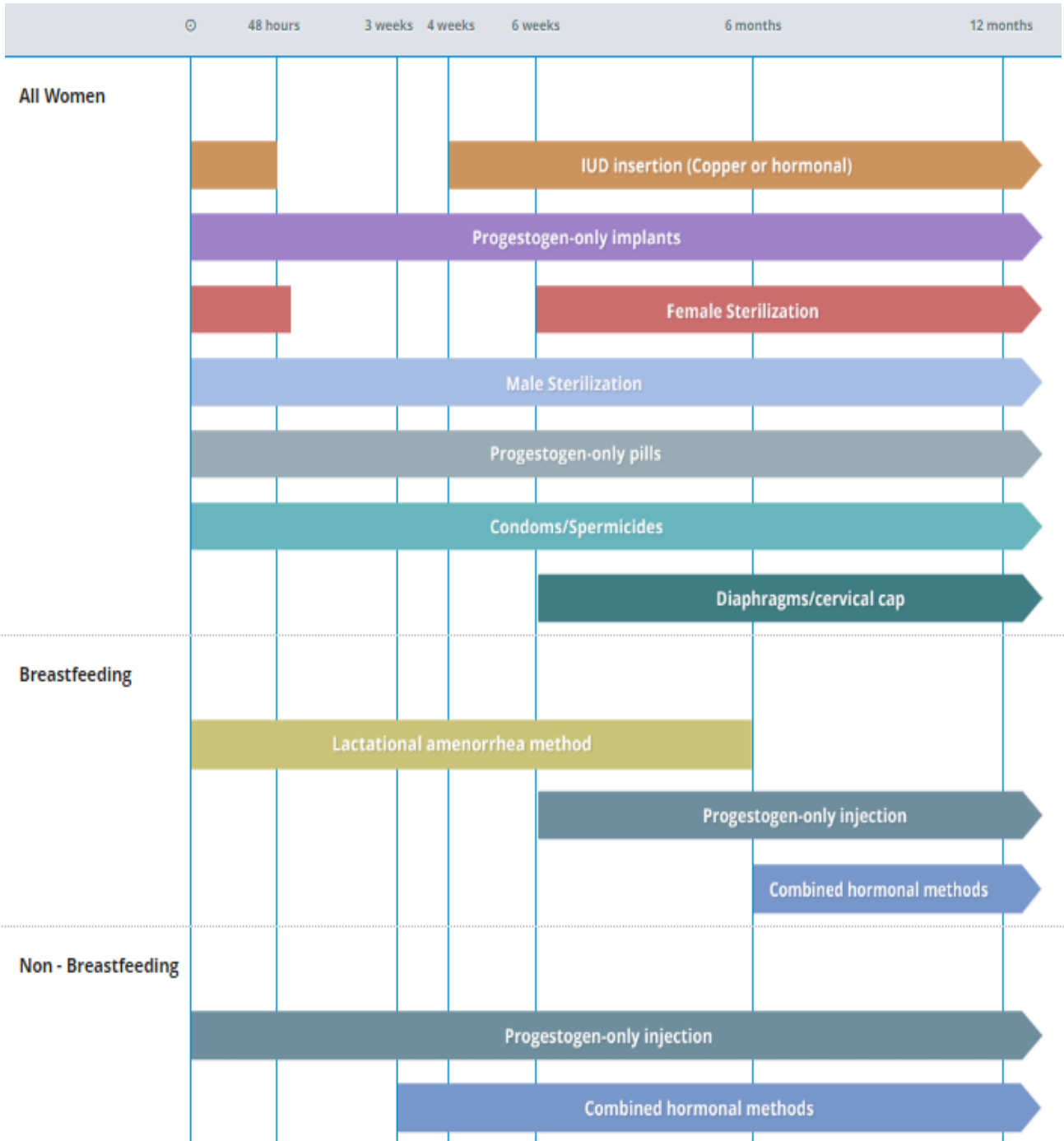
The main content area is titled "1. What are the woman's characteristics?" and contains a form with the following sections:

- Choose Medical Conditions:** A dropdown menu showing "0 Selected".
- Breastfeeding Status:** Two radio buttons labeled "Yes" and "No".
- Current Medication Use:** A dropdown menu showing "0 Selected".
- Other Characteristics:** A dropdown menu showing "0 Selected".

Below these sections is a "Time interval after delivery:" slider with markers for 0 hours, 48 hours, 3 weeks, 4 weeks, 6 weeks, 6 months, and 12 months. The slider is currently set to 0 hours.

At the bottom of the form, there is a link: "2. Click on family planning method to see recommendations".

Step 3: Click on family planning method to see recommendation



12.2 CONTRACEPTION FOR ADOLESCENTS

Adolescence is defined by WHO as the period between ages 10 and 19 years. Biological maturity in this period is not necessarily accompanied by psychological maturity or economic independence. It is a period of transition from childhood to adulthood and also a time for seeking one's own identity. Many adolescents find difficulty adjusting to this period, especially coping with sexuality. Many become sexually active, but the sexual intercourse is infrequent. Also the adolescent usually do not use any contraceptive if used, they use irregularly or the method used is not reliable. Besides, adolescents like to experiment and indulge in risky behaviours. Many times they have sex under the influence of alcohol or drugs. This sometimes results in unplanned/unwanted pregnancy and STI/HIV infection.

While dealing with adolescents, it is important to understand some of the changes that occur in this stage of development. Some of the major features are:

Girls:	Boys:
<ul style="list-style-type: none">- Increase in height and weight- Enlargement of breasts- Growth of pubic and axillary hair- Start having menstrual periods	<ul style="list-style-type: none">- Increase in height and weight- Change in voice- Enlargement of penis and increase in testicular volume- Growth of beard and mustache with appearance of axillary and pubic hair.

Common reproductive health problems faced in puberty are menstrual irregularity and dysmenorrhoea in girls and wet dreams and masturbation in boys. Both can be victims of sexual abuse or may be trafficked for prostitution.

Globally, as age of marriage rises, more adolescents will indulge in premarital sexual activity. As a result, adolescents are at risk of:

- Unplanned/unwanted pregnancy and unsafe abortion
- RTI including sexually transmitted infection. Recent information on HIV infection shows that 50% of new infections are occurring in youth.

12.2.1 Consequences of Unwanted pregnancy in adolescent girls

Social

- Decreased opportunity for education
- Single mother (less opportunity for marriage)
- Forced marriage

Economic

- No employment opportunity due to lack of education

Medical

- May seek clandestine and unsafe abortion leading onto death and disability
- Worsened anemia
- Risk of obstructed labour
- PIH is more common in very young girls

All these can cause death in this young mother. In fact, pregnancy complications are the commonest cause of death in girls of this age group.

- Babies born to adolescent girls have a 30% higher risk of being underweight and malnourished and may die.

Therefore, it is of utmost necessity to prevent unwanted pregnancy in adolescents, especially where abortions are not legal or unavailable.

12.2.2 Contraception for Adolescents

While offering contraception to adolescents, following points should be remembered:

- Should provide service whether married or not, regardless of being in or out of school.
- Counselling and services should be readily available.
- Counselling should include prevention of STIs.
- They should not feel embarrassed or threatened.
- There should be supportive environment
- Health workers should not be judgmental.
- Confidentiality should be maintained.
- Should avoid unnecessary clinical procedures like pelvic examinations.

12.2.3 Contraceptive choices

An effective method should be used with condoms as back up for prevention of STI and HIV. Factors influencing contraceptive choices are:

- Social, cultural and environmental
- Age
- Parity
- Frequency of intercourse and number of partners
- Possible risk in the event of unwanted pregnancy
- Medical conditions

1. Combined Oral Contraceptive pills

This should be the first choice since it is an effective contraceptive and has low side effects. Give proper counselling to ensure consistent and effective use.

2. Condoms

It should be used correctly and consistently. It is an important method in this age group since there is sexual intercourse in unstable relationships and condoms help prevent STI/HIV. Besides, it is available to the adolescents without having to visit a health facility. But, it must be emphasized that another method must be used since its effectiveness against pregnancy is lower than other methods.

Demonstrate how to correctly use condoms.

3. Emergency Contraception

This has an important place as contraception in adolescents since:

- Sexual intercourse in adolescents are unplanned and irregular
- Regular contraceptive services may not be available to them

EC can be used in cases of condom breakage as a back-up method. While providing emergency contraception, counselling should be given on prevention of STI/HIV.

Therefore, it is important to let the adolescents know about the existence of emergency contraception..

4. **DMPA** is other option available for adolescents.

5. **IUCD** can be provided to adolescents if required.

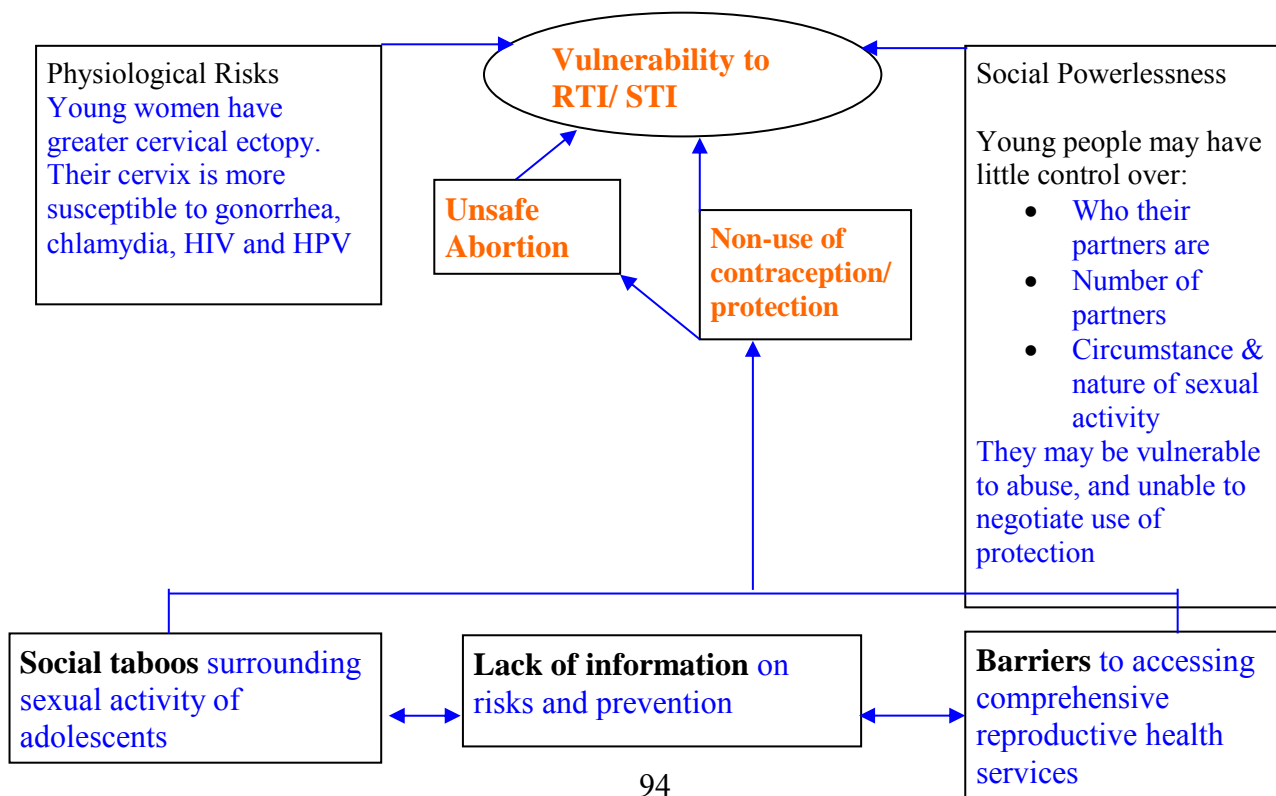
6. Other methods that can be used are

- Female condoms
- Fertility Awareness Based Methods

12.3 REPRODUCTIVE TRACT INFECTIONS (RTI/STI) IN ADOLESCENTS

Risk factors

- A variety of medical and social factors put adolescents at particular risk to RTIs including STIs. The diagram below illustrates some of these determinants:



Consequences

- Because of barriers to receiving care, young people may be unable to seek timely and effective treatment for their infections.
- Social taboos have tremendous impact. A young woman suffering from an RTI as a complication of an unsafe abortion may be ashamed to seek care.
- Adolescents who do not control the circumstances of their sexual activity, such as victims of sexual coercion and abuse, are at risk of recurrent sexually transmitted infections even if they are able to seek treatment the first time.
- Young women, who become infertile because of RTI are prone to be stigmatized by the family and society.

12.2.3 Intervention (Giving Sexuality Education)

Sexuality education and making reproductive health services available for adolescents are two major interventions to address the issues of adolescent reproductive health.

Adolescents need accurate information to make them aware of consequences of unprotected sex. It gives them knowledge and confidence to make decisions related to sexual behavior including abstinence. Giving sexuality education helps them delay sexual debut, limit number of sexual partners and use effective contraception even as adults. Both boys and girls should be taught responsible behavior and they should be encouraged to be responsible for contraception.

In case of pregnancy in the partner who may be a minor (below 18 years) he may be liable for legal actions.

Sexuality education should be given to different age groups (10 to 14 years and 15-19 years). Younger adolescents must be encouraged to delay sexual activity and older ones must be taught about unsafe sex and contraception. It should also be given separately for boys and girls so that questions are asked freely and there are more interactions. In schools, question boxes can be put up. These can be opened periodically on fixed days and answers given preferably by a health worker. In some schools a teacher is responsible for all activities related to health. He/she can coordinate these activities. We must also not forget out of school adolescents while designing any reproductive program for this age group.

In developed countries, there are hot lines (telephones) and youth clinics, which are open 24 hours a day. These clinics give counselling, investigate for and treat STIs and give contraceptive advice including emergency contraception. In Bhutan, we must also treat reproductive tract infections and STI without imposing moralistic attitude and provide condoms along with extensive counselling for prevention of both STI and unwanted pregnancy. Ensure that services are private and confidential to make it more attractive to adolescents. Emergency contraception should be given whenever it is sought.

Sexuality education can be given by parents, teachers, health workers and peer educators. Young people listen more to their peers, but the peer educators need constant support from the program for sustainability.

Many people believe giving sexuality education will make adolescents promiscuous. This is not true. It has been seen that in countries where adolescent reproductive health programs exist, teenage pregnancy with subsequent unsafe abortions and HIV infection among young people are very low.

CHAPTER 13: EMERGENCY CONTRACEPTION

Emergency contraception or post-coital contraception refers to methods of contraception that can be used to prevent pregnancy in the first few days after intercourse. It is also intended for emergency use following unprotected intercourse, contraceptive failure (for example torn condom, forgotten pills), rape or coerced sex.

The **four** Emergency contraception methods described here are (**three types of hormonal pills and Copper bearing Intra Uterine Contraceptive Device/ IUD**):

1. LNG (Levonorgestrel)- ECP

1. Single dose (preferred) 150 mg (Two 0.75 mg tablets)
2. Split dose- one dose of 0.75 mg followed by a second dose of 0.75 mg 12 hours later

2. Combined ECPs- (100 micro gram ethinyl estradiol plus 0.5 mg LNG)

1. Split dose: One dose of 100 micro gram ethinyl estradiol plus 0.5 mg LNG, followed by the second dose after 12 hours
2. Copper IUD for EC

3. UPA (Ulipristal acetate)-ECP - single dose - 30 mg tablet- included in WHO's guidelines in 2016. It may not be available in Bhutan yet.

Providing emergency contraception helps in reduction of unwanted pregnancies. Where this is provided, incidence of induced abortion is low. This helps in prevention of maternal morbidity and mortality due to unsafe abortion/ unwanted pregnancy. It is also an important back up method for other contraceptives and helps women or couples continue using the method of choice.

ECPs can be provided effectively by trained health workers and pharmacy retailers.

13.2 IMPORTANT BENEFITS

It prevents maternal deaths due to unsafe abortions.

When adolescents come for emergency contraception, the occasion can be used for counselling for responsible sexual behaviours, contraception and prevention of **STIs**.

Emergency contraception can play an important role in linking individual and couples to ongoing reproductive health care!

13.3 WHY DOES UNPLANNED PREGNANCY OCCUR AMONG ADOLESCENTS?

- Most societies deny them sex education
- They seldom have access to proper services
- They have difficulties in negotiating for safe sex
- Most of them have sex in unstable relationships
- They are secretive about their sexuality
- Some have sex as a means to rebel against parents
- Some get pregnant purposely as a pathway to the deserved status of marriage

13.4 BELLAGIO DECLARATION (ITALY), 1995

All family planning service providers must learn about emergency contraception and make them available to women who may need them.

13.5 ELIGIBILITY FOR EMERGENCY CONTRACEPTIVE PILLS

When is emergency contraception needed?

Indications;

Emergency contraception is meant to be used only following an unprotected act of sexual intercourse to prevent pregnancy. The following are a number of situations when a woman can use or may need to use emergency contraception:

1. When a woman has been a victim of sexual assault.
2. After incorrect or inconsistent use of regular contraceptive methods:
 - i. failed coitus interruptus,
 - ii. when ejaculation has occurred in the vagina or on the external genitalia;
3. Miscalculation of the infertile period when using periodic abstinence, or failure to abstain from sexual intercourse during the fertile days
4. Woman is more than 2 weeks late for the Net En contraceptive injection and more than 4 weeks late for the DMPA contraceptive injection and had unprotected intercourse
5. Missed 3 or more active (hormonal) combined oral contraceptive pills in the first week and had unprotected intercourse
6. Missed one or more progesterone only pills by more than 3 hours and had unprotected intercourse
7. Unprotected intercourse prior to the effective time of vasectomy (3 months).
8. Accidental failure of other contraceptive methods such as:
 - a. condom breakage or
 - b. slippage
 - c. IUD expulsion.

13.6 MEDICAL ELIGIBILITY FOR ECPs

Medical conditions in which other hormonal contraceptives are restricted/ not indicated, do not apply to ECP. There is no evidence that ECPs increase the risk of cardiac, metabolic and other complications. Therefore practically all women can take ECPs.

Note: if a woman is already pregnant, ECPs are contra-indicated

Emergency Contraception Methods available in Bhutan

1. Increased dose of OCP
2. CuT insertion
3. Levonorgestrel pills

13.6.1 Musts in Emergency Contraception

- Providers must **have clear guidelines** on how and when to offer EC.
- Providers must **give clear instructions** to the clients to avoid incorrect **use** or confusion

13.6.2 Timing of prescribing ECPs

Ideally UPA(not available currently in Bhutan) ECPs, LNG ECPs and Combined ECPs should be taken as early as possible after unprotected intercourse, within 120 hours (5 days). However the woman should be advised that the effectiveness of ECPs is reduced longer the interval between unprotected intercourse and ECP intake.

UPA ECPs may be more effective between 72- 120 hours than other ECPs.

Copper IUD can be inserted upto 120 hours after unprotected intercourse.

13.6.3. Remarks

- Evidence suggests that single dose LNG-ECP regimen is as effective as split dose LNG-ECP.
- WHO expert group considers single dose option to be preferable to split -dose option for better compliance.
- Evidence also suggests that LNG-ECPs and UPA-ECPs are preferable to combined ECPs because they cause less nausea and vomiting.
- Dose details also given in sections below.

13.7 REGIEMENS

13.7.1 Increased dose of OCP (Yuzpi regimen)

Give 4 pills (Microgynon in Bhutan) within 5 days of unprotected sex followed by 4 more pills after 12 hours.

13.7.1.1 Mode of Action

- Inhibits ovulation
- Prevents implantation of fertilized egg
- May prevent fertilization
- May prevent transport of sperm and ova

13.7.1.2 Efficacy

- ECPs are 98% effective in preventing pregnancy

13.7.1.3 Side effects and management

1. **Nausea:** -Seen in 50 % of clients

Advice: Take the pills with food or at bedtime. Give prophylactic anti-emetic especially if patient has nausea with regular pills.

2. **Vomiting:Preventing emergency contraceptive pills associated nausea and vomiting**

Many women will not experience nausea and vomiting when taking emergency contraceptive pills. However, it is difficult to predict which women will experience nausea and vomiting.

Women taking levonorgestrel-only emergency contraceptive pills are less likely to experience nausea and vomiting compared to women taking combined estrogen progesterone emergency contraceptive pills.

Routine anti-emetics before taking emergency contraceptive pills is not recommended. Pre-treatment with anti-emetics can be considered depending on availability and clinical judgement.

13.7.1.4 Management of vomiting after taking emergency contraceptive pills

- If a woman vomits within 2 hours after taking a dose of emergency contraceptive pills: she should take another dose as soon as possible.
- If vomiting occurs 2 hours after taking LNG ECP and Combined ECP: no need to take repeat dose of emergency contraceptive pills.
- However, if vomiting occurs within 3 hours of taking UPA ECP: dose has to be repeated as UPA takes about 3 hours for absorption.

If she is taking combined estrogen progesterone emergency contraceptive pills she can use an anti-emetic before taking the combined estrogen progesterone emergency contraceptive pills. If vomiting continues, a repeat ECP dose can be given vaginally.

13.7.1.5 Irregular uterine bleeding: some women may experience some spotting; while majority have bleeding little early or on time. Provide reassurance. If period is delayed more than a week pregnancy must be suspected

13.7.1.6 Other side effects: Breast tenderness, headache, dizziness, and fatigue. these do not last more than 24 hours. .Give paracetamol if required.

13.7.1.7 Contraindications

Medical conditions in which other hormonal contraceptives are restricted/ not indicated, do not apply to ECP. There is no evidence that ECPs increase the risk of cardiac, metabolic and other complications. Therefore practically all women can take ECPs.

The only contraindication is **pregnancy**. **ECPs** will not work if the woman is already pregnant.

13.7.1.8 Counselling

While counselling:

- Be **respectful** towards the client
- Be **responsive** to her needs for information and care
- **Reassure** clients that all information will be kept confidential
- Have **supportive** and non-judgemental attitudes
- Do counselling in a private area (ensure **privacy**)

All clients should be counselled prior to providing emergency contraception. Let the client tell her story if she so wishes. Offer support without judging the client. If she decides to take emergency contraceptive pills, inform her that:

- Emergency contraceptive pills prevent pregnancy.
- **ECP do not cause abortion.**
- Explain the effectiveness of emergency contraceptive pills if used correctly and their mechanism of action depending on when in the menstrual cycle the ECPs are taken.

Additionally you need to counsel on:

1. Stress:

- Clients are stressed due to fear of pregnancy and STI
- They are embarrassed about being sexually active
- They are embarrassed about having failed to take effective precautions
- Rape victims may be suffering from mental trauma

Therefore, it is essential that you have a supportive attitude while talking to these women!

2. Frequent use

You must tell the client that EC is only for emergency and not for frequent use since there is more chance of failure. Of course there are no health risks associated.

3. HIV/STD

Tell them EC will not protect them from disease, only from pregnancy. If there is fear of having contracted any STI or HIV, give them diagnostic services or refer to a higher level. Counsel on how STD/HIV can be prevented.

4. Regular contraceptive use

- If a client is not already using a regular contraceptive, give her information, especially if she desires it.
- If client is too stressed at first contact, you can talk to her later on during follow up, about using a regular contraceptive.
- If it was due to failure of a regular contraceptive method, explain the reason for failure and how it can be prevented in future.

5. Information for the clients

1. Tell her she still has a **chance of being pregnant** despite EC, but that there is **no harm for the foetus.**
2. Explain how to take the pills **correctly**
3. Describe common **side effects.** This will help women to know what to expect and may tolerate better.
4. Tell her that drinking milk or eating snacks with pills may **reduce nausea**
5. Help her **decide when to take the first dose** so that taking the second one 12 hours later is not inconvenient for her (for example, if first dose is taken at 2 PM today, she has to wake up at 2AM in the night to take the second dose, which is definitely inconvenient!)

6. **If she engages in unprotected sex in the next few days, she will not be protected from pregnancy. Therefore, she must use condoms.**
7. Tell her that her **next menstrual bleeding** may start a few days earlier or later than normal.
8. Tell her to come for **regular contraception** as soon as her period starts.
9. If her period is delayed for more than a week, **pregnancy should be ruled out first.**
10. If a woman is married or has stable partner she should use other more effective contraceptives like OCP, CuT or DMPA.

6. If client is pregnant (EC has failed)

1. Offer her options and let her decide. Respect her decision. You may need to refer her to confirm pregnancy.
2. If she desires to keep the pregnancy, reassure her that the small hormonal dose will not affective foetus.
3. In all cases of EC failure, rule out ectopic pregnancy (may be higher chances of it in EC failures than in a normal pregnant population).

13.7.2 High dose of Levonorgestrel (LNG)

These pill are also commonly known as “Morning after pills” or “i pill”

13.7.2.1 Composition

Levonorgestrel is a third generation progesterone. Each tablet usually contains 0.75mg (750microgram) or 1.5mg of Levonorgestrel.

13.7.2.2 Dosage

- Single dose: If using 1.5mg tablet, give a single dose
- Split dose: If using 0.75mg tablet - take one tablet as early as possible and the next tablet 12 hours apart
- **It should be taken within 5 days.** Earlier the more effective.

13.7.2.3 Mode of action:

- Prevent or delay ovulation
- Inhibit fertilization by affecting tubal transport of the ovum.
- Interferes with implantation of fertilized ovum in the uterus.

13.7.2.4 Effectiveness

If started within 72 hours of unprotected sex, Levonorgestrel reduces the chance of pregnancy by 99%.

13.7.2.5 Side effects

Progestin only emergency contraception pills causes significantly fewer side effects than do combined pills

Common side effects are:-

- Vomiting
- Nausea

13.7.2.6 Counselling clients

Counselling clients for progesterone only emergency pills are similar to OCP use for emergency contraception

If a woman is pregnant at the time of taking the progesterone only pills, it will not harm the embryo or foetus.

13.7.3 CuT insertion

13.7.3.1 Time of insertion: To be inserted within 5 days/ 120 hours of the unprotected sexual intercourse.

13.7.3.2 Efficacy: Prevents 98% of pregnancy

13.7.3.3 Mode of action Prevents fertilization by decreasing number of sperms reaching the fallopian tubes. Also interferes with ovum transport and implantation of fertilised ovum.

13.7.3.4 Indications

- Same as of OCP
- When more than 72 hours have lapsed from unprotected intercourse
- When client is already considering using CUT as regular contraception.

13.7.3.5 Eligibility criteria

CuT should **not be used** in an established pregnancy or where there is high risk of STI (rape etc)

13.7.3.6 Counselling

- Same as for OCP, when given as emergency contraception.
- You may suggest that she might keep CuT as regular contraception. If she does not want it, she can come for removal during or soon after her menstrual period.

13.7.3.7 Instruction to the client

She must come back to the clinic if there is any of the following signs and symptoms:

- Purulent vaginal **discharge**
- **Fever**
- Pelvic **Pain**
- Excessive or abnormal **bleeding**

13.7.3.8 Follow up

- If client does not want to keep the CuT, remove during /after next menstrual period and give her another contraceptive for regular use.
- If she wants to keep the CuT, check it to see if in place and give advice related to continued follow up.
-

In case of delayed menstruation, rule out pregnancy. If pregnant, remove CuT and exclude ectopic pregnancy!

In case of rape/sexual assault or unknown partner, STI should be ruled out and treated.

Correcting Misunderstandings

Emergency contraceptive pills:

- Do not cause abortion.
- Do not cause birth defects if pregnancy occurs.
- Are not dangerous to a woman's health.
- Do not promote sexual risk-taking.
- Do not make women infertile

13.8 QUESTIONS AND ANSWERS ABOUT EMERGENCY CONTRACEPTIVE PILLS

13.8.1. Do ECPs disrupt an existing pregnancy?

No. ECPs do not work if a woman is already pregnant. When taken before a woman has ovulated, ECPs prevent the release of an egg from the ovary or delay its release by 5 to 7 days. By then, any sperm in the woman's reproductive tract will have died, since sperm can survive there for only about 5 days.

13.8.2 Do ECPs cause birth defects? Will the fetus be harmed if a woman accidentally takes ECPs while she is pregnant?

No. Good evidence shows that ECPs will not cause birth defects and will not otherwise harm the fetus if a woman is already pregnant when she takes ECPs or if ECPs fail to prevent pregnancy.

13.8.3 How long do ECPs protect a woman from pregnancy?

Women who take ECPs should understand that they could become pregnant the next time they have sex unless they begin to use another method of contraception at once. Because ECPs delay ovulation in some women, *she may be most fertile soon after taking ECPs*. If she wants ongoing protection from pregnancy, she must start using another contraceptive method at once.

13.8.4 What oral contraceptive pills can be used as ECPs?

Many combined (estrogen-progestin) oral contraceptives and progestin only pills can be used as ECPs. Any pills containing the hormones used for emergency contraception— levonorgestrel, norgestrel, norethindrone, and these progestins together with estrogen (ethinylestradiol)— can be used. (See Pill Formulations and Dosing, p. 56, for examples of what pills can be used.)

13.8.5 Are ECPs safe for women with HIV or AIDS? Can women on antiretroviral therapy safely use ECPs?

Yes. Women with HIV, AIDS, and those on antiretroviral therapy can safely use ECPs.

13.8.6 Are ECPs safe for adolescents?

Yes. A study of ECP use among girls 13 to 16 years old found it safe. Furthermore, all of the study participants were able to use ECPs correctly.

13.8.7 Can a woman who cannot use combined (estrogen-progestin) oral contraceptives or progestin-only pills as an ongoing method still safely use ECPs?

Yes. This is because ECP treatment is very brief.

13.8.8 If ECPs failed to prevent pregnancy, does a woman have a greater chance of that pregnancy being an ectopic pregnancy?

No. To date, no evidence suggests that ECPs increase the risk of ectopic pregnancy. Worldwide studies of progestin-only ECPs, including a United States Food and Drug Administration review, have not found higher rates of ectopic pregnancy after ECPs failed than are found among pregnancies generally.

13.8.9 Why give women ECPs before they need them? Won't that discourage or otherwise affect contraceptive use?

No. Studies of women given ECPs in advance report these findings:

- Women who have ECPs on hand took them sooner after having unprotected sex than women who had to seek out ECPs. Taken sooner, the ECPs are more likely to be effective.
- Women given ECPs ahead of time were more likely to use ECPs than women who had to go to a provider to get ECPs.
- Women continued to use other contraceptive methods as they did before obtaining ECPs in advance.

13.8.10 Should women use ECPs as a regular method of contraception?

No. Nearly all other contraceptive methods are more effective in preventing pregnancy.

A woman who uses ECPs regularly for contraception is more likely to get an unintended pregnancy than a woman who uses another contraceptive regularly. Still, women using other methods of contraception should know about ECPs and how to obtain them if needed—for example, if a condom breaks or a woman misses 3 or more combined oral contraceptive pills.

13.8.11 If a woman buys ECPs over the counter, can she use them correctly?

Yes. Taking ECPs is simple, and medical supervision is not needed. Studies show that young and adult women find the label and instructions easy to understand. ECPs are approved for over-the-counter sales or non-prescription use in many countries.

CHAPTER 14: PERMANENT METHODS OF FAMILY PLANNING

14.1 INTRODUCTION:

Sterilization is an option when desired family size has been achieved. It is also indicated in high risk women in whom another pregnancy might be detrimental to her health.

Sterilization is the most effective contraceptive method available, being a permanent one time procedure.

Both Tubal Ligation (TL) and No-Scalpel Vasectomy (NSV) can be performed under local anaesthesia, and the client can be sent home after a few hours. Hospital admission is not usually required. TL can be performed within 72 hours of delivery (post-partum), or as an interval procedure (after 42 days onward).

14.2 POLICY AND STANDARDS

- Sterilization will be purely voluntary through informed decision.
- There will be no element of coercion while offering contraceptive surgery to clients.
- Sterilization will be offered to all eligible couples who have completed their chosen family size.
- Trained professional will perform sterilization procedures.
- Sterilization will be performed in a properly equipped facility that has acceptable standards of asepsis and infection control.
- No-scalpel vasectomy will be the preferred surgical technique for vasectomy.
- Adequate facilities for carrying out the procedure must be available; this includes equipment and drugs to handle life-threatening situation and other emergencies.
- The surgeon and staff must be trained and skilled in the technique they are using, and in the use of appropriate and safe anaesthesia.
- All instruments and equipment must be in optimum working order before the start of the surgical procedure.
- Strict infection prevention measures must be maintained.

14.3 MALE STERILIZATION (VASECTOMY)

Vasectomy is a simple minor surgical procedure performed as an outpatient/ambulatory procedure. Both the conventional vasectomy procedure and the Non-Scalpel Vasectomy (NSV) are one of the safest procedures. The vas deferens on each side of the scrotum are identified by palpation before entering the scrotum. The vas deferens on each side is occluded so that the sperm are not released into ejaculation.

14.3.1 Category of service providers for Vasectomy

Male sterilization should be performed only by trained and competent medical officers and surgeons.

14.4 ELIGIBILITY FOR VASECTOMY

14.4.1 Indications

Vasectomy can be done for a client who seeks permanent contraceptive method and wants no more children. There is no medical condition that would be an absolute contraindication for male sterilization, although there could be some conditions that may require extra care.

14.4.2 Absolute contraindications for vasectomy

Box 14.1: Male surgical sterilization is not appropriate if there is any suggestion that the client:

- shows excessive interest in reversal
- disagrees with/ does not want to sign informed consent
- is under pressure from another person.

Generally there are no absolute medical contra indications to voluntary male sterilization

14.4.3 Delay vasectomy

For the conditions below, vasectomy should be delayed until specific conditions resolve. Help the client choose another method for the interim.

- ✓ acute systemic infection or gastroenteritis
- ✓ depression: help client choose another method and refer for treatment of depression
- ✓ STI: chlamydial and gonococcal infection
- ✓ uncontrolled diabetes
- ✓ local skin or scrotal infections
- ✓ large varicocele*
- ✓ large hydrocele*
- ✓ intra-scrotal mass

Procedure is delayed until the condition is evaluated or corrected. Alternative temporary methods of contraception should be provided in the interim.

14.4.4 Conditions with anticipated difficulties

In the following conditions surgery should be undertaken in a setting with an experienced surgeon and staff, equipment required to provide general and other back-up medical support. Alternate temporary methods of contraception should be provided, if referral is required or there is otherwise any delay.

- ✓ Cryptorchidism
- ✓ Filariasis involving the scrotum can lead to difficulties to palpate the spermatic cord.
- ✓ Coagulation disorders (risk of hematoma, risk of infection)

*Large **hydrocele or large varicocele**: Vas may be difficult or impossible to locate in the presence of a large hydrocele or large varicocele. A single procedure to repair hydrocele/varicocele and

vasectomy can decrease the risk of complication. Alternative methods of contraception should be provided if referral is required or there is any delay in performing the procedure.

Inguinal hernia: clients with inguinal hernia requesting vasectomy:

- ✓ Vasectomy can be done concurrent with hernia repair.
- ✓ The procedure should be done in a setting with experienced surgeon and staff under GA and other back up medical support.
- ✓ Alternative temporary methods of contraception should be provided if referral is required or there is any delay in performing the procedure.

14.4.5 Documenting denial of voluntary sterilization

When a client is judged unsuitable for voluntary sterilization, the reason(s) and the action taken should be stated on the client card/record/case sheet

14.5 COUNSELLING AND INFORMED CHOICE FOR VASECTOMY

The couple's decisions about fertility and contraception are made for a variety of reasons. Decisions are influenced by personal circumstances such as family size, economic situations and the health status of one or both partners. The decision may also be affected by cultural expectations and information available about family planning. The person counselling should only explain the procedures not coerce the client into making the decision to undergo sterilization. The decision remains with the client.

Vasectomy is intended to be a permanent method and involves surgery with its associated risks. Voluntary sterilization has consequences, risks and concerns that need to be discussed with each client. It is therefore essential that service providers provide clients with necessary information and counselling about the procedure, clarify myths and misconceptions and emphasize that vasectomy is not castration. Counsel both partners if possible.

14.5.1 Pre operative counselling should focus on:

- preparing him for the operation
- giving him instructions on how to prepare for surgery and what to expect during and after the operation
- ensuring that he has made the decision voluntarily
- documenting client and spousal informed consent
- discussing other temporary and permanent family planning methods that are available

The client must be counselled in a language and terminology he understands. Privacy must be maintained during counselling. The following information should be understood by clients:

- side effects of the method
- advantages/disadvantages

- the need to use contraception such as condoms or for the partner to use temporary methods for **3 months** post vasectomy and the need for confirmatory semen analysis 3 months post vasectomy.

14.5.2 Informed consent for vasectomy

Informed consent is the client's voluntary decision to undergo or not to undergo a surgical sterilization procedure, in full possession and understanding of the relevant facts. In Bhutan, the informed consent should be signed by both the client and spouse and is the legal authorisation for performing the procedure. Therefore service providers should ensure that client and spouse have signed the informed consent form with full understanding. In special cases where the client is mentally disabled, the guardian can give consent. A sample of the informed consent form is provided in the appendices.

The consent is an exercise of free choice with a full understanding of the nature and consequences of the procedure to be performed. The consent must be obtained **BEFORE** performing the procedure.

The following are primary and ethical obligations and responsibilities of the service provider:

- Written consent signed by both the client and the spouse must be obtained for all clients requesting surgical contraception.
- This serves as legal authorization for surgery and documents informed and voluntary choice.
- Make sure that the client has been informed about the following six points:
 1. Temporary contraceptives also are available to the client.
 2. Voluntary vasectomy is a surgical procedure.
 3. There are certain risks of the procedure as well as benefits. (Both risks and benefits must be explained in a way that the client can understand.)
 4. If successful, the procedure will prevent the client from ever having any more children.
 5. The procedure is considered permanent and probably cannot be reversed.
 6. The client can decide against the procedure at any time before it takes place (without losing rights to other medical, health, or other services or benefits).

14.6 CLIENT ASSESSMENT FOR VASECTOMY

The purpose of client assessment prior to surgical sterilization is necessary to:

- ascertain clients' fitness for the surgical sterilization procedure
- exclude possible risks associated with the procedure

14.6.1 Preoperative Assessment

The recommended information to include in a preoperative medical evaluation of a male client are:

14.6.2 Demographic information

Includes client's name, address, age, marital status, spouse's name, occupation, education, number of living children, and age of the youngest child

14.6.3 Medical history to include the following

- Respiratory problems (e.g. asthma), Heart disease or Diabetes
- Bleeding disorders
- Scrotal or inguinal surgery
- Genitourinary infections/STI risk assessment
- Sexual impairment and scrotal abnormalities
- Current medications
- Allergies to medications

14.6.4 Physical and laboratory examination

Genital examination is mandatory prior to performing vasectomy. Other examinations should be done as indicated by the medical history. It is important that providers review history and perform the clinical examination and ensure the client's voluntary consent for the procedure. There are no mandatory laboratory tests to be done prior to vasectomy.

The following tests are recommended as a good preventative health measures:

- pulse and BP
- urine sugar and protein

14.7 VASECTOMY PROCEDURE

14.7.1 Timing of procedure

Vasectomy can be performed as requested as long as there are no reasons to delay the procedure. Procedure should be delayed till after successful treatment if the client has infection of the operative area, acute systemic infections or if there are associated inguino-scrotal problems.

14.7.2 Anaesthesia

Vasectomy can be performed under local using 1% Xylocaine. Occasionally general anaesthesia may be used when vasectomy is performed using the Modified Standard Vasectomy technique. When GA is used client requires admission day prior to the surgery and is discharged on the first post operative day.

14.7.3 Vasectomy techniques

The two techniques of vasectomy are

1. Modified standard vasectomy
2. Non-scalpel vasectomy

14.7.4 Non-Scalpel Vasectomy Technique (NSV)

Currently in Bhutan **Non-Scalpel Vasectomy technique (NSV) is followed.** It requires two specially designed but simple instruments to puncture the scrotal skin to access the vas deferens. The instruments are:

1. NSV ringed forceps (3.0 to 4.0 mm diameter ring)
2. NSV dissecting forceps

Compared with traditional vasectomy, NSV results in fewer complications, produces less pain during the procedure and early follow-up period, and permits couples to resume sexual activity earlier after surgery. Also, there is a reduction in the time required for the vasectomy when skilled providers use the no-scalpel approach.

In NSV, the vas deferens is palpated and then isolated using the ringed NSV forceps. The dissecting forceps are then used to puncture the scrotal skin (as opposed to an incision) to access and deliver the vas. The NSV technique does not require skin suture as the scrotal skin puncture is very small.

14.7.5 Monitoring the client during vasectomy procedure

The client should be monitored by observing his general condition and state of consciousness during and after surgery. Vital signs should be monitored continuously if general anaesthesia is used.

14.7.6 Post-operative care and discharge

14.7.7 Vasectomy under local anaesthesia: Clients who have had their vasectomy performed under local anaesthesia can be discharged after 30 minutes if they are stable and do not have abnormal findings. Before the client is discharged, a trained staff member should repeat and verify his understanding of the discharge instructions. Routine antibiotic prophylaxis is NOT given for vasectomy. Clients are provided analgesics such as paracetamol for 3 days.

14.7.8 Vasectomy under general anaesthesia: If vasectomy was performed under general anaesthesia, the client's vital signs and state of consciousness should be closely monitored post operatively in the recovery room. The client must be ambulatory, alert and oriented with normal vital signs before being sent to the ward. Clients are then discharged on the first post operative day (considering day of surgery as day of operation). Before the client is discharged, a trained staff member should repeat and verify the client's understanding of the discharge instructions.

14.7.9 Post vasectomy contraception and information for all clients:

All clients should be counselled on the importance of using post vasectomy contraception till semen analysis confirms the effectiveness of vasectomy. A client who has undergone vasectomy should **wait 3 months** before relying on his vasectomy for contraception. Current evidence shows that 20 ejaculations after vasectomy (in the absence of a 3 month waiting period) is not a reliable determinant of vasectomy effectiveness. The client should however resume sexual activity (while using contraceptive protection) during the 3 month waiting period after his vasectomy in order to clear any remaining sperm from his semen.

Post-operative instructions-

- Resume normal activities in 3 days.
- Resume sexual activity whenever comfortable but with an additional contraceptive method for 3 months post vasectomy. Provide the client with supply of condoms, and explain how to use them. Effectiveness of vasectomy is confirmed by a semen analysis done 3 months post vasectomy.
- Wound care: Keep incision clean and dry. Avoid getting the wound wet while bathing. Soap and water can be used to wash the wound after 3 days.
- Wear close fitting scrotal support for at least 48 hours and then as long as it is needed.
- Describe the warning signs (refer to Box 14.2 – signs of infection, bleeding, pain) and where to go if needed.
- Explain how to use medications that are given.
- Clients are provided with analgesics such as paracetamol for 2 days. (Antibiotics are not used routinely for vasectomy.)
- Reiterate that sexual performance is unchanged after vasectomy and that vasectomy does not affect a man's ability to have sex.
- Written or printed post-operative care and discharge information should be given to the client before he is discharged.

14.8 Routine follow-up care after vasectomy

All clients who have had a vasectomy are advised the following:

- First follow up 3rd day post vasectomy to check wound.
- Second follow up 3 months post vasectomy to do mandatory semen analysis to confirm effectiveness of vasectomy.
- Return to facility earlier if he has any concerns.
- Contact doctor immediately if he has any of the warning signs in Box 15.1.

At follow-up

The operating surgeon if possible should conduct the follow up assessment:

During the first follow up visit on third day:

- Inspect the wound site.
- Remove sutures if any.
- Perform any other client evaluation that should be done.
- Address client concerns if any.

At second follow up visit at 3 months post vasectomy:

- do semen analysis to confirm effectiveness of vasectomy.
- Address client concerns if any.

Further follow-up can be scheduled if continued care is required

Box 14.2 POSTOPERATIVE DANGER SIGNS POST VASECTOMY

See doctor in the event of:

fever (greater than 38 C or 100.4 F)

- dizziness with fainting
- persistent or increasing scrotal pain and/or swelling bleeding or pus coming from the incision

14.8 MANAGEMENT OF COMPLICATIONS OF VASECTOMY

Serious complications are extremely rare and occur in less than 1% of all male sterilization procedures. Clients should be routinely counselled about common side effects and possible complications and what to do if certain problems occur (Table 15A.2).

Table 15 A: Complication,side effecs and management-following vasectomy

Complications	Managements
Intra-operative 1. Vaso-vagal attack (transient BP drop/giddiness/	Lower his head Wipe his face with cold water Allow patient to rest under cover Atropine 0.6 mg IV slow stat Defer operation
2. Convulsions	5 to 10mg Diazepam IV slowly over 2 min. Give Oxygen Allow patient to recover Stop surgery
3. Injury to testicular Artery	Ligate both ends of the artery
Immediate Post Operative 1. Scrotal swelling with pain	Ice packs Scrotal support Rest at home Painkillers as required
2.Haematoma Small Large	Scrotal support Painkillers Evacuation drainage ligate active bleeder(s) Antibiotics Sterile dressing Consider referral (on case basis)

3. Infection Wound sepsis Orchitis (inflammation of the testis) Tetanus (rare)	Dressing Antibiotics/painkillers Admit Scrotal support/bed rest Refer immediately to hospital well equipped to handle such cases
C. Late 1. Sperm Granuloma (at the site of vas occlusion/epididymis), usually symptomless	Anti-inflammatory- brufen Refer if painful/persistent
2. Psychological Problem	Discuss problem Talk friendly over role of sterilization Appropriate referral if necessary
Method failure (technical/spontaneous recanalisation)	If couple not willing to keep pregnancy, consider MTP (gestation less than 8 weeks) or Medically follow up pregnancy Repeat vasectomy, if so desired

14.8.1 Anaesthesia complications

Use of general anaesthesia significantly and unnecessarily increases the risks of major complications associated with vasectomy and is not recommended except in certain complicated procedures.

For local anaesthesia, when intravascular injections are avoided and the recommended doses of xylocaine are not exceeded, toxic reactions are rare. However, toxic reactions may be manifested as convulsions requiring assisted ventilation and anticonvulsants (e.g. diazepam).

14.8.2 Surgical complications

The most common complaints following vasectomy are swelling of scrotal tissue, bruising and pain. While these symptoms generally disappear without treatment, ice packs, scrotal support and simple analgesics provide relief. The incidence of these symptoms can be reduced by using gentle operating technique and checking for bleeding.

Complications, such as haematomas and infections, are uncommon. Haematomas can be minimized by ensuring meticulous haemostasis. Also, clients must be careful not to strain the scrotal sac for several days after surgery. Infections can be minimized through the use of meticulous aseptic technique and good postoperative care. There is no evidence that routine prophylactic use of antibiotics is beneficial if asepsis is adequate.

14.8.3 Correcting Misunderstandings Vasectomy:

- Does not remove the testicles. In vasectomy the tubes carrying sperm from the testicles are blocked. The testicles remain in place.

- Does not decrease sex drive.
- Does not affect sexual function. A man's erection is as hard, it lasts as long, and he ejaculates the same as before. Does not cause a man to grow fat or become weak, less masculine, or less productive.
- Does not cause any diseases later in life.
- Does not prevent transmission of sexually transmitted infections, including HIV.

14.8.4 Vasectomy for Men with HIV

- Men who are infected with HIV, have AIDS, or are on antiretroviral (ARV) therapy can safely have a vasectomy. Special arrangements are needed to perform vasectomy on a man with AIDS.
- Vasectomy does not prevent transmission of HIV.
- Urge these men to use condoms in addition to vasectomy. Used consistently and correctly, condoms help prevent transmission of HIV and other STIs.
- No one should be coerced or pressured into getting a vasectomy, and that includes men with HIV.

15.0 FEMALE STERILIZATION

15.1 What is Female Sterilization?

Female surgical sterilization is a relatively simple procedure that involves permanently blocking/occluding both the fallopian tubes to prevent fertilization. This is the most commonly adopted method of contraception across the world with more than 180 million couples using it.

15.2 FEMALE SURGICAL STERILIZATION/ TUBAL OCCLUSION

The different types are listed below:

- Interval Sterilization ; after 12 weeks
- Postpartum Sterilization within 6 weeks
- During Caesarean section

15.3 EFFECTIVENESS OF FEMALE STERILISATION

Female sterilisation is one of the most effective methods but carries a small risk of failure:

- Less than 1 pregnancy per 100 women over the first year after having the sterilization procedure (5 per 1,000). This means that 995 of every 1,000 women relying on female sterilization will not become pregnant.
- A small risk of pregnancy remains beyond the first year of use and until the woman reaches menopause.
- Effectiveness varies slightly depending on how the tubes are blocked, but pregnancy rates are low with all techniques. One of the most effective techniques is cutting and tying the cut ends of the fallopian tubes after childbirth (postpartum tubal ligation).

15.4 ADVANTAGES AND DISADVANTAGES OF FEMALE STERILISATION

ADVANTAGES

- Very effective method of contraception
- Permanent method. A single procedure gives a life long, safe and effective protection against unwanted pregnancies
- Failure rate is very low (0.5 % in first year)
- No interference with sex act
- no effect on breast feeding
- no known side effects or health risks
- can be performed immediately after childbirth, during cesarean section and at interval period
- helps protect against ovarian cancer

DISADVANTAGES

- Requires a trained provider to perform the surgery
- Uncommon complications of surgery (wound infection, bleeding at the incision, injury to internal organs, anaesthesia risk)
- Compared to male sterilization, female sterilization is more risky and complicated
- Reversal of surgery is very difficult/ with poor results
- No protection against STI/RTIs

15.5 CORRECTING MYTHS/ MISUNDERSTANDINGS

Female sterilization:

- Does not make women weak.
- Does not cause lasting pain in back, uterus, or abdomen.
- Does not remove a woman's uterus or lead to a need to have it removed.
- Does not cause hormonal imbalances.
- Does not cause heavier bleeding or irregular bleeding or otherwise change women's menstrual cycles.
- Does not cause any changes in weight, appetite, or appearance.
- Does not change women's sexual behavior or sex drive.
- Substantially reduces the risk of ectopic pregnancy.

Female Sterilization for Women With HIV

- Women who are infected with HIV, have AIDS, or are on antiretroviral (ARV) therapy can safely undergo female sterilization. Special arrangements are needed to perform female sterilization on a woman with AIDS.
- Urge these women to use condoms in addition to female sterilization. Used consistently and correctly, condoms help prevent transmission of HIV and other STIs.
- No one should be coerced or pressured into having female sterilization, and that includes women with HIV.

15.6 Categories of providers for female surgical sterilization

Female sterilization should be performed only by trained and competent Gynaecologists or surgeons.

15.7 MEDICAL ELIGIBILITY FOR FEMALE SURGICAL STERILIZATION

15.7.1 Indications

Female sterilization can be done for clients seeking a permanent contraceptive method and wanting no more children. It can be performed on most women. With proper counselling and informed consent, the procedure can be performed on following women:

- who just gave birth (within 48 hours) or after 4 weeks of childbirth provided there is no infection
- After miscarriage if no infection
- When client desires it

Also, women with following conditions can have the female sterilization procedure under any circumstances

- mild pre-eclampsia
- past ectopic pregnancy
- benign ovarian tumors
- irregular or heavy bleeding patterns, dysmenorrhoea
- vaginitis without purulent cervicitis
- varicose veins
- HIV positive, high risk for HIV women or with other STIs
- non-pelvic tuberculosis
- along with cesarean delivery

Gynaecological and Medical conditions when sterilization should be **DELAYED:**

- pregnancy
- postpartum or second trimester abortion (>7 to 42 days)
- serious postpartum or post abortion complications
- severe pre-eclampsia/ eclampsia
- pelvic inflammatory disease
- current STIs
- pelvic cancers
- malignant trophoblastic disease
- deep-vein thrombosis
- acute heart disease
- gall bladder disease
- acute viral hepatitis
- severe iron deficiency anaemia (Hb below 7 g%)
- acute lung disease/pneumonia

- systemic infections/ gastroenteritis
- abdominal skin infections
- complicated abdominal surgeries/ infected emergency surgeries, where prolonged immobilisation is required

Gynaecological and Medical conditions when the client for sterilization should be REFERRED to a higher facility with experienced staff:

- fixed uterus due to previous surgery or infection
- hernia (umbilical or abdominal wall)
- endometriosis
- postpartum uterine rupture or post abortion perforation
- moderate or severe high blood pressure (160/100 or higher)
- diabetes / vascular disease
- complicated valvular disease
- severe liver cirrhosis
- hyperthyroid
- coagulation disorders
- chronic lung diseases
- pelvic tuberculosis

Gynaecological and Medical conditions when the surgeon/ gynaecologist has to be ALERT performing sterilization:

- past PID
- current breast cancer
- uterine fibroid
- mild hypertension (140/90; 155/99)
- past heart disease or stroke
- epilepsy or taking medicines for seizures
- diabetes with vascular disease
- hypothyroid
- mild liver disease
- obesity

Documenting denial of voluntary sterilization

When a client is judged unsuitable for voluntary sterilization, the reason(s) and the action taken should be stated on the client card/record/case sheet.

Procedure is delayed until the condition is evaluated or corrected. Appropriate alternate temporary methods of contraception should be provided in the interim.

15.8 COUNSELLING AND INFORMED CHOICE FOR FEMALE SURGICAL STERILIZATION

15.8.1 Sterilization

A couple's decisions about fertility and contraception are made for a variety of reasons. Decisions are influenced by personal circumstances such as family size, economic situations and the health status of one or both partners. The decision may also be affected by cultural expectations and information available about family planning. The person counselling should only explain the procedures, not coerce the client into making the decision to undergo sterilization. The decision remains with the client.

Tubal occlusion is intended to be a permanent method and involves surgery with its associated risks. Voluntary sterilization has consequences, risks and concerns that need to be discussed with each client. It is therefore essential that service providers provide clients with necessary information and counselling about the procedure so that the client can reach an independent and informed decision. Counsel both partners if possible.

15.8.2 Pre operative counselling should focus on:

- preparing her for the operation
- giving her instructions on how to prepare for surgery and what to expect during and after the operation
- ensuring that she has made the decision voluntarily, without any coercion and incentives
- documenting her informed consent as well as her spouse's signature
- discussing other temporary and permanent family planning methods that are available

The client and spouse must be counselled in a language and terminology they understand. Privacy must be maintained during counselling. The following information should be understood by the client:

- effectiveness, permanency of the procedure, small failure rate
- advantages/disadvantages of the method
- side effects.

15.8.3 Informed Consent

Informed consent is the client's voluntary decision to undergo or not to undergo a surgical sterilization procedure, in full possession and understanding of the relevant facts. In Bhutan, the informed consent should be **signed by both the client and spouse** and is the legal authorisation for performing the procedure. Therefore service providers should ensure that client and spouse have signed the informed consent form with full understanding. In special cases where the client is mentally disabled the guardian can give consent. A sample of the informed consent form is provided in the appendices.

Informed consent for surgical sterilization is an agreement by an individual (male or female), after appropriate counselling has been given. The consent is an exercise of free choice with a full understanding of the nature and consequences of the procedure to be performed. The consent must be obtained BEFORE performing the procedure.

The following are primary and ethical obligations and responsibilities of the service provider:

- Ensure that the individual gives free and informed voluntary consent for the operation.
- Ensure she and her spouse are legally competent to give consent.
- Written consent signed by both the client and the spouse must be obtained for all clients requesting surgical contraception.

This serves as legal authorisation for surgery and documents informed and voluntary choice. Make sure that the client has been informed about the following:

- alternatives to the procedure
- availability of reversible methods of contraception
- specific surgical procedures to be followed
- risks of surgical procedures and of anaesthesia
- risk of failure
- permanency of the method
- free choice of the client.

15.9 CLIENT ASSESSMENT FOR FEMALE SURGICAL Sterilization

Client assessment prior to surgical sterilization is necessary to:

- ascertain the client's fitness for the surgical sterilization procedure
- exclude possible risks associated with the procedure
- exclude pregnancy (Pregnancy should be ruled out prior to performing female surgical sterilization. A pregnancy test should be done if there is any suspicion of pregnancy).

The following should be taken/assessed and recorded in client case sheet/record:

15.9.1 Demographic information

Includes client's name, address, age, spouse's name, occupation, education, number of living children and age of her children.

15.9.2 Medical and Obstetric history

history of chronic/acute conditions: active tuberculosis, heart disease, hypertension, anaemia, diabetes, bleeding disorders, psychiatric conditions, pelvic or abdominal surgery, pelvic inflammatory disease, vaginal discharge, urinary tract infections, recent injuries or infections, history of pregnancies (live births, miscarriages, abortions, deliveries and any complications) date of last menstrual period and description of menses breastfeeding, family planning method use, STI risk assessment, allergies to medication, etc.

15.9.3 Physical examination and tests

The following physical examination and tests should be done:

- pulse, temperature and blood pressure
- auscultation of heart and lungs
- pelvic examination: speculum visualization of cervix and bimanual vaginal examination to rule out pregnancy, PID, other pathology of the uterine cavity and overt malignancies.
- pregnancy test if LMP, history and pelvic exam is suggestive of pregnancy
- haemoglobin test.

15.10 PROCEDURE: FEMALE SURGICAL STERILIZATION

15.10.1 Timing of procedure

15.10.1.1 Interval female surgical sterilization should be performed within the first five days of the menstrual cycle. Pregnancy should be ruled out in all women undergoing female surgical sterilization.

15.10.1.2 Postpartum female surgical sterilization should be performed within the first 48 hours after vaginal delivery or 4 weeks after delivery just as interval female surgical sterilization. Surgical sterilization can also be performed in conjunction with a Caesarean section performed for obstetric indications if the client has been appropriately counselled well in advance.

15.10.1.3 Post miscarriage sterilization in the absence of sepsis can be done within the first 7 days after miscarriage if client desires female sterilization.

15.11 TYPE OF ANAESTHESIA FOR FEMALE SURGICAL STERILIZATION

The goal of anaesthesia is to minimise psychological and emotional distress and trauma in the client and keep her free from pain and discomfort. The following factors should be considered in the choice of anaesthesia: type of surgical technique, the skill of the surgeon and anaesthetist, the availability of appropriate drugs, the safety and comfort of the client, the ability of the surgeon to manage complications should they occur.

Interval female sterilization using mini-laparotomy can be performed either under spinal anaesthesia or general anaesthesia. Postpartum female surgical sterilization can be performed under local anaesthesia with sedation or under general anaesthesia.

15.11.1 Local anaesthesia

Local anaesthesia used, with or without sedation is the best option for performing female sterilization procedures. It is safer than spinal or general anaesthesia, recovery is faster, and the procedure can be performed at more facilities.

Preoperative medication

Premedication serves to reduce fear and anxiety. It can provide analgesia, prevent postoperative nausea and vomiting, and induce amnesia.

The following regimen (Box 15.1) is recommended when performing female sterilization procedure under local anaesthesia with conscious sedation:

Box 15.1 Regimen for local anaesthesia with conscious sedation

Tablet Diazepam 10 mg orally (for a woman weighing >35 Kg) 45 minutes before the procedure with one sip of water.

Pethidine 25 mg WITH Phenergen 12.5 mg WITH Atropine 0.6 mg IV is to be administered together intravenously in operating theatre just before procedure with monitoring of vital signs every 5 minutes.

Xylocaine 1% 10–20 ml Local infiltration to the skin and wait 1–2 minutes after infiltration to begin the procedure.

2.11.2 General and spinal anaesthesia

The provision of general and spinal anaesthesia including preoperative medication should be provided as per protocols.

Box 15.2 CLIENT INSTRUCTIONS FOR FEMALE STERILIZATION: PREOPERATIVE, POSTOPERATIVE AND DISCHARGE

Preoperative client information

- Bathing, wearing clean and loose clothes
- Fasting for 8 hours before surgery and taking no medications for 24 hours prior to surgery unless prescribed by a physician
- Being accompanied to the facility and home after the procedure
- The steps of the operation, including information on sedation/anaesthesia, screening, lab tests, what to expect in operating theatre, expectations about pain/discomfort, emptying bladder before surgery
- Removal of jewellery, nail polish, hairpins, eye glasses and dentures before surgery

Post-operative client information

- She should rest at home for 1-2 days after discharge in order to decrease complications. She may resume light activities 2-3 days after discharge and normal activities after 1 week.
- She may resume intercourse after 1 week.
- Keep the incision clean and dry. She may bathe or wash after 2 days.
- Explain how to use post op medications that are given.
- The following are the routine post op medications:
 - analgesics tablets for 3 days post surgery
- Explain what problems to look out for (for danger signs refer to Box 14.4), what to do about each of the problems such as fever, pain and bleeding, and where to go and whom to contact in case of emergency and for any other problems and questions she may have.
- **Any other relevant information such as:**
 - Once the operation is completed she is sterile.
 - Her menstrual periods will continue until she reaches menopause.
 - If she misses a menstrual period and has any other signs of pregnancy, abdominal or pelvic mass/ pains she should contact the clinic.
 - Give the client a chance to ask questions and express any other concerns.
 - Give the exact date and time for a follow-up visit (within 7 days post surgery).
 - Written/printed postoperative and discharge instructions should be given to the client.

After the procedure:

- Rest for 2-3 days.
- Keep the incision clean and dry for 2-3 days.
- Take prescribed medicines as advised
- **Follow up after 7 days for stitch removal.** If necessary, follow up can also be done at client's home or another nearby facility.
- Return to the facility immediately if-
 - she has fever
 - pus from the wound

- pain, heat swelling, or redness in the wound
- abdominal pain, cramping, or tenderness
- fainting/ dizziness
- she thinks that she is pregnant (missed periods, nausea and breast tenderness)

Preventing failure of female sterilization

Five common causes of failure are:

- Undetected pregnancy (in the luteal phase that got missed)
- Surgical occlusion of another structure and not the fallopian tube (round ligament is commonly mistaken for tubes).
- Incomplete occlusion of the tubes.
- Slippage of rings.
- Development of fistulas.

Following two precautions can be taken to reduce failures:

- Perform the procedure within 7 days of menstrual cycle.
- To confirm identification of fallopian tubes, they can be traced up to the fimbrial end.

15.12.2 Postpartum Sterilization (PPS)

A procedure conducted within 7 days of childbirth is slightly different. Since the uterus at this time is raised up to the umbilicus, a sub-umbilical incision is given to perform the mini laparotomy. The fallopian tubes at this time are enlarged and need to be tied carefully. Abdomen and skin are closed in the same way as in mini-laparotomy for other method.

15.14 DISCHARGE AFTER FEMALE SURGICAL STERILIZATION

Discharge

Following female sterilization done under local, spinal or general anaesthesia, clients can be routinely discharged on the same or the next post operative day. Prior to discharge ensure client:

- can stand or walk steadily
- can talk or converse clearly and coherently
- has eaten and has passed urine
- can dress herself and is ambulatory
- is afebrile and the wound is clean

15.15 ROUTINE FOLLOW-UP CARE

All clients who have had female sterilization should be advised the following:

- First follow-up should be done within 7 days of surgery.
- Return to facility earlier if she has any concerns.
- Contact doctor immediately if she has any of the warning signs as in Box 14.4.

At follow-up:

The following should be done at the follow up visit

- Inspect the wound site.
- Remove sutures if any.

- Address client concerns.
- Perform any other client evaluation/referral as indicated.

A second follow- up visit should be scheduled if continued care is required.

Table 15.2: Management of complications of female sterilization

Complications	Assessment	Management
Intraoperative haemorrhage (injury to mesosalphinx)	Determine presence of injury to mesosalphinx.	Identify the source of bleeding and ensure hemostasis
Bladder, intestinal injuries (rare)	Determine presence of hematuria and other signs of internal injury.	Identify and repair. The procedure should be performed by a trained and competent surgeon.
Shock or acute distress (very rare)	Check for increased respiration and pulse, decreased blood pressure, evidence of hemodynamic instability.	Cardio pulmonary resuscitation
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.
Postoperative fever	Determine source of infection.	Treat infection based on findings.
Haematoma (subcutaneous)	Determine presence of infection or abscess.	Apply warm, moist packs to site. Observe – usually will resolve over time but may require drainage if extensive.
Superficial Bleeding (skin edges or subcutaneously)	Determine presence of infection or abscess.	Treat based on findings.
Failure of tubal occlusion/tubal ligation	Confirm with pregnancy test.	Explain how failure happened. If intrauterine pregnancy is confirmed, counsel client and refer for appropriate care. If ectopic pregnancy is suspected, refer immediately for complete evaluation.

15.18 MAINTAIN THE FOLLOWING RECORDS

- The signed consent form
- Complete information on the personal and medical history, and investigations
- After the procedure, notes on the anaesthesia and the operation, the immediate post-operative recovery, and any post-operative complications and treatment.
- Written postoperative instruction.

15 A.2 POST-PARTUM TUBAL LIGATION:

Post-partum TL is performed within 72 hours of vaginal delivery. At this time the fundus is near the umbilicus permitting a small sub-umbilical incision and ready access to the tubes; the patient is sent home within a few hours. The early surgery avoids re-admission to hospital and possibility of losing a client who is willing for TL but unable to return because of domestic responsibilities including the care of young children.

Before performing postpartum TL, ensure that:

- There have been/are no complications during labour and delivery which contraindicate surgery; these include:
 - puerperal fever
 - prolonged rupture of membranes;
 - hypertensive state, including pre eclampsia and eclampsia; and
 - postpartum psychosis

The baby is alive and well

The women and her husband have made a clear, well-informed, carefully considered decision in non-stressful circumstances, and the women is confident of her choice to undergo the procedure. The decision to undergo sterilization should be made during ante-partum care or following recovery from delivery. It should not be made with in labour.

The post partum procedure is an immediate minilap tubal ligation. It requires a smaller subumbilical incision, no manipulation of uterus is necessary. The procedures of opening abdomen and tubal occlusion is same in both interval and post partum tubal ligation.

CHAPTER 15 FAMILY PLANNING IN POST-ABORTION CARE

Introduction

Any sexually active women of reproductive age group may have an induced or spontaneous abortion at some part of her lifetime. When a woman has abortion, either spontaneous or induced, complications may develop. Both spontaneous and induced abortions can be life threatening, depending on the subsequent events and the care a woman receives.

Women's reproductive health rights state that a woman has a right to knowledge, right to accessibility and availability of contraception, and right to safe abortion care. These women need proper treatment for the complications that may arise and at the same time need accurate information and proper counselling for family planning before she leaves a health center since she may not come back later.

When women have unwanted pregnancy and some of them resort to unsafe abortions performed outside the country, it is important that they are treated with same respect, and unbiased attitude like any other clients. Unlike a woman in her postpartum period, she also may lack social support from her family. On one hand, she had a bad experience and on the other, she is liable to have another unwanted pregnancy. That has to be borne in the minds of people who treat her.

At present, a woman may receive the treatment, but there is no uniform mechanism on providing family planning services before she leaves the Health Center. In a hospital setting, she is treated in a ward by one set of providers, whereas family planning is provided in the RH Unit by another set of providers in the OPD. A linkage has to be created where these women come in contact with the family planning providers. There must be some sort of co-ordination between the two sets of providers. Who should start the counselling? When should it be done? Where should it be done: in the ward or in the RH clinic? Every health worker should know that these group of women need family planning services immediately, as they may become pregnant within one month.

A proper guideline for all the health care settings must be in place to ensure that these women receive the care they needs so that they can continue to have good reproductive and sexual health.

ABORTIONS

Abortion: Ending of a pregnancy before 22weeks.
 Babies born before this period do not survive (WHO guidelines)

15 A.7 POST ABORTION FAMILY PLANNING

Introduction:

Despite the increase in Contraceptive Prevalence Rate over the last few years, some women still have unwanted pregnancy, some of whom may seek induced abortion that may be unsafe.

A woman who undergoes an induced abortion has three characteristics;

1. She is sexually active.
2. She does not want pregnancy.
3. She is likely to undergo another abortion in event of a pregnancy.

Therefore, there is a need to strengthen the family Planning Services to reduce unwanted pregnancy and avoid unsafe abortion. So, accurate information, proper counselling, and all range of family planning methods should be made accessible and available to all women who had undergone abortion.

There are few factors that effect post-abortion family planning because:

Opportunity for counselling/ method delivery is minimal as women may come for one visit only.

- Family planning counselling and service is not routinely provided in the set up where post abortion care is given.
- Complication from unsafe abortion may influence the choice and timing of the method.
- There may be immediate return of fertility.
- She may lack community support

Service provider groups who can give family planning advice to post abortion women are:

- a) Those treating abortion complications.
- b) Family planning providers.

They should be able to inform the women of basic information about the return of fertility and availability of safe and effective contraception. Family planning counselling and services should be available in conjunction with emergency treatment of abortion complications so that an appropriate contraceptive method can be initiated if the woman chooses to use one.

POST-ABORTION CONTRACEPTION COUNSELLING

Family Planning in Post-abortion Care

Women who have just been treated for post-abortion complications need easy and immediate access to family planning services. When such services are integrated with post-abortion care, are offered immediately post-abortion, or are nearby, women are more likely to use contraception when they face the risk of unintended pregnancy.

Factors Affecting Postpartum and Post Abortion Family Planning

Postpartum	Post Abortion
Health System	
Opportunity for counselling/method delivery possibly increased by women's multiple contacts with health system	Opportunity for counselling/method delivery minimal because women typically has one contact with health system, few returns for follow-up.
Family planning care may be available in the Maternity Ward.	Care delivered in emergency on gynaecology ward where family planning is not offered routinely.
Easy to identify woman in Post-partum period for follow-up family planning.	Difficult to identify women in Post-abortion period for follow-up family planning.
Preventive approach to care	Curative crisis oriented approach to care.
Typically supportive provider attitude towards mother	Often insensitive and sometimes punitive provider attitudes towards women who have undergone abortion.
Clinical	
Delayed resumption of menses, especially if breast feeding	Prompt returns of ovulation and menses.
Breast feeding precludes use of some Hormonal methods.	Complications from unsafe abortion may influence choice or timing of method.
Psychological/Cultural	
Women identifies herself as mother	Little known about women's self and of the abortion experience itself.
Societal support for mothers.	Little social support after abortion.
Some Post-partum practices postponed risk of future pregnancies.	Little known about practices after abortion.
Societal fertility role confirmed.	Societal fertility role may not be confirmed.
Women may perceive risk of subsequent pregnancy to be delayed.	Women may not recognise almost immediate return to fertility.

CHAPTER 16: FAMILY PLANNING FOR DIVERSE GROUPS

Women near Menopause

A woman has reached menopause when her ovaries stop releasing eggs (ovulating). Because bleeding does not come every month as menopause approaches, a woman is considered no longer fertile once she has gone 12 months in a row without having any bleeding. Menopause usually occurs between the ages of 45 and 55. About half of women reach menopause by age 50. By age 55 some 96% of women have reached menopause.

To prevent pregnancy until it is clear that she is no longer fertile, an older woman can use any method, if she has no medical condition that limits its use. By itself, age does not restrict a woman from using any contraceptive method.

Special considerations about Method Choice

When helping women near menopause choose a method, consider:

Combine hormonal methods (combined oral contraceptives (COCs), monthly injectables.

Check WHO MEC Wheel to determine a suitable contraceptive.

Progestin-only methods (progestin-only injectables)

- A good choice for women who cannot use methods with estrogen.
- During use, DMPA decreases bone mineral density slightly. It is not known whether this decrease in bone density increases the risk of bone fracture later, after menopause.

Emergency contraceptive pills

- Can be used by women of any age, including those who cannot use hormonal methods on a continuing basis.

Female sterilization and vasectomy

- May be a good choice for older women and their partners who know they will not want more children.
- Older women are more likely to have conditions that require delay, referral, or caution for female sterilization.

Male and female condoms, and withdrawal

- Protect older women well, considering women's reduced fertility in the years before menopause.
- Affordable and convenient for women who may have occasional sex.

Intrauterine device (copper-bearing and hormonal IUDs)

- Expulsion rates fall as women grow older, and are lowest in women over 40 years of age.
- Insertion may be more difficult due to tightening of the cervical canal.

Fertility awareness methods

- Lack of regular cycles before menopause makes it more difficult to use these methods reliably.

When a Woman Can Stop Using Family Planning

Because bleeding does not come every month in the time before menopause, it is difficult for a woman whose bleeding seems to have stopped to know when to stop using contraception. Thus, it is recommended to use a family planning method for 12 months after last bleeding in case bleeding occurs again.

- *Hormonal methods* affect bleeding, and so it may be difficult to know if a woman using them has reached menopause. After stopping a hormonal method, she can use a non hormonal method. She no longer needs contraception once she has had no bleeding for 12 months in a row.
- *Copper-bearing IUDs* can be left in place until after menopause. They should be removed within 12 months after a woman's last monthly bleeding.

Relieving Symptoms of Menopause

Women experience physical effects before, during, and after menopause: hot flashes, excess sweating, difficulty holding urine, vaginal dryness that can make sex painful, and difficulty sleeping.

Providers can suggest ways to reduce some of these symptoms:

- Deep breathing from the diaphragm may make a hot flush go away faster.
- A woman can also try eating foods containing soya or taking 800 international units per day of vitamin E.
- Eat foods rich in calcium (such as dairy products, beans, fish) and engage in moderate physical activity to help slow the loss of bone density that comes with menopause.
- Vaginal lubricants or moisturizers can be used if vaginal dryness persists and causes irritation. During sex, use a commercially available vaginal lubricant, water, or saliva as a lubricant, if vaginal dryness is a problem.

Contraceptives for Clients with STIs, HIV, and AIDS

People with STIs, HIV, AIDS, or on antiretroviral (ARV) therapy can and continue to use most contraceptive methods safely. In general, contraceptives and ARV medications do not interfere with each other. There are a few limitations, however. See the table below. (Also, every chapter on a contraceptive method provides more information and considerations for clients with HIV and AIDS, including those taking ARV medications.)

Special Family Planning Considerations for Clients with STIs, HIV, or on Antiretroviral Therapy

Method	Has STIs	Has HIV or AIDS	On Anti-retroviral (ARV) therapy
Intrauterine device (copper-bearing or hormonal IUDs)	Do not insert an IUD in a woman who is at very high individual risk for gonorrhea and chlamydia, or who currently has gonorrhea, chlamydia, purulent cervicitis, or PID. (A current IUD user who becomes infected with gonorrhea or chlamydia or develops PID can safely continue using an IUD during and after treatment.)	A woman with HIV can have an IUD inserted. A woman with AIDS should not have an IUD inserted unless she is clinically well on ARV therapy. (A woman who develops AIDS while using an IUD can safely continue using the IUD.)	Do not insert an IUD if client is not clinically well.
Female sterilization	If client has gonorrhea, chlamydia, purulent cervicitis, or PID, delay sterilization until the condition is treated and cured.	Women who are infected with HIV, have AIDS, or are on antiretroviral therapy can safely undergo female sterilization. Special arrangements are needed to perform female sterilization on a woman with AIDS. Delay the procedure if she is currently ill with AIDS-related illness.	
Vasectomy	If client has scrotal skin infection, active STI, swollen, tender tip of penis, sperm ducts, or testicles, delay sterilization until the condition is treated and cured.	Men who are infected with HIV, have AIDS, or are on antiretroviral therapy can safely undergo vasectomy. Special arrangements are needed to perform vasectomy on a man with AIDS. Delay the procedure if he is currently ill with AIDS-related illness.	
Progestinonly injectables	No special considerations. Can safely use progestin-only injectables or implants.		

CHAPTER 17: TRAINING

Health workers should have sound knowledge and updated information to offer quality service to the people. Training and retraining of health workers and other providers will ensure they can offer quality service. The overall objective of training should focus on updating knowledge of health workers, counselors and other providers. Acceptance and continuation of contraceptives largely depend upon the quality of services offered, facilities available for dealing with complications.

A system of continuing education and on-the-job training should be developed. It should include:-

- Effective counselling skills;
- Inter-personnel communication skills;
- Aseptic technique;
- Correct technique for surgical procedures;
- Treatment of complications;
- General update on family planning technology;
- IUCD insertion techniques for all categories
- Family planning information management including data use.

A system of provider certification and CME credits should be established for all of the training provided. Service providers at all levels should receive adequate training on interpersonal communication skills which is crucial for the success of the program.

Managers, providers and communicators involved in FP programs should receive adequate training and need to keep their knowledge and skills updated from time to time. Therefore, family planning training should cover the following categories of personnel; managers, supervisors, trainers and providers.

Training needs assessment for each level should be formally conducted and suitable training curricula developed. Training needs review will be done every third year where as updating of training curricula will be done as and when necessary. Training evaluation will also be done for each level. Monitoring of skills retention should be in place.

Training impact studies will be conducted preferably after every five years of completion of the training and implementation of the activities. Recommendations are to be accommodated and specific weaknesses in training addressed.

Pre-service training for the health workers in training institutes should be standardized.

Orientation of new/expatriate doctors and nurses should be conducted regularly.

CHAPTER 18: MONITORING AND SUPERVISION:

General Consideration:

Like any other health services, CHU service monitoring will be as guided by the HMIS guidelines, specifically activity reporting. Vigilance on the part of the RH program is required to ensure that these standards are achieved and maintained. (Align with QASD)

Regular monitoring and supervision will identify the necessary changes and will ensure that the services are effective, safe, and quality is maintained.

A supervisor will ensure the following:

- Ensure the quality service delivery by each staff member within the standard.
- Identify the staff members' skill development needs and training wherever necessary.
- Provide an opportunity for constructive feedback to the staff members in order to improve job performance.
- Ensure the timeliness and completeness of all the reports.
- Ensure application and retention of skills.
- Ensure that the health workers use tickler files for follow up.

As a supervisor, you can also monitor some aspects of quality of care by actually observing activities and behaviours of staff during provision of services through:

- Routine daily supervision
- Arranging visits
- Organizing random spot checks by a quality assurance team.

Records, Reports and Feedback:

CHU records and reports have been reviewed and revised. The revised format with necessary changes has been incorporated into our national health information system and should continue till further revision of the system.

The present flow of reporting system, monthly from health center to Dzongkhag (District) and quarterly from Dzongkhag to central level should be maintained. The existing system of reproductive health records and reports are attached as annexure.

For a successful, quality Family Planning programme the indicators need to be monitored at regular interval.

Monitoring indicators for FP services

a. Facility level:-

Methods	Indicators	How often (Interval)	Who is responsible	Source of Information
Condom	No. Condom distributed	Monthly	In-charge of BHU/RHU	- FP register - Monthly report - Stock register
OCP	No. of new users (incidence)	Monthly	- DO -	- FP register - Monthly report
	No. of current users	Annual (mid year)	- DO -	- Client record - (Tickler filing system) - Annual house hold survey
	No. of women discontinued	Quarterly	- Do -	Clients record (Tickler file)
	Method failure	Annual	- DO -	- FP register
DMPA	No. of new users	Monthly	- DO -	- FP register - Monthly report
	No of current users	Annual	- Do -	- Client record (tickler filing) - Annual House hold survey - OPD/Pharmacy register
	No of women discontinued	Quarterly	- Do -	- Client record
	Method failure	Annually	- Do -	- Do -
IUCD	No. of new users	Monthly	In- Charge RHU.BHU	- Monthly report - FP register
	No. of current user	Annual (mid year)	- DO -	- Client record - House hold survey

	No. of women discontinued	Quarterly	- DO -	- Client record
	Incidence of missing strings including expulsion	Annual	- DO -	- Client record - FP register
	Method failure	Annual	- DO -	- DO -
Vasectomy/ Tubal ligation	New Acceptors(For TL include those done with Cesarean section)	Monthly	- DO -	- Monthly report - FP register - OT register
	Pregnancy after Voluntary surgical contraception	Annual	- DO -	- House hold survey - FP register - Failure report

b. Dzongkhag level

1. Compile/ Analyse data/ take action based on the report received from health facilities
2. The following indicators will be specially monitored at this level
 - Contraceptives prevalence rate
 - No of months contraceptives out of stock
 - No. of staff trained in IUCD
 - No of supervisory visit to Health facilities
 -

c. National Level

1. Compile/analyze data/take action based on the report received from Dzongkhag
2. The following indicators will be specially monitored at national level
 - Contraceptive rate
 - Training/retraining/ refresher courses conducted on family planning
 - No of supervisory visit to the dzongkhags
 - No. of workshop /seminar conducted
 - No of research/studies conducted

Special Investigation and Research

Special in-depth investigations, or research studies, will help to give careful attention to selected issues or problems. This could, for example, be a study of client satisfaction; reasons for drop outs with a particular method (DMPA, IUD, OCP, etc.) Such studies focus on the operational aspect of the program.

Review and Evaluation

In line with the RGOB's policy and intensification RH activities, regular review and evaluation is recommended at Dzongkhag and national level. The following modalities could be used by different level:

Dzongkhag level

- Monthly reports
- Quarterly reports

National level

- Bi- annual visit
- Annual Health Conference
- Workshop /Seminar/meeting

Annexure A

**Royal Government of Bhutan
Ministry of Health
Public Health Department**

HORMONAL CONTRACEPTIVES SCREENING AND FOLLOW UP CARD

Health Center: _____ Regd. No. _____
Client's Name: _____ Age: _____
ID No: _____ Address: _____
Mobile No: _____

MENSTRUAL HISTORY:

OBSTETRICAL HISTORY

Onset: ____ yrs (age of menarche)
Cycle: Regular/ irregular
Flow: Scanty/Moderate/Heavy
Duration: ____ days
Date of onset of last menstrual period: _____

Total No. of pregnancy: _____
Total No. of living children: _____
Date of last delivery/Abortion : _____

MEDICAL HISTORY

	Yes	No
• Severe headache	<input type="checkbox"/>	<input type="checkbox"/>
• Convulsion	<input type="checkbox"/>	<input type="checkbox"/>
• Chest pain/breathlessness	<input type="checkbox"/>	<input type="checkbox"/>
• Breast lumps	<input type="checkbox"/>	<input type="checkbox"/>
• Diabetes	<input type="checkbox"/>	<input type="checkbox"/>
• Jaundice within last 6 months	<input type="checkbox"/>	<input type="checkbox"/>

Physical Examination

General examination Systemic examinations when necessary

- | | | |
|------------------|--------|---------------|
| • Pulse: | minute | Mental status |
| • Blood pressure | mmHg | Lungs |
| • Weight | Kg | Heart |
| | | Abdomen |

Contraceptive provided: - Oral pills/DMPA

1. Only for DMPA
2. Only for oral pills

Annexure – B
Royal Government of Bhutan
Ministry of Health and Education
Public Health Department

IUD SCREENING & FOLLOW UP CARD

Health Center:

Redg. No. :

Client's name:

Age:

ID No:

Mobile No:

Address

Menstrual history: Onset:

(Age of Menarche)

Cycle :

Regular/irregular

Flow:

Scanty/Moderate/Heavy

Duration:

Days

Pain: Present/Absent

Date of onset of last menstrual period:

Date of last Pap smear if done:

Obstetrical history: Total No. of pregnancy :

Total No. of living children:

Date of last delivery/abortion:

Medical History:

Yes	No.		Yes	No	
Abd. mass	<input type="checkbox"/>	<input type="checkbox"/>	Post coital bleeding	<input type="checkbox"/>	<input type="checkbox"/>
Allergy	<input type="checkbox"/>	<input type="checkbox"/>	Surgery of Abd/Pelvis	<input type="checkbox"/>	<input type="checkbox"/>
			Chest pain/Shortness of breath	<input type="checkbox"/>	<input type="checkbox"/>
			Irregular bleeding p/v	<input type="checkbox"/>	<input type="checkbox"/>

Physical Exam:

BP	mmHg	weight	Kg
Abdomen		Normal/Abnormal	
Uterus	Size	Normal/small/bulky	
	Position	Anteverted/retroverted/mid position	
	Mobility	Yes/No	
	Cervix	Healthy/unhealthy	
	Adnexa	Normal/abnormal	
	Heart	Normal/Abnormal	

Annexure – C

RECORD OF VOLUNTARY SURGICAL CONTRACEPTIVE ACCEPTORS AND INFORMED CONSENT (FEMALE STERILIZATION)

1. Identification:

Health Centre: _____ Regd No: _____
Name of client: _____ Age: _____
Name of Spouse: _____
Address: _____

2. Obstetrical records (couple):

Total Pregnancies: _____
No. of living children: Son _____ Daughter _____
Age of living children: Son _____ Daughter _____
(in years)

3. Contraceptive used before Pills/condoms/DMA/IUD (couple): _____

4. Consent:

1. The decision for operation is completely voluntary and my husband has full consent regarding this operation.
2. Although I am aware of all the other Birth control methods I am voluntary willing to accept surgical sterilization.
3. I am aware that I am going to undergo some form of surgical operation and there are some risks involved.
4. I am aware that the operation is permanent and reversal is seldom successful.

Signature/Thumb impression

Of client

NAME: _____ Date: _____

Signature/Thumb impression of husband/guardian Date: _____

5. Medical History:

	Yes	No		Yes	No
Severe headache	<input type="checkbox"/>	<input type="checkbox"/>	Hypertension	<input type="checkbox"/>	<input type="checkbox"/>
Convulsion	<input type="checkbox"/>	<input type="checkbox"/>	Allergy	<input type="checkbox"/>	<input type="checkbox"/>
Chest pain	<input type="checkbox"/>	<input type="checkbox"/>	Post coital bleeding	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	Surgery of abd/ pelvis	<input type="checkbox"/>	<input type="checkbox"/>
Systemic bleeding Problem	<input type="checkbox"/>	<input type="checkbox"/>	Asthma	<input type="checkbox"/>	<input type="checkbox"/>

6. Physical Exam:

Pulse /mm BP mmHg
Weight kg

7. Laboratory Test:

Haemoglobin gm%
Pregnancy test (where indicated) Positive/negative

Signature of Medical Officer

Annexure – D

RECORD OF VOLUNTARY SURGICAL CONTRACEPTIVE ACCEPTORS AND INFORMED CONSENT (MALE STERILIZATION)

8. Identification:

Health Centre: _____ Regd No: _____
Name of client: _____ Age: _____
ID No: _____ Mobile No: _____
Name of Spouse: _____
Address: _____

9. Obstetrical records (couple):

Total Pregnancies: _____
No. of living children: Son _____ Daughter _____
Age of living children: Son _____ Daughter _____
(in years)

10. Consent:

1. The decision for operation is completely voluntary and my spouse has full consent regarding this operation.
2. Although I am aware of all the other Birth control methods I am voluntary willing to accept surgical sterilization.
3. I am aware that I am going to undertake some form of surgical operation and there are some risks involved.
4. I am aware that the operation is permanent and reversal is seldom successful.

Signature/Thumb impression
Of client

NAME: _____ Date: _____

Signature/Thumb impression of spouse/guardian Date: _____

4. Medical History:

	Yes	No		Yes	No
Previous Surgery	<input type="checkbox"/>	<input type="checkbox"/>	Convulsion	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	144	<input type="checkbox"/>	<input type="checkbox"/>

Allergies

Hypertension

Bleeding disorders

Sexual problem

Diabetes

5. Physical Examination:

Pulse: /mm
BP: mmHg

	Normal	Abnormal		Yes	No
Scrotum	<input type="checkbox"/>	<input type="checkbox"/>	Hydrocele	<input type="checkbox"/>	<input type="checkbox"/>
Lungs	<input type="checkbox"/>	<input type="checkbox"/>	Hernia	<input type="checkbox"/>	<input type="checkbox"/>
Heart	<input type="checkbox"/>	<input type="checkbox"/>	Undescended testis	<input type="checkbox"/>	<input type="checkbox"/>
Skin	<input type="checkbox"/>	<input type="checkbox"/>	Previous scrotal Surgery	<input type="checkbox"/>	<input type="checkbox"/>
			Scrotal mass	<input type="checkbox"/>	<input type="checkbox"/>

6. Laboratory investigation: (Only if indicated)

Date:

Signature of Surgeon

Annexure – E

WHO Medical Eligibility Criteria Wheel



Annexure F

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Annexure G

Abbreviations and Acronyms:

AIDS	-	Aquired Immuno deciciency Syndrome
AIS	-	Artificial Insemination with donor sperm
ANM	-	Auxiliary Nurses Midwife
BBT	-	Basal Body temperature
BHU	-	Basic Health Unit
BHW	-	Basic Health Workers
BMIS	-	Bhutan Multiple Indicator Survey
COC	-	Combined oral Contraception
CuT	-	Copper T 380A
DHSO	-	District Health Supervisory Officer
DMO	-	District Medical Officer
DMPA	-	Depot Medroxy progesterone Acetate
EC	-	Information, education and communication
ETG	-	Etonogestrel
F.P	-	Family planning
HA	-	Health Assistant
HIV	-	Human Immunodeficiency viruses
HLD	-	High level disinfectant
IP	-	Infection prevention
IUCD	-	Intra uterine contraceptive decive
IVF + ET	-	In- vitro fertilization + Embryo transfer
LAM	-	lactational Amenorrhoes method
LNG	-	Levonorgestrel
MEC	-	Medical Eligibility Criteria
MOH	-	Ministry of Health
NHS	-	National Health Survey
NSV	-	No scapal Vasectomy
OCP	-	Oral contraceptive Pills
PID	-	Pelvic Inflammatory disease
RH	-	Reproductive Health
RRH	-	regional referral hospital
STIs	-	Sexually transmitted infection
TL	-	Tubal Ligation
UNFPA	-	United nation Fund for Population
VHW	-	Village Health Workers
WHO	-	World Health Organization

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