Woman-Centered Reproductive Health Care

An e-Resource for Lady Health Visitors & Midwives in Pakistan

Midwives can save lives

Midwifery Association of Pakistan

McMaster University

Midwifery

FIRST EDITION

PREFACE

Welcome to the eBook!

▸ **Click to hear a message from Arusa Lakhani, President of the Midwifery Association of Pakistan**

This new form of a midwifery/Lady Health Visitor (LHV) textbook is the result of collaboration between experts in Pakistan and a multidisciplinary team of faculty and students affiliated with the Midwifery Education Program, McMaster University in Ontario, Canada. We were privileged to receive funding for this project from Grand Challenges Canada, an agency of the government of Canada, in response to a call for proposals addressing issues in women's health care. The collaborating authors hope this book will be a valuable component of continued learning for all midwives. Influencing positive changes for midwives/LHVs can lead to change in other aspects of women's health care and can improve the overall status of women in society.

This book is prepared for midwives/LHVs because they are key participants in quality reproductive health care. When midwives possess high levels of knowledge and skills and build trusting relationships in which women can actively participate in making decisions about what is best for them, the experience can strengthen women's own capabilities.

This enhanced eBook is our attempt to create a learning resource specifically for midwives that has a balance of evidence-based content and interactive features to help readers engage with that content. The eBook will contribute to the knowledge base that is essential for providing quality care to women. It will assist both students and practicing midwives/LHVs to attain the competencies about reproductive care set out by the International Confederation of Midwives (ICM). In January 2019, ICM published their revised Essential Competencies for Midwifery Practice (▸ **Click here**). Several of the competencies are addressed in chapters of this book and are listed below.

CATEGORY 1 - GENERAL COMPETENCIES

1.a. Assume responsibility for own decisions and actions as an autonomous practitioner

Knowledge of:

- Personal beliefs and their influence on practice
- Knowledge of evidence-based practices

1.d. Use research to inform practice

Knowledge of:

- Global recommendations for practice and their evidence base (e.g. World Health Organization guidelines)

1.e. Uphold fundamental human rights of individuals when providing midwifery care

Knowledge of:

- Laws and/or codes that protect human rights
- Sexual, reproductive health rights of women and girls
- Principles of ethics and Human Rights within midwifery practice

1.g. Facilitate women to make individual choices about care

Knowledge of:

- Cultural norms and practices surrounding sexuality, sexual practices, marriage, the childbearing continuum, and parenting
- Principles of empowerment

1.j. Assess the health status, screen for health risks, and promote general health and well-being of women (and infants)

Knowledge of:

- Health needs of women related to reproduction
- Health conditions that pose risks during reproduction

1.m. Care for women who experience physical and sexual violence and abuse

Knowledge of:

- Socio-cultural, behavioural, and economic conditions that often accompany violence and abuse
- Resources in community to assist women and children
- Risks of disclosure

CATEGORY 2 - PRE-PREGNANCY AND ANTENATAL

2.b. Determine health status of woman

Knowledge of:

- Physiology of menstrual and ovulatory cycle
- Components of a health history including psycho-social responses to pregnancy and safety at home
- Components of a physical exam

2.i. Provide care to women with unintended or mistimed pregnancy

Knowledge of:

- Complexity of decision-making about unintended or mistimed pregnancies
- Emergency contraception
- Legal options for induced abortion; eligibility and availability of medical and surgical abortion services
- Medications used to induce abortion; properties, effects, and side effects
- Risks of unsafe abortion
- Family planning methods appropriate for the post-abortion period.
- Care and support (physical and psychological) needed during and after abortion

CATEGORY 4 - ONGOING CARE OF WOMEN AND NEWBORNS

4.f. Provide family planning services

Knowledge of:

- Anatomy and physiology of female and male related to reproduction and sexual development
- Socio-cultural aspects of human sexuality
- Family planning methods including natural, barrier, hormonal, implantable; emergency contraception, sterilization; their possible side effects, risk of pregnancy, and contraindications to use

CONTRIBUTORS

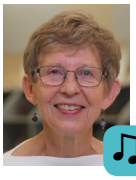
CANADA

PAKISTAN

CO-PRINCIPAL PROJECT LEADS

Eileen K. Hutton PhD, FCAHS
Professor Emerita
Scientific Director, Midwifery Research Center
McMaster University
huttone@mcmaster.ca

▸ Hear Eileen's introduction



Karyn Kaufman DrPH
Professor Emerita
Midwifery Education Program
McMaster University
kaufman@mcmaster.ca

▸ Hear Karyn's introduction

Rafat Jan Rukanuddin RN, RM, PhD
Professor
School of Nursing & Midwifery
Aga Khan University

▸ Hear Rafat's introduction

Arusa Lakhani PhD(c)
Assistant Professor, Aga Khan University
President, Midwifery Association of Pakistan

▸ Hear Arusa's introduction

Marina Baig MSc(c)
Senior Instructor
School of Nursing & Midwifery
Aga Khan University

▸ Hear Marina's introduction

CONTRIBUTING AUTHORS & EDITORS

Abdullah Haroon BHSc (Hon), MD (c)
Senior Thesis Student
BHSc Honours Program
McMaster University
harooa1@mcmaster.ca

▸ Hear Abdullah's introduction

Beth Murray-Davis RM, PhD
Associate Professor
Midwifery Education Program
McMaster University

▸ Hear Beth's introduction

Dustin Costescu MD, FRCSC
Assistant Professor
Department of Obstetrics & Gynecology
McMaster University

▸ Hear Dustin's introduction

Surriya Shahnaz PhD
Principal
Multan College of Nursing

▸ Hear Surriya's introduction

Kiran Mubeen MScN
Senior Instructor
School of Nursing & Midwifery
Aga Khan University

▸ Hear Kiran's introduction

Sadia Karimi BScN
Senior Instructor
School of Nursing & Midwifery
Aga Khan University

▸ Hear Sadia's introduction

TECHNICAL PRODUCTION

MEDIA — **Bruce C. Wainman** PhD, **Markku Wainman** BMus

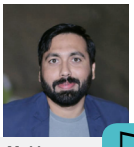
LAYOUT — **Eric Cheng** BHSc (Hon), BHSc (PA), **Alice Lu** BHSc (Hon), MD (c)

ADMINISTRATIVE COORDINATION

Rashid Ahmed MSc
Julia Simioni MSc
Marilia Carvalho MSc

EVALUATION WORKSHOP LEADERS

▸ Shazia Ashraf MSN



▸ Farhan Mukhtar MSN

Marina Baig MSc(c)
Arusa Lakhani PhD(c)
Kiran Mubeen MScN
Rafat Jan Rukanuddin RN, RM, PhD
Surriya Shahnaz PhD

SPECIAL THANKS

Valuable contributions from Saadia Israr, Maisah Syed, staff of the eBook Foundry of McMaster University, Ehteshaam Alee, Dr Asif Butt, Shaheen Ghani, Aliya Nassir, Dr Shabbir Nasiree, Azra Parveen, Zahida Parveen, and Adil Varani.

A special thank you to our partners at the Society of Obstetricians and Gynaecologists of Canada, who assisted with our application to Grand Challenges Canada and provided resource materials for this eBook.

Icons from **The Noun Project**.

Funded by **Grand Challenges Canada**, Stars in Global Health, Grant Number: R-ST-POC-1807-12889.

This eBook was produced by:

THE EBOOK FOUNDRY AT MCMASTER UNIVERSITY

Hamilton, Ontario, Canada

ebooks@mcmaster.ca

https://midwiferytextbooks.com/

Twitter: @ebook_foundry

First edition | Last updated: March 18, 2020

ISBN 978-1-988941-36-3

HOW TO USE THIS eBOOK

Thie eBook is intended to be read on a smartphone, tablet or personal computer.

We recommend using the program **Adobe Acrobat Reader**, which can be downloaded from the links below:

► DOWNLOAD FOR ANDROID DEVICES

► DOWNLOAD FOR APPLE (iOS) DEVICES

► DOWNLOAD FOR COMPUTERS

Thie eBook uses several enhancements to enrich the learning experience. An **Internet connection** is needed for some.

LINKS

Links connect you to certain destinations in the text, or to external webpages.
They are denoted by a ► symbol. Simply click on the link to proceed.

TEXT FIELDS

There are several activities in this eBook that you allow to type and save your response.
These are shaded boxes. Click inside the text field to begin typing.

AUDIO

Additional information recorded in Urdu can be found in various sections of thie eBook.
These are denoted with a banner on the right-hand side of the text. Click this to hear the audio on Soundcloud.

VIDEO

Supplemental videos have been recorded in Urdu for thie eBook.
These are denoted with a banner on the right-hand side of the text. Click this to view the video on YouTube.

We have included all brand names of products that we are aware of and are available. The list is not exhaustive. Products shown in illustrations are used as examples to familiarize readers with the generic properties of products and are not an endorsement of any one product.

TABLE OF CONTENTS

LINKS
This chart is interactive! Links are indicated by the ▸ symbol.

OVERVIEW OF REPRODUCTIVE HEALTHCARE IN PAKISTAN

This overview covers information about the need for reproductive and sexual healthcare in Pakistan. Lady Health Visitors (LHVs) and midwives who care for women throughout and between pregnancies are important providers of sexual and reproductive health care. They can enhance women's ability to make decisions about this vital part of their lives (1).

Comprehensive definitions of reproductive health and sexual health by the World Health Organization (WHO) are shown below:

REPRODUCTIVE HEALTH

"Reproductive health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes" (5,7).

AUDIO

► *Definition of Reproductive Health*

High quality reproductive healthcare includes the provision of antenatal, intrapartum and postnatal care, counselling and provision of contraception, and safe (post)-abortion care (2).

SEXUAL HEALTH

"Sexual health is a state of physical, emotional, mental, and social wellbeing in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected, and fulfilled"- (2,3)

AUDIO

► *Definition of Sexual Health*

Sexual healthcare is a broad area of practice. According to WHO, high quality sexual healthcare is the provision of comprehensive education and information pertaining to: a) physical and psychosocial aspects of sexuality and reproduction, b) sexual function and psychosexual counselling, c) prevention, support and care in situations of gender-based violence, d) prevention and control of sexually transmissible infections (2).

Sexual and reproductive ill health accounts for 20% of the global burden of ill-health for women, compared with 14% for men (4). Reproductive and sexual healthcare addressing these issues has positive effects for women and families (2).

Women have a right to access high quality sexual and reproductive healthcare. Pakistan is a member of WHO and is a signatory to the United Nations' seventeen Sustainable Development Goals (SDGs) that were adopted in 2015. Two of these goals are "Good Health and Wellbeing" and "Gender Equality". Both aim to ensure universal access to sexual and reproductive healthcare services, including information on family planning (5).

Therefore, all reproductive and sexual-health related interventions provided by a healthcare provider should:

- Be evidence-based and delivered in a positive and respectful manner.
- Consider multiple factors, beyond just the individual, that can influence sexual and reproductive health including family, friends, colleagues, politics, religion, community, and the law. Thus, all aspects of sexual and reproductive health should be considered: physical, psychological and sociocultural.
- Consider the diverse needs of different populations such as adolescents, rape survivors, transgender people, and women who have received unsafe abortions from unqualified providers.
- Consider sexual and reproductive health as connected to each other. Despite some differences, the two are intertwined. For example, the use of certain contraceptives (i.e. reproductive health) can impact the sexual pleasure and enjoyment experienced by the individual (i.e. sexual health) (2,3).

The need for family planning in Pakistan

COUNTRY	CONTRACEPTIVE PREVALENCE RATE (%)	UNMET FAMILY PLANNING NEED (%)
PAKISTAN	Your prediction:	Your prediction:
INDIA	56	13
BANGLADESH	64	12
IRAN	78	5

TABLE 1: Contraceptive prevalence rate and unmet family planning need in Pakistan and neighbouring countries.

Pakistan's population lags behind other countries in the use of family planning methods. The contraceptive prevalence rate, in 2018, among women ages 15-49 years is 41%; the unmet need for family planning (family planning) is 20% (6). The Pakistan Demographics and Health Survey (PDHS) 2017-8 indicates that 34% of currently married women use a method of family planning, with 25% using a modern method and 9% using a traditional method (7).

ACTIVITY #1

In Table 1, you will find the data about contraceptive prevalence and the unmet family planning needs in Pakistan's neighbouring countries (6).

How do you think Pakistan compares with these countries? Write down what you think are the statistics for Pakistan. Click inside the grey boxes to begin typing your answer.

Once you have done that, go to the end of this chapter to learn the answers.

GLOSSARY

FAMILY PLANNING
A practice that involves the use of contraceptive methods, and allows women to space their pregnancies, prevent unintended pregnancies, and enables them to limit the size of their families if they wish to do so.

Family planning can bring various benefits to the woman, her children, her family, and the overall society (8). These benefits are social, economic, and biological as described below:

- Reduce the number of maternal deaths because of a decreased chance of complications, lower the risk of having an unsafe abortion, and reduce the number of health issues due to closely spaced pregnancies.
- Empower women by helping them achieve educational and career goals by delaying pregnancy and spacing births. This can help increase their own and their family's income in the future.
- Boost workforce participation and economic stability by allowing more young women to participate in the workforce. This can help in lowering the gender pay gap and empower women to have an independent income.
- Improve men and women's mental health by allowing couples to plan the number of children in their family. Unplanned births can lead to greater levels of anxiety, depression and lower levels of happiness. Couples who have an unplanned pregnancy may be less prepared for parenthood.
- Decrease the number of teenage pregnancies. Pregnant adolescents are more likely to have pre-term births which can lead to higher rates of infant illness and death. Teenage girls who have to leave school due to pregnancy have lower educational attainment which has a broader negative effect on their family and society.
- Help prevent the spread of sexually transmitted diseases such as HIV and AIDs that have a biological, psychological, and sociological impact on the person suffering from the disease and an economic impact on society.
- Benefit society by lowering unsustainable population growth which affects the economy, the environment and national progress.

Reasons for unmet family planning needs in Pakistan

Despite the benefits of family planning, there are reasons for the low use of contraceptives that include:

1. Lack of knowledge about family planning methods can lead women to believe myths, rumours, and fears about side effects of family planning methods and result in incorrect use of a method (9–12). Fears include permanent infertility, getting cancer, and heavy menstruation. Such fears account for 9% of family planning non-use (13). The following quote shows a lack of understanding about a method, its common side effects and how to cope with them (14).

QUOTE 1: Incorrect use of a contraceptive

"My sister in law, she eats [her birth control pills] every 3 days, three pills at a time…she says it makes her feel sick, so she eats three every 3 days."

The lack of understanding and knowledge of how to use a method properly and manage side effects can lead to contraceptive failure or discontinuation of the method which can lead to an unintended pregnancy (14–16). Some family planning methods, such as condoms, can be purchased directly from stores, where individualized counselling is unlikely to take place about the best contraceptive method for a woman/couple (15). This is known to be the case for more than one-third (35%) of women (15).

2. Limited availability of contraceptive services and contraceptive methods leads to lack of places to purchase and limited availability even if able to pay. The lack of choice can result in using whatever is available even if it is not well suited or well understood. Contraceptive methods such as condoms and pills are free in government-funded family health clinics (17). These clinics also provide IUD insertion, tubal ligation (females), and vasectomy (males), all with minimal or no cost to the user (17).

3. Care providers and their lack of knowledge and ability to provide complete information about the contraceptive choices available to individual women, taking into account their medical and social situation. In some instances, the values and beliefs of the provider about family planning impose further limits on women's choices. For example, a study bout Lady Health Workers, who have an important role in providing healthcare services in the community, especially in rural areas found that on average, they spent only 6% of their total time (2-3 minutes per couple per week) discussing family planning and they seldom talked about long-term birth control methods (13,18). This adds to the problem of low contraceptive awareness and uptake.

4. The social and cultural factors that influence the use of contraception include:
    a. **Family pressure and family composition:**
    Some women feel pressured by their husband or in-laws to not use contraception; such pressure accounts for 10% of family planning non-use (13). This relates to the lack of female empowerment and male dominance in decision-making surrounding family planning in Pakistan (19). Having fewer than two sons or two daughters as well as a lack of spousal communication on sexual matters can contribute to family planning non-use (20).
    b. **Religious beliefs:**
    The predominant religion in Pakistan is Islam. Islam does not prohibit the use of birth control in order to limit family size or to space pregnancies (20). However, some people hold the view that it is not up to them, but to a divine power to determine the number of children to be born (21). Studies indicate that religious beliefs account for 5% of family planning non-use (12,22).
    c. **General stigma about contraception:**
    There is a prevailing social stigma about the use of contraception. Midwives and medical institutions may express negative ideas along with family members, friends, and mass media (23–25). The stigma associated with using contraception can make women feel ashamed or afraid to use contraception to limit family size and avoid pregnancy.

DID YOU KNOW

Chapter 2, Verse 233 of the Holy Quran encourages mothers to breastfeed their infants for a full two years. When there is exclusive breastfeeding for a long period of time, pregnancy spacing is often a natural occurrence.

EXAMPLE 1: Stigma from midwives

In a survey of knowledge and attitudes of community health workers in Rawalpindi regarding emergency contraceptive pills (ECPs), more than 80% of the respondents had strong, negative viewpoints about ECP. Respondents stated such pills could lead to multiple sexual partners and the spread of 'evil' practices within society (23).

EXAMPLE 2: Stigma from the electronic media

In 2016, the Pakistan Electronic Media Regulatory Authority imposed a ban on contraception advertisements on the television and radio because they were "ruining innocent children". The authority faced harsh criticism for this action and consequently reversed its decision after a few days (24,25).

Recent developments regarding family planning policies

Recently, there has been increased interest by the Pakistani government to prioritise family health by addressing the challenges of population growth with new measures to increase the contraceptive prevalence rate. In 2018, the following statements were issued to address the population growth challenge (26).

- With a population growth rate of 2.4% and one of the lowest contraceptive prevalence rate in the region of 35%, Pakistan will face extreme pressure on its natural and economic resources if the population continues to grow as it is.
- We will ensure the adequate availability of contraception to all married women of reproductive age (MWRA) through the population welfare and healthcare network of Basic Health Units, Lady Health Workers and Community Midwives.
- We will build on the existing consensus from religious leaders of all major schools of jurisprudence on using temporary birth spacing methods and publicise their endorsement at the community and household level.
- We will revitalise national family planning programmes, including providing air- time on national television to promote behaviour change and increase uptake and continuation of contraception.
- We will undertake important structural reforms to ensure coordination between the Departments of Health and Departments of Population Welfare to ensure that expecting mothers and new parents are counselled on family planning.
- We will double the size of the Lady Health Worker (LHW) programme to ensure each woman has access to complete package of LHW services (including family planning, pregnancy management, neonatal care), with adequate training, support and service structure for LHWs.

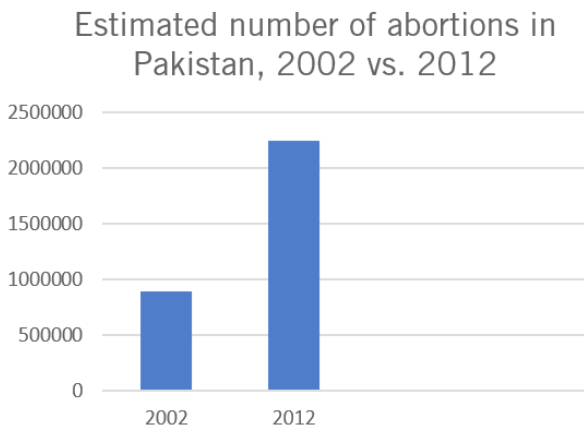
Unmet family planning needs lead to abortion and compromised maternal health

Abortion may be spontaneous or induced. Spontaneous abortion occurs when a fetus is born early and weighs less than 500 grams. A spontaneous abortion is sometimes also called a miscarriage. Induced abortion occurs when a pregnancy is intentionally ended, most often before 20 weeks of gestation (27).

In Pakistan, abortion is permissible to save a woman's life or to provide necessary treatment to her. If any health care provider performs an abortion except in these circumstances, they may be punished according to the law. The complete text of the provisions for abortion is provided in ► Appendix A.

In 2002, there were an estimated 890,000 induced abortions in Pakistan, with an abortion rate of 29 per 1,000 women aged 15-49 (28). These numbers have risen substantially over a ten-year period. In 2012, the estimated annual number of abortions rose to 2,250,000, an increase of 152.8% (9) (See Figure 1). The abortion rate per 1000 women aged 15-49 demonstrated a 90% increase, rising from 29 to 50 in the same time period (29).

FIGURE 1



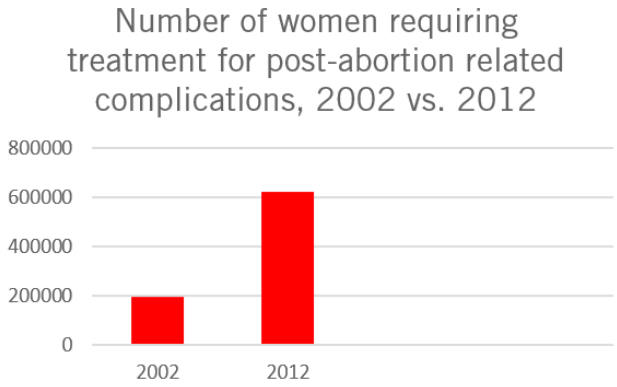
The increase in the number of abortions is reflected in the rise in the number of women requiring treatment for abortion-related complications. In the same 10-year interval, the numbers rose from 197,000 to an estimated 623,000 women (29) (See Figure 2).

GLOSSARY

SPONTANEOUS ABORTION
Loss of pregnancy before a fetus becomes viable (sometimes called early pregnancy loss or miscarriage).

INDUCED ABORTION
Termination of pregnancy before a fetus becomes viable; can be either safe or unsafe.

FIGURE 2



Seeking an abortion can result from unmet family planning needs and unintended pregnancy. Many abortions are unsafe and performed in a setting that lacks hygienic conditions and the necessary supplies and equipment for safe intervention. An estimate is that up to 40% of abortions are being done by unqualified providers (30). Unsafe abortions performed by such providers account for a substantial portion of the high maternal morbidity and mortality rates in Pakistan.

Pakistan has a high maternal mortality ratio (MMR) compared to neighbouring countries with similar socioeconomic and cultural environments (Table 2) (6,31,32).

COUNTRY	MMR (number of maternal deaths per 100,000 live births)	% of Maternal deaths due to abortion
PAKISTAN	Your prediction:	Your prediction:
BANGLADESH	176	9
INDIA	174	10
IRAN	25	5.2

TABLE 2: Maternal mortality ratio, and the proportion of maternal deaths due to abortion, in Pakistan and neighbouring countries (2015).

GLOSSARY

UNSAFE ABORTION
A procedure for terminating a pregnancy that is performed by an individual lacking the necessary skills, or in an environment that does not conform to minimal medical standards, or both.

MATERNAL MORBIDITY
Any health condition attributed to and/or worsened by pregnancy and childbirth that has a negative impact on a woman's wellbeing.

MATERNAL MORTALITY
The death of a woman while pregnant or within 42 days of termination of pregnancy, from any causes related to or aggravated by the pregnancy or its management.

ACTIVITY #2

In Table 2, you will find the data about maternal mortality ratio and the % of maternal deaths due to abortion in Pakistan's neighbouring countries (6,31,32).

How do you think Pakistan compares with its neighbours? Write down what you think are the statistics for Pakistan. Click inside the grey boxes to begin typing your answer.

Once you have done that, go to the end of this chapter to learn the answers.

ACTIVITY #3

Within the statistics presented in the overview are many individual personal situations that midwives and LHVs encounter. Before proceeding to the next chapters, please read the following brief descriptions of women's situations.

Make notes for yourself about your reactions/feelings and how you would respond to that person. In later chapters you will be asked to consider those situations and your responses.

CASE 1

A 21-year-old woman is in her third year at university and is the first person from her poor, rural village ever to go to university. She does not want to become pregnant but due to her irregular menses, it is difficult to determine her days of fertility. She is currently not using a contraceptive method and is asking for advice and care.

How would you respond? Type in the box to the right:

CASE 2

A 27-year old woman has two children under the age of five, and her husband often physically abuses her. He does not believe in birth control, but she does not want to bring another child into an abusive household, especially if it will only make her more dependent on him for financial support. Her depression has worsened considerably in the last few months and she desires contraception that she controls.

How would you respond? Type in the box to the right:

CASE 3

A 25-year-old woman with two young children is 10-weeks pregnant. Her husband just recently died of an illness and left her without any financial support. She is unemployed and does not have any skills beyond household work. She does not think she can support another child. Her in-laws are strict and believe she should keep the child.

How would you respond? Type in the box to the right:

CASE 4

A 17-year-old girl comes to your clinic. She presents to you with bleeding that is foul-smelling. She tried to end the pregnancy a few days ago by inserting a metal object into her vagina. She has not been to the hospital and has not seen any other healthcare provider. She is afraid to tell anyone at home that she feels unwell.

How would you respond? Type in the box to the right:

CHAPTER KEY POINTS

- All women should have access to sexual and reproductive healthcare services including information about family planning
- Pakistan has a low national contraceptive prevalence rate and high unmet need for family planning within its population.
- There are multiple reasons related to the unmet need for contraception.
- The low use of contraception contributes to the estimated 2.25 million abortions that occur annually in Pakistan.
- While abortion is permissible in certain circumstances there is a high number of unsafe abortions which contributes to a high maternal mortality ratio.

ANSWERS FOR ACTIVITIES 1 & 2

COUNTRY	CONTRACEPTIVE PREVALENCE RATE (%)	UNMET FAMILY PLANNING NEED (%)
PAKISTAN	**41**	**20**
INDIA	56	13
BANGLADESH	64	12
IRAN	78	5

TABLE 1

COUNTRY	MMR (number of maternal deaths per 100,000 live births)	% of Maternal deaths due to abortion
PAKISTAN	**178**	**12**
BANGLADESH	176	9
INDIA	174	10
IRAN	25	5.2

TABLE 2

UNIT 1

ESSENTIAL KNOWLEDGE FOR PROVIDING REPRODUCTIVE CARE

NAVIGATION

CHAPTER 1

REPRODUCTIVE ANATOMY AND PHYSIOLOGY

A detailed understanding of the male and female reproductive anatomy and physiology will help the midwife/LHV understand the basis of different family planning and abortion methods. The emphasis is on the female reproductive system as this is the population that midwives/LHVs most likely care for.

Female Reproductive Anatomy

The female reproductive system consists of the following anatomical structures (1,2):

Internal structures:

- Ovaries
- Fallopian (Uterine) Tubes
- Uterus (womb)
- Vagina (birth canal)

External structures (called the vulva):

- Labia majora
- Labia minora
- Clitoris
- Urethral opening
- Vaginal opening
- Bartholin glands

Figure 1-1 provides an unlabeled diagram of the female reproductive system. Try to label the diagram as much as you can. The labeled diagram is provided at the end of the chapter.

GLOSSARY

LABIA
The inner (minora) and outer (majora) lips of the vagina, which protect the internal female organs.

CLITORIS
A small, sensitive, erectile part of the female genitalia located anteriorly on the vulva.

BARTHOLIN GLANDS
Two pea-sized glands located slightly posterior and to the left and right of the opening of the vagina. They secrete mucus to lubricate the vagina.

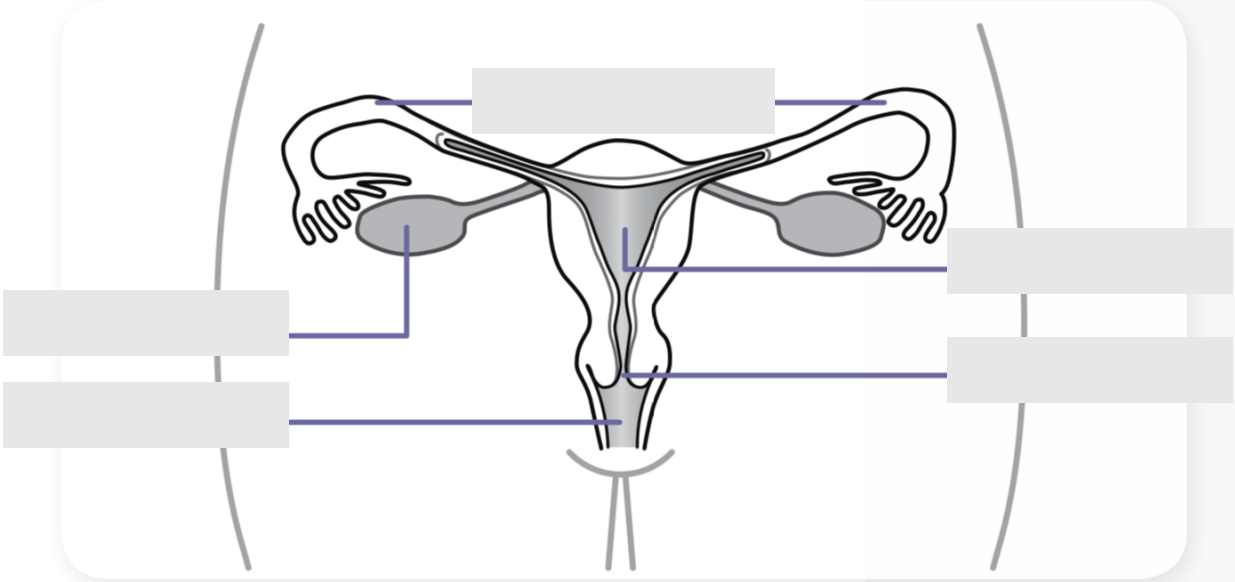


FIGURE 1-1: Illustration of the female reproductive system (3).
Click inside the grey boxes to begin typing your answer.

The Ovaries

There are two ovaries, with one ovary on each side of the uterus in the lower right and left side of the abdomen located close to the ends of the uterine tubes.

The ovaries have two main functions:

- They produce mature eggs (ova).
- They are the main source of the female sex hormones, estrogen and progesterone.

The Fallopian (Uterine) Tubes

There is one fallopian tube on either side of the uterus. Each tube at its far end is thin and opens just above the ovary; this allows a mature egg to enter from an ovary each month following ovulation. The ciliated cells (cells with hair-like projections that can have sweeping motion) lining the inside of the fallopian tube move the egg towards the uterine cavity. Fertilization of the egg by male sperm takes place in the fallopian tube as the egg moves from the ovary to the uterus.

The Uterus

The uterus is a hollow, muscular organ that receives a fertilized egg and protects the fetus as it grows and develops into a baby. When the baby is ready to be born, labour process begins with the uterine muscle contracting strongly to push the baby out of the uterus, through the birth canal and into the world.

The uterus has three parts:

- **Fundus**: the top of the uterus.
- **Body**: the main part of the uterus that includes the uterine cavity.
- **Cervix**: the lower part of the uterus that is closed during pregnancy and opens during labour into the vagina to allow passage of the baby through the birth canal.

The wall of the uterus consists of three layers:

- **Endometrium**: the inner layer that lines the uterus. It consists of glandular tissue (endometrial glands) that make secretions. The endometrium builds up during the menstrual cycle to prepare for implantation of a fertilized egg. If this does not occur, the tissue sheds during menstruation.
- **Myometrium**: the middle layer of the uterus wall. It mostly consists of smooth muscle which contracts throughout the entire menstrual cycle and especially during labour.
- **Perimetrium**: the outer layer of the uterus. This layer secretes a lubricating fluid that helps to reduce friction between the uterus and other nearby organs.

GLOSSARY

OVULATION
The releasing of an egg (ovum) from an ovary each menstrual cycle, usually at day 14.

Figure 1-2 provides an unlabeled diagram of the uterus. Try to label the diagram as much as you can. The labeled diagram is provided at the end of the chapter.

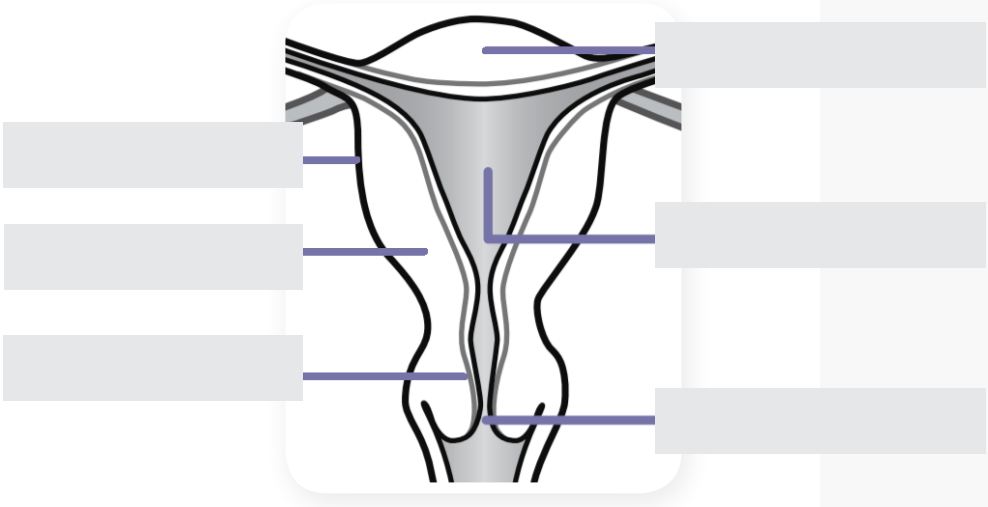


FIGURE 1-2: The layers and structure of the uterus (3)

The Vagina

The vagina is a muscular tube that goes from the cervix to the outside of the body. The vagina is also called the birth canal because during childbirth (parturition), the baby passes through the vagina. The products of menstruation (blood and tissue) pass out of the body through the vagina.

The Vulva

The vulva makes up the external female genital and reproductive organs. It protects the internal genital organs and provides sexual pleasure. The vulva opens into the vagina. The vulva is made up of several female genital organs including the labia majora, labia minora, clitoris, urethral opening, vaginal opening, and the Bartholin glands.

Figure 1-3 provides an unlabeled diagram of the vulva. Try to label the diagram as much as you can. The labeled diagram is provided at the end of the chapter.

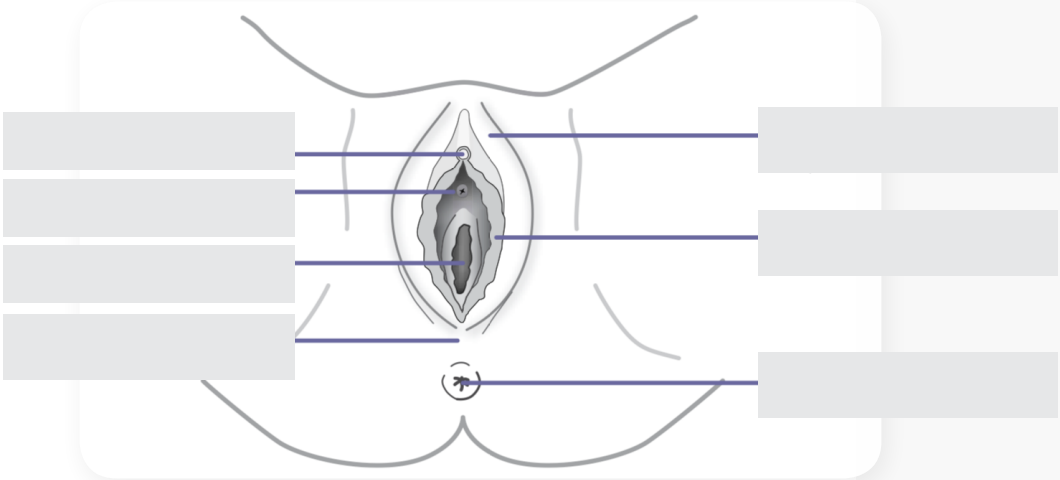


FIGURE 1-3: External female genitalia (vulva) (3)

Female Reproductive Physiology

An understanding of female reproductive physiology includes an introduction to female reproductive hormones (4).

The hormones that are important to female reproductive physiology are:

- Estrogen
- Progesterone
- Follicle Stimulating Hormone (FSH)
- Luteinizing Hormone (LH)
- Human Chorionic Gonadotropin (hCG)

Estrogen

Estrogen is the main female sex hormone. It is produced primarily by the ovaries and is categorized as an ovarian hormone. It is responsible for the development of a woman's breasts, body shape and reproductive organs.

Progesterone

Progesterone prepares the body for conception by causing the growth and maturation of the endometrium. It also regulates menstruation and maintains early pregnancy. Progesterone is produced by the corpus luteum, the structure that is formed in the ovary after the release of the mature egg. It is categorized as an ovarian hormone.

Follicle Stimulating Hormone (FSH)

FSH causes immature ovarian follicles in the ovary to become a mature ovum (egg) that is ready to be released and potentially fertilized during a menstrual cycle. FSH is released by the anterior pituitary gland and is categorized as a pituitary hormone.

Luteinizing Hormone (LH)

A surge of LH, also known as the "LH peak", half-way during the menstrual cycle causes the release of a mature egg (ovum) from one of the ovaries. This process is called ovulation. LH is released by the anterior pituitary gland and is categorized as a pituitary hormone.

Human Chorionic Gonadotropin (hCG)

During the first trimester of pregnancy following the fertilization of a mature ovum, successful implantation into the uterine wall and early development of the embryo and placenta, hCG is released by the placenta to help maintain the uterine lining for the survival and growth of the fetus. The presence of hCG is usually considered a positive sign of pregnancy. Levels can be detected by a blood test or a urine test in about two weeks post-conception.

The Menstrual Cycle

An understanding of the female menstrual cycle and the hormones involved is fundamental to understanding how a woman becomes pregnant and how some family planning methods prevent pregnancy by changing aspects of the menstrual cycle.

During the menstrual cycle, there are changes that occur **simultaneously** at the anatomical and hormonal level. Both changes are necessary to allow for successful implantation of the fertilized egg and a successful pregnancy. The anatomical changes occur in the ovary and the uterus, whereas the hormonal changes occur in the blood.

First phase

The average menstrual cycle is twenty-eight days. Day one of the cycle is the first day of menstrual bleeding that is more than spotting and begins the **menstrual phase** which typically lasts about 5 days (**Figure 1-4**).

AUDIO

- *Menstrual Cycle*

GLOSSARY

MENSTRUAL CYCLE
A repeating series of changes in the ovaries and uterine endometrium that includes ovulation and monthly bleeding. Most women have cycles that each last between 24 and 35 days.

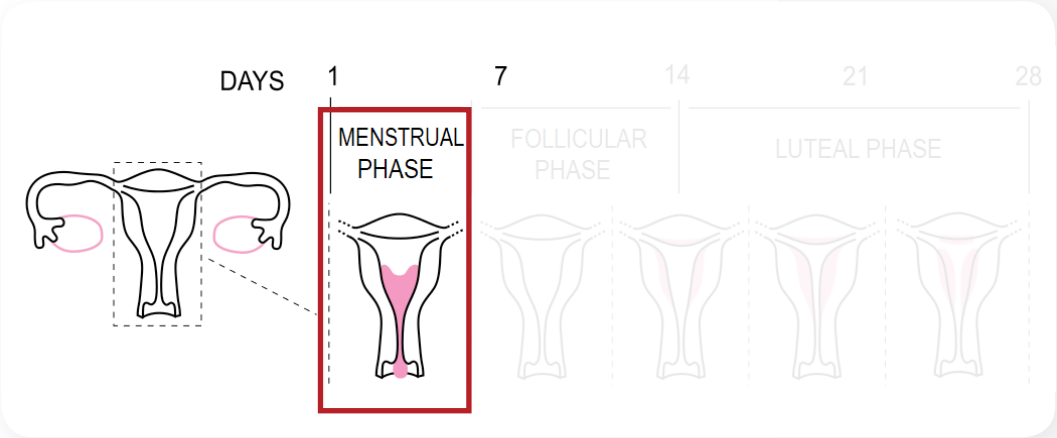


FIGURE 1-4: The first phase of the menstrual cycle (6).
Isometrik via Wikimedia [CC BY-SA 3.0 (https://creativecommons.org/licenses/by-sa/3.0)]

Second phase

The second phase of the cycle begins once menstruation ceases and is called the **follicular phase** because it is the time when the follicle develops in the ovary. During this phase, there is an increase in the levels of both follicle stimulating hormone (FSH) and estrogen, which cause the development of one ovarian follicle containing an egg which will mature and be released later in the cycle. At the same time, the uterine endometrium continues to grow and thicken (**proliferative phase**) in preparation for pregnancy. The cervical mucus is clear, thin, and elastic to allow easy entry of sperm into the uterus.

Estrogen levels reach a peak thirty-six hours before ovulation and cause a surge of FSH and luteinizing hormone (LH). LH levels then peak twenty-four hours before ovulation. This LH hormonal surge stimulates the ovarian follicle to break open, releasing the egg to the Fallopian (uterine) tube. This series of events occurs at midpoint of the cycle, usually Day 14 and is called **ovulation** (Figure 1-5).

GLOSSARY

CERVICAL MUCUS
A thick fluid plugging the opening of the cervix. Majority of the time, it is thickened such that it prevents sperm from entering the uterus. However, at the midpoint of the menstrual cycle, it becomes thin and watery, allowing sperm to pass through with greater ease.

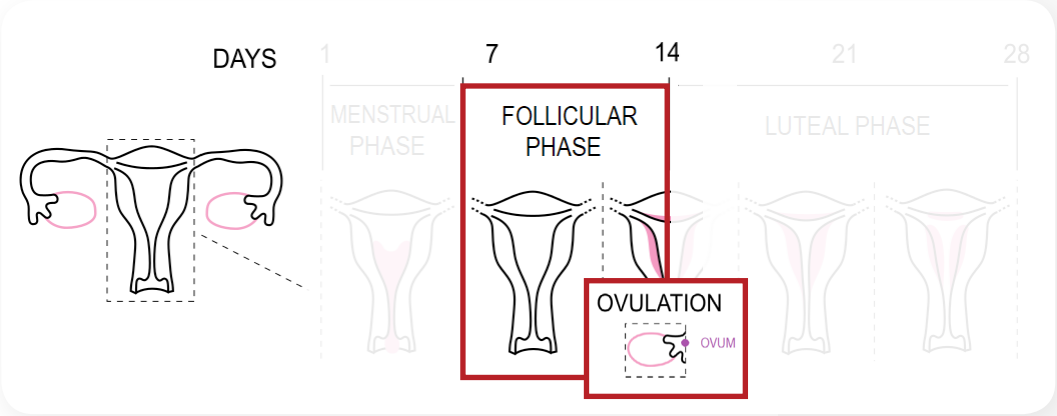


FIGURE 1-5: The second phase of the menstrual cycle (6).
Isometrik via Wikimedia [CC BY-SA 3.0 (https://creativecommons.org/licenses/by-sa/3.0)]

Third phase

The third phase of the cycle begins after ovulation, where the follicle is under the influence of the corpus luteum (**luteal phase**). During this time, the endometrial glands within the uterine endometrium are producing the maximal amount of secretions, in anticipation of the implantation of a fertilized egg (**secretory phase**). The corpus luteum continues to produce the hormone progesterone which maintains the endometrium so that a fertilized egg (**zygote**) can implant. The increase in progesterone levels causes the cervical mucus to become thicker and inelastic, blocking the entry of sperm into the uterus (**Figure 1-6**).

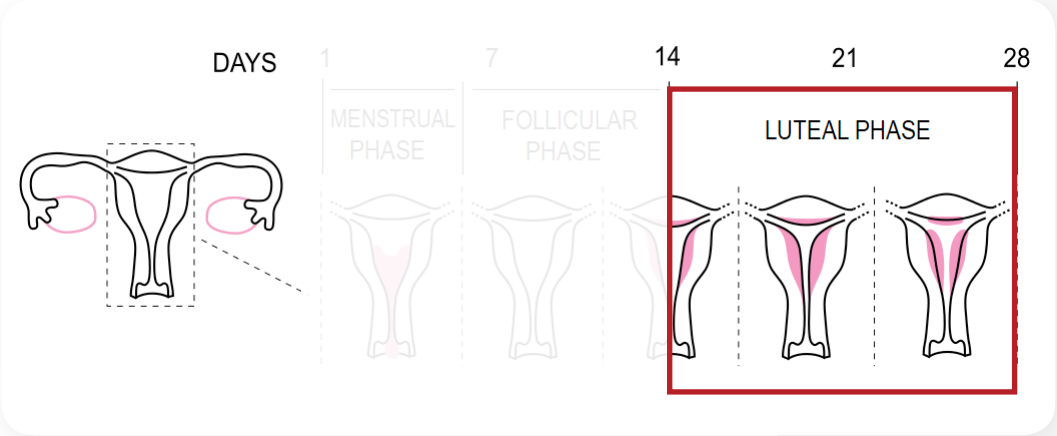


FIGURE 1-6: The third phase of the menstrual cycle (6).
Isometrik via Wikimedia [CC BY-SA 3.0 (https://creativecommons.org/licenses/by-sa/3.0)]

If fertilization **does not** occur, the corpus luteum will stop producing progesterone and breaks down in ten days. This will result in the endometrium breaking down as well, leading to a menstrual period and the beginning of a new cycle.

If fertilization **does** occur (the ovum [egg] is **fertilized** by sperm), the progesterone produced by the corpus luteum supports the pregnancy until a hormone called human chorionic gonadotropin (hCG) signals the corpus luteum to continue producing progesterone through the first trimester of pregnancy.

Figures 1-7, **Figure 1-8** and **Figure 1-9** show the anatomical and hormonal components of the menstrual cycle and how they change together throughout the cycle.

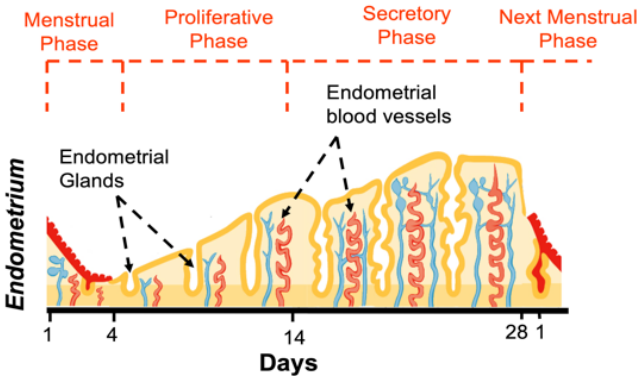


FIGURE 1-7: Phases of menstrual cycle with changes to uterine lining
Ilustration by Dr. Bruce Wainman

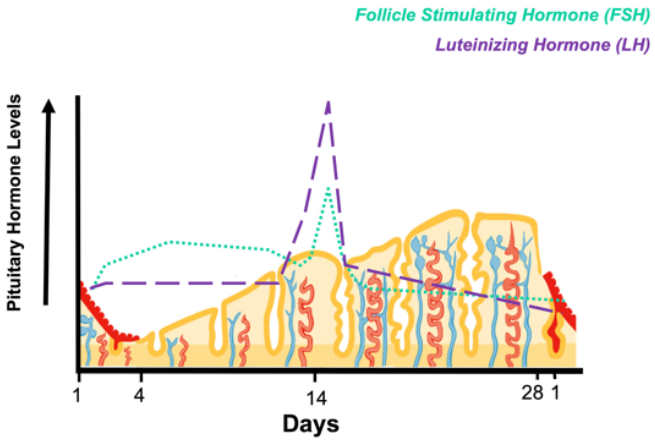


FIGURE 1-8: Levels of pituitary hormones (LH and FSH) during the menstrual cycle
Ilustration by Dr. Bruce Wainman

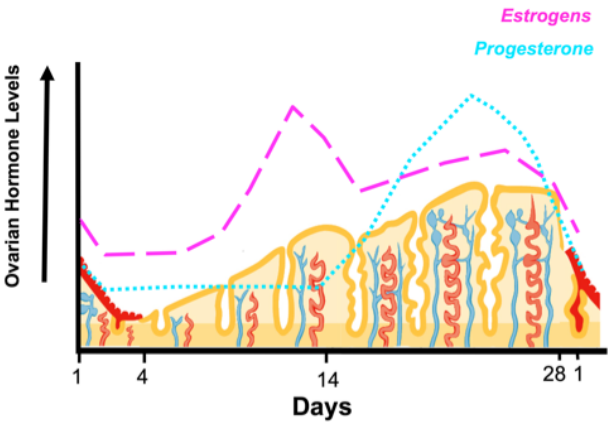


FIGURE 1-9: Level of ovarian hormones (estrogen and progesterone) during the menstrual cycle *Ilustration by Dr. Bruce Wainman*

The diagram below (**Figure 1-10**) shows the relative hormone levels (in the blood) of hCG, estrogen, and progesterone during a 40-week pregnancy. hCG is measured in International Units and is in very small quantities.

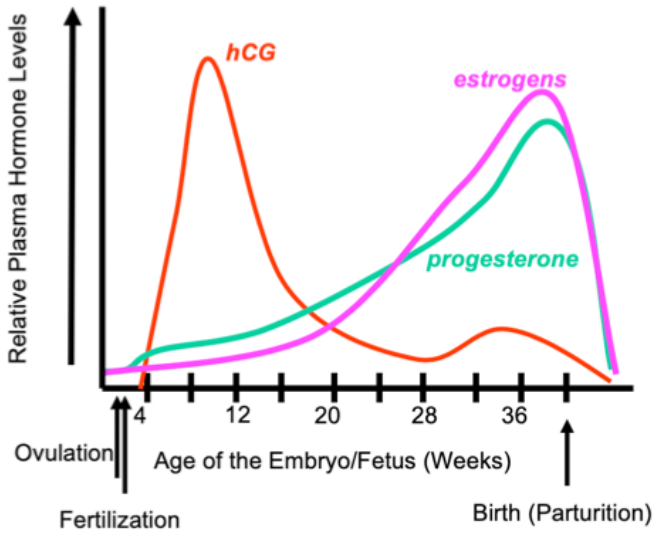


FIGURE 1-10: Relative hormone kevels of hCG, estrogen and progesterone following fertilization and implantation
Ilustration by Dr. Bruce Wainman

Male Reproductive Anatomy/Physiology & Human Fertilization

The reproductive cells produced by males are called sperm. Sperm are produced in the testes and are transported to the urethra. During sexual intercourse, an erect penis enters the female's vagina where the sperm are ejaculated near the cervix. Sperm travel into the uterus towards the Fallopian (uterine) tubes where the egg may be present. If a sperm encounters an egg, fertilization may occur.

Figure 1-11 provides an unlabeled diagram of the male reproductive system. Try to label the diagram as much as you can. The labeled diagram is provided at the end of the chapter.

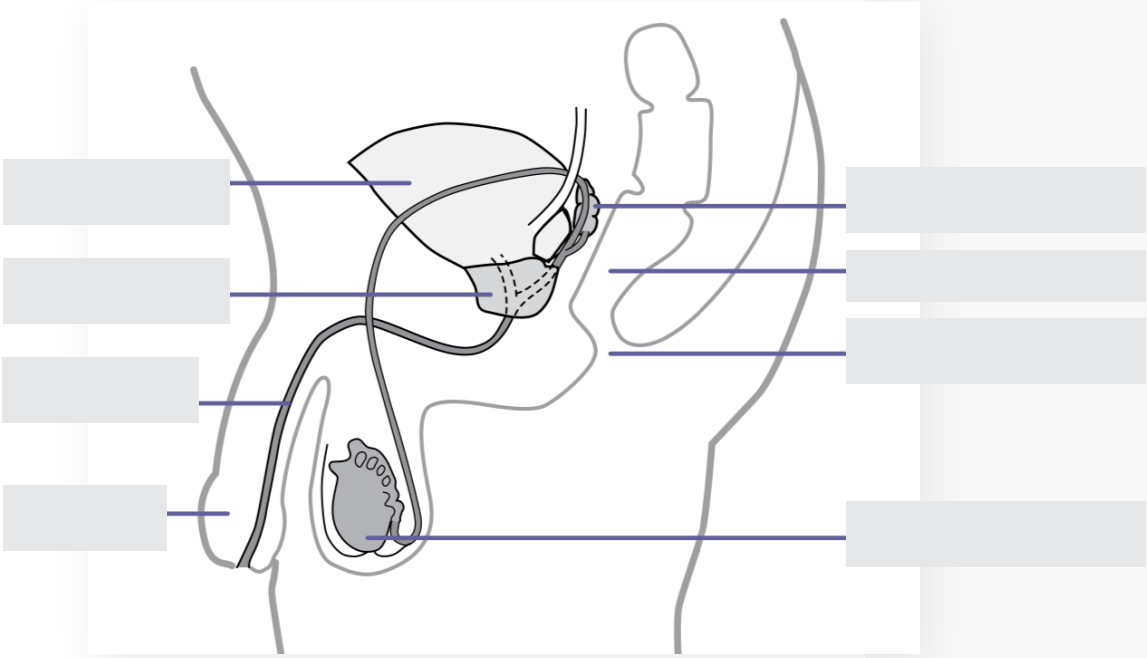


FIGURE 1-11: Overview of male reproductive anatomy (3)

Human Fertilization

The fertility period is the time when pregnancy is most likely to result from introduction of sperm. There are several factors that can vary the length and predictability of the fertility period (4). For example, sperm can survive for about 3-5 days inside the woman's body, the time of ovulation may vary slightly, and hormone levels may peak early or late (4). Therefore, the time when fertilization may take place is six days long, from five days before ovulation day until ovulation day itself.

Fertilization is the fusion of a sperm with the egg. Once a sperm has fused with the egg, changes take place to prevent multiple sperm from fusing with the egg. The fertilized egg, now called the **zygote**, travels from the Fallopian tube to the uterus and implants within the endometrium. This is the beginning of the pregnancy.

A flow diagram of the male and female processes of reproduction is shown below (**Figure 1-12**):

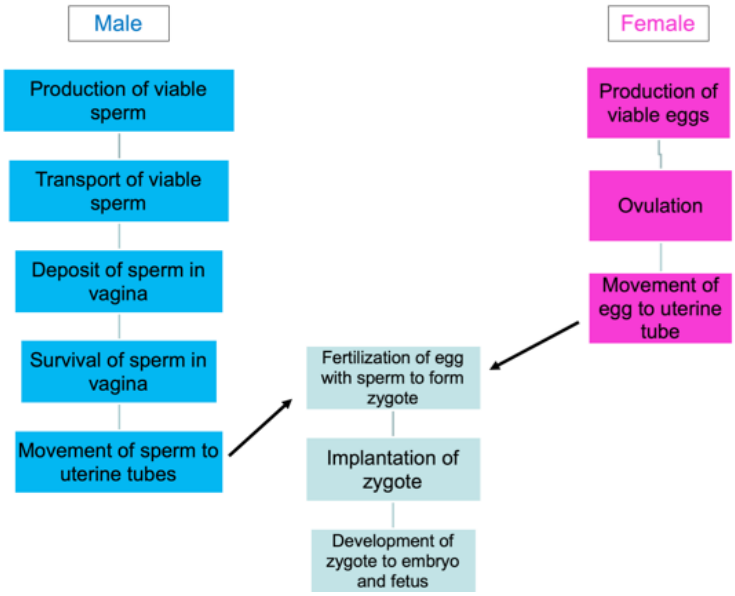


FIGURE 1-12: Pathway to fertilization
Ilustration by Dr. Bruce Wainman

Understanding the diagram is important for knowing how various contraceptive methods interrupt the fertilization process, thereby preventing pregnancy.

AUDIO

- *Definition Of Fertilization*

CHAPTER KEY POINTS

- Female and male reproductive anatomy includes both external and internal structures.
- The menstrual cycle is a complex physiologic process regulated by hormonal changes.
- The pathway to fertilization involves several sequential steps; family planning methods can block the sequence at various points.

LABELLED FIGURES

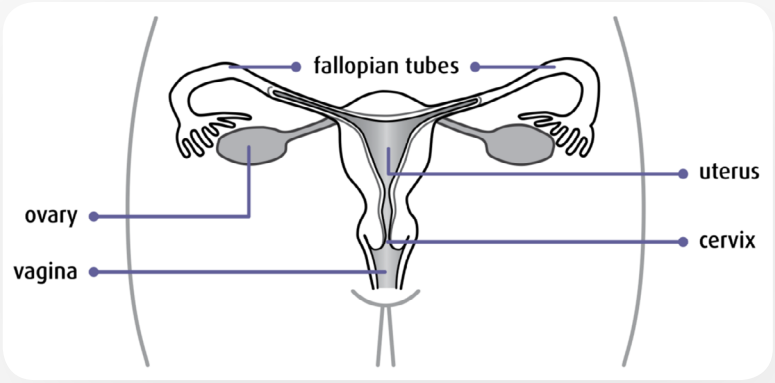


FIGURE 1-1: Illustration of the female reproductive system (3)

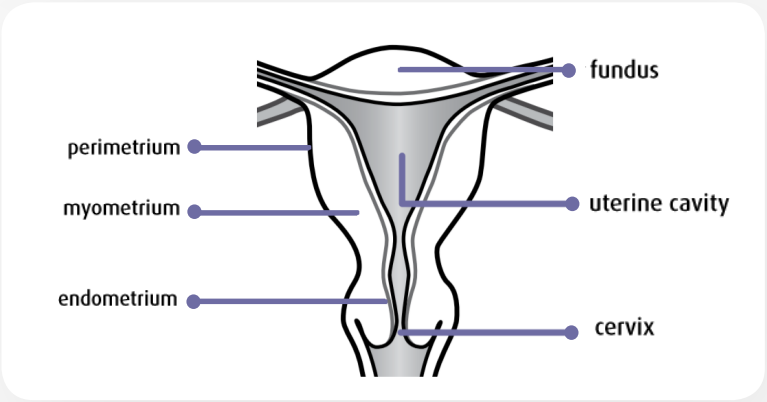


FIGURE 1-2: The layers and structure of the uterus (3)

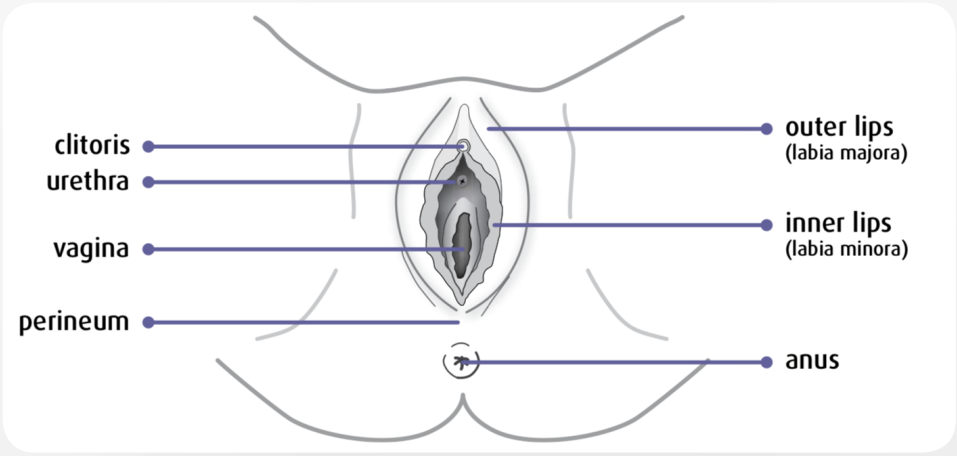


FIGURE 1-3: External female genitalia (vulva) (3)

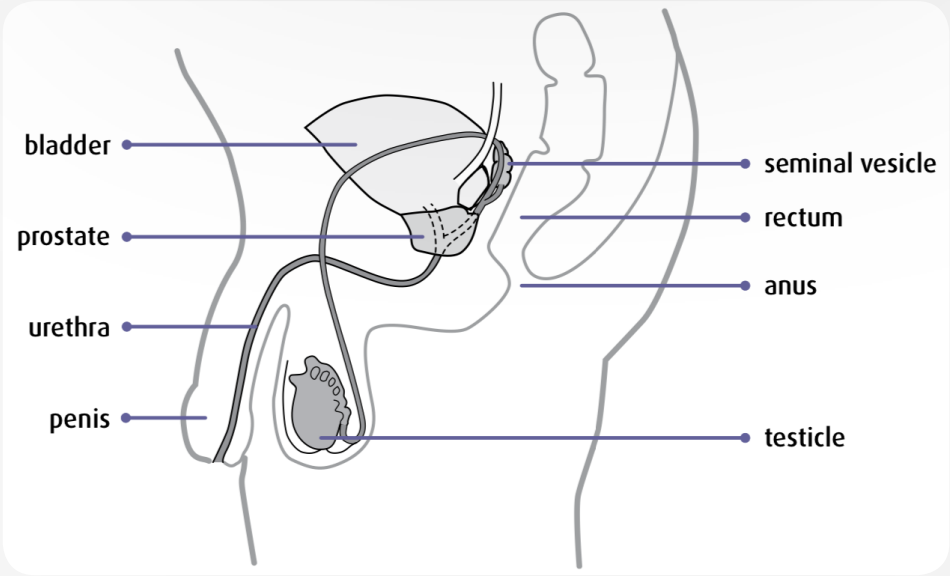


FIGURE 1-11: Overview of male reproductive anatomy (3)

CHAPTER 2
ASSESSING THE HEALTH STATUS OF WOMEN

To adequately evaluate the woman's health status, it is important to establish a trusting relationship during the history taking. The woman needs to speak freely to an interested listener who does not allow body language or facial expressions to imply disinterest or boredom. The midwife/LHV should avoid interrupting the woman, because important cues or related problems that may contribute to the reason for the visit could be lost. It is important to maintain eye contact with the woman and to listen carefully. It is important for the midwife/LHV to use a level of language that the woman will easily understand. Communicating with the woman in this manner may help establish rapport and obtain an accurate history.

The following list of items are important to include in a complete health assessment done at any point in a woman's life (1,2).

Age

Knowledge of the woman's age helps to understand the health issues that may arise at different stages in a woman's life (puberty, adolescence, childbearing years, and premenopausal and postmenopausal years).

Last Normal Menstrual Period

The date of onset of the last normal menstrual period (LNMP) is important to define. A missed period, irregularity of periods, heavy bleeding, or other abnormalities can be indicators of health problems.

Pregnancy History

The reproductive history should be recorded as part of the health evaluation. Gravida refers to the number of pregnancies, while parity is the number of deliveries over 20 weeks' gestation.

Reason for Visit

If the visit is for other than a routine prenatal or postnatal check you may start the visit by asking "What is the reason for your visit?" or "How can I help you?" These questions are an important way to begin a conversation with a woman about what she thinks is important. The reason may be a physical problem/symptom that needs exploring, or it may be emotional distress or a need for information or any combination of those reasons. You then will need to explore the reason with more specific questions such as:

- How long the issue or problem has existed?
- Is it getting better or worse?
- Are there social, economic or family life issues involved?

GLOSSARY

COMPLETE HEALTH ASSESSMENT
Information taken by the healthcare provider which includes physical examination of the client, review of the client's medical and surgical history, and laboratory and other diagnostic testing.

If the woman's visit is about family planning, the history needs to include the following:

- Previous or present use of contraception, satisfaction with the method, and whether there are contraindications to its use.
- Explore the need of contraception and her preferences for a method and related medical eligibility.

Medications & Habits

- Any medications prescribed or over the counter
- Use of hormones, steroids, and other compounds likely to influence the reproductive tract
- Use of any herbal preparations
- Use of alcohol, tobacco, betel nuts, paan, or other drug use
- Explore whether the woman smokes and, if so, how much and for how long
- Caffeine intake

Medical Illnesses

- Serious medical and psychiatric illnesses
- Hospitalization
- Major endocrine disease; for example, hyperthyroidism
- Recent notable weight gain or loss
- Last physical examination, including pelvic examination and cancer screening with Pap smear

Surgeries

- Operative procedures and when
- Postoperative or anesthetic complications

Allergies

- Allergic reactions (rash, vomiting, breathing problems) to drugs, foods, or other substances
- Consider possible allergies prior to any medical procedures, such as drawing blood samples, pelvic examination, and taking blood pressures where latex gloves or other products will be used

Bleeding and Clotting Problems

- Bleeds excessively from prior surgery or minor trauma
- Bruises easily, or has bleeding from the gums while brushing teeth (except during pregnancy when this is common)

Obstetric History

The obstetric history includes each of the woman's pregnancies listed in chronological order. This includes:

- Date of birth
- Sex and weight of the newborn
- Duration of pregnancy in weeks
- Length of labour
- Type of delivery
- Type of pain medication used, if any
- Any complications

Gynecologic History

The gynecologic history helps inform appropriate family planning approaches. Begin with the menstrual history:

- Age at first menstruation
- Interval between periods
- Duration of flow
- Amount and character of flow
- Degree of discomfort

Also ask about infections:

- Sexually transmitted infections (STI) including gonorrhea, syphilis, human immunodeficiency virus (HIV), hepatitis, herpes virus, chlamydia, and human papillomavirus (HPV)
- Treatment of pelvic inflammatory disease (PID), salpingitis, endometritis, or tubo-ovarian abscess
- Episodes of vaginitis including frequency and medications used to treat

Sexual History

Questions about the woman's sexuality should be asked in ways that are not judgmental or critical of individual choices. Questions to ask may include:

- Are you currently sexually active?
- Are there any problems in your current relationship(s)?
- Sexual orientation

Social History

- Living situation (adequacy, sanitation, number of persons, family relationships)
- Adequacy of food, access to food and water
- Economic security, employment
- Social networks/support
- Health practices (hygiene, exercise, nutrition, immunizations, health screening)

Family History

- The health of her immediate relatives, including her children, parents and siblings
- Familial heart disease, hypertension, diabetes, stroke, and blood abnormalities
- Breast, ovarian, and colon cancers

Physical Examination

Midwives and LHVs must be able to competently perform a complete physical examination including a pelvic examination. This book does not cover all aspects of the physical exam but provides a detailed description of a pelvic examination since it may reveal disorders of the reproductive organs, the lower urinary tract, and the lower abdomen (3–5).

GLOSSARY

PELVIC EXAMINATION
The physical examination of the external and internal female pelvic organs. A pelvic exam includes a "bimanual exam" meaning that two hands are used to examine by touch the size and consistency of the uterus and the location of the ovaries and Fallopian tubes.

Female Pelvic Examination

- Explain to the woman each phase of the examination as it is being done.
- After emptying her bladder, the woman lays on the examination table with a sheet covering the abdomen, pelvis and legs.
- Sit on a low stool within reach of a side table that holds the examination equipment. This may include a speculum, ring forceps, gauze, gloves, and lubricating jelly and any specimen collection items. Have a bright light within easy reach.
- Assist the woman to place her feet in the stirrups or her heels together so that her perineum can be examined. Keep the woman covered with the sheet. Put on gloves, and direct the light onto her perineum.

Steps of the Pelvic Examination

1. Inspect the vulva.
2. Insert the vaginal speculum.
3. Inspect the vaginal walls and cervix.
4. If indicated, obtain cultures to diagnose infections; conduct cancer screening (e.g. obtain a Pap smear).
5. Following removal of the speculum, perform bimanual examination of the uterus and ovaries.
6. If indicated, a rectovaginal examination.

Inspection and Palpation of the Vulva

- Inspect the perineum for swelling, ulcers, lesions, and color changes.
- Using gentle but steady touch, separate the labia with thumb and forefinger inspecting the clitoris, vestibule, urethral meatus, and vaginal orifice.
- Palpate gently for vestibular tenderness and Bartholin gland enlargement.
- Have the woman strain as if to defecate; check for bulging of the anterior or posterior vaginal wall or urine leakage.

Using the Vaginal Speculum

- The labia minora are separated with the gloved index and middle fingers.
- A metal speculum should be warmed before use with warm water or a warm towel. Use water or a small amount of lubricant on the blades (avoid lubricant if a Pap smear is being done or cultures are being obtained). Encourage slow deep breaths if the woman is tense. Insert the closed blades into the vagina with the width of the blades at about a 45-degree angle until they are fully inserted; rotate to the horizontal then gently open the blades to expose the cervix. Once the cervix is located, lock the blades open.
- Inspect the cervix for color, lacerations, ulcers, and growths.
- Inspect the cervical os for size, shape, color, discharge, and polyps.
- Obtain any specimens for laboratory examination.
- Loosen the setscrew and inspect the vaginal walls by rotating the speculum to expose the entire cavity. Carefully withdraw the speculum while inspecting the mucosa.

Bimanual Pelvic Examination

This examination involves the palpation of the uterus and adjacent structures, as shown in **Figure 2-1**. The steps are as follows:

- Using lubricant, insert the index and middle fingers of your gloved dominant hand into the vagina with the tips of the fingers facing anteriorly and touching the cervix.
- Ask the woman to take a deep breath and slowly exhale, while pressing your fingers of your non-dominant hand deeply into the lower abdomen, pushing the uterine fundus downward and forward toward the two vaginal fingers to assess size, mobility and any tenderness.

- The ovaries are examined for size and any tenderness by placing the fingers within the vagina to one side of the uterus while the abdominal fingers are pushed in at a point 2 to 3 cm medial to the anterior superior iliac spine.
- Attempt to approximate the fingertips of the two examining hands. The abdominal fingers are pulled inferiorly to push the tube and ovary onto the tips of the vaginal fingers.
- Move the fingers of the abdominal hand and the fingertips of the vaginal hand to the other side of the uterus to palpate the ovary and tube.

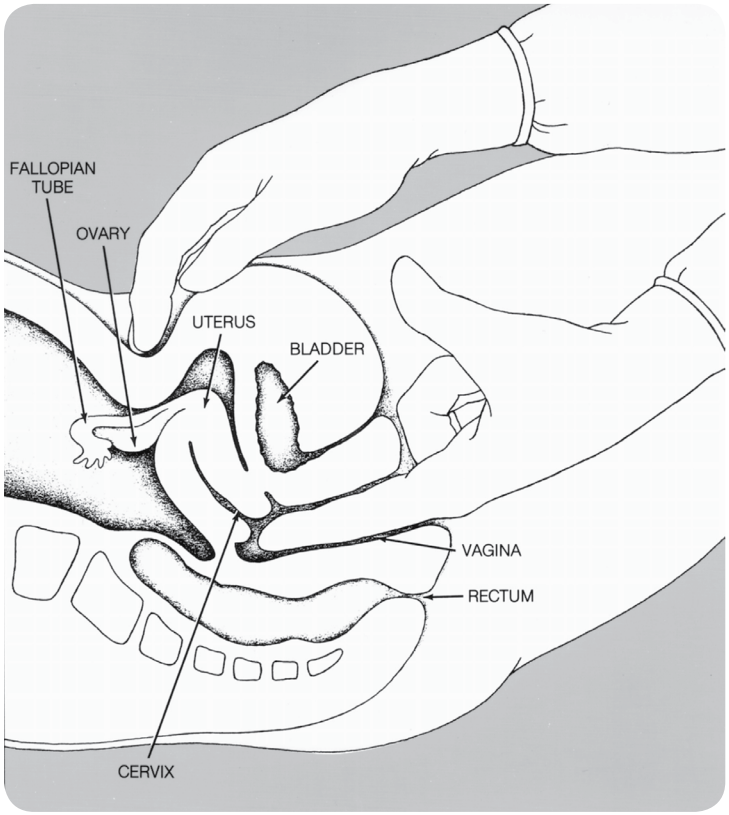


FIGURE 2-1: Bimanual abdominovaginal palpation of the uterus (6)
Via Wikimedia [Public domain]

CHAPTER KEY POINTS

- Establishing a relationship with the woman is vital to doing a comprehensive health assessment.
- The assessment includes details of the presenting issue/problem and the woman's medical, reproductive, sexual and family history.
- It is important to inquire about the woman's socio-economic situation and its impact on health conditions: income security, personal safety, access to health resources.
- Midwives and LHVs should be competent to perform a complete physical examination.
- All findings should be well documented and include specific plans and goals related to any problems or abnormalities identified during the physical assessment.
- A comprehensive pelvic exam includes a speculum exam and bimanual palpation of the uterus and adjacent structures.

CHAPTER 3

PRINCIPLES OF HEALTH COUNSELLING

This chapter presents a human rights-based approach to counselling women in the cultural and social context of Pakistan. The concept of values clarification is presented that aims to help healthcare providers reflect on their beliefs and values about family planning, abortion and post-abortion care and identify biases that influence the provision of care.

Women's Sexual and Reproductive Health and Rights

The UN Universal Declaration of Human Rights, led by the UN General Assembly in 1948, states: "All human beings are born free and equal in dignity and rights". These are rights that all human beings are entitled to regardless of their sex, age, nationality, religion, or any other status (1). Pakistan is signatory to this document and many other human rights treaties including the International Covenant on Civil and Political Rights (1966), Convention on the Elimination of All Forms of Discrimination against Women (1979) and the Convention on the Rights of the Child (1989) (2).

Both reproductive and sexual health are connected to universal human rights and contribute to the dignity and freedom of all people (3).

The reproductive and sexual rights that are critical to the achievement of highest attainable reproductive and sexual health include, but are not limited to, the rights of individuals and couples to (4–6):

- Informed consent, confidentiality and privacy
- Equality and non-discrimination
- Receive comprehensive and evidence-based education and information on sexuality and reproduction
- Making decisions pertaining to their reproductive and sexual health in a non-discriminative, non-coercive, and non-violent manner
- Freely deciding the timing, spacing and number of children that they have
- Entering and ending a marriage with freedom, full consent, and equality between both spouses

It is the responsibility of qualified healthcare providers, including midwives, to provide information and care related to safe abortion and post-abortion care to any woman who needs it. This is in line with WHO's recommendations to its member states regarding the planning and management of safe abortion care and the treatment of abortion complications (7,8):

GLOSSARY

VALUES CLARIFICATION
A process through which one can examine their moral reasoning and basic values. This involves three subprocesses: choosing a value, analyzing its pros and cons, and affirming that value, which when acted upon repeatedly, is believed to yield positive outcomes.

HUMAN RIGHTS
Any basic right or freedom to which all human beings are entitled and on which a government may not interfere.

- Provide prompt and unreserved treatment to anyone seeking emergency medical care, regardless of their age or any other factors.
- Provide the appropriate treatment for abortion-related complications in a timely manner, in order to protect the woman's life and health.
- All treatment should be provided in a sensitive manner that respects the privacy, dignity and confidentiality of the women.

The right to health, including sexual and reproductive, is also included in the Convention for the Elimination of all Forms of Discrimination Against Women (CEDAW). This is a document published by the United Nations. This document states that all possible steps should be taken to eliminate discrimination against women in the field of healthcare and to make sure that they have access to healthcare services, especially family planning (9). This is because discrimination against women who are seeking sexual and reproductive healthcare can lead to preventable morbidity and mortality, both of which are recognized by the United Nations as violations of their human rights (10,11).

It is the role and responsibility of the healthcare provider to put women first and to respect their autonomous decisions. Providers may struggle to reconcile personal ethical and moral values with those of their profession sometimes resulting in refusal to provide abortion and post-abortion services by invoking conscientious objection. The CEDAW committee emphasizes that "if health service providers refuse to perform such services based on conscientious objection, measures should be introduced to ensure that women are referred to alternative health providers" (9). According to the international FIGO consensus:

- Providers have a right to conscientious objection
- The primary conscientious duty of healthcare providers is to do no harm; conscientious objection is secondary to this primary duty.
- Certain safeguards must be implemented to prevent undue delays in access to services: the healthcare provider should immediately refer the client to another provider who does not object to the procedure. However, if timely referral and change in provider are not possible without putting the client into danger, then the provider must provide the care, regardless of any personal objections (10,12,13).

One of the reasons why women in Pakistan have abortions from unqualified providers, and consequently suffer abortion-related complications, is because of the discrimination and stigma they perceive or experience from healthcare providers (14). Healthcare provider attitudes and behavior form essential components of interactions with clients, and any biases, implicit or explicit, may negatively impact the care provided. The next section will therefore explore the concept of values clarification, which seeks to address the biases of healthcare providers.

GLOSSARY

CONSCIENTIOUS OBJECTION
When a healthcare provider objects to and refuses to perform a procedure or carry out an act of duty due to strong personal, religious or ethical beliefs and values.

Theory of Values Clarification

Values consist of beliefs, ideals and knowledge (15,16). Providers may have certain biases about women who have abortions and post-abortion care. Although providers have the right to invoke conscientious objection as a means to refuse care, it is also important to pause and reflect on those moral and ethical values and to think about their implications.

The examination of one's moral reasoning and basic values can be done through a process called values clarification (15,16). This involves three subprocesses:

1. Choosing a value.
2. Analyzing its pros and cons.
3. Affirming that value, which when acted upon repeatedly, is believed to yield positive outcomes.

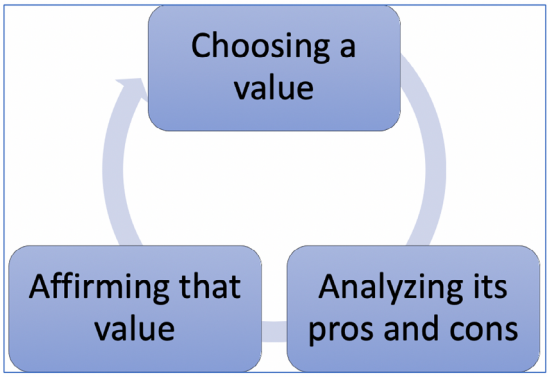


FIGURE 3-1: The process of values clarification

The ultimate goal of values clarification is to challenge yourself about your deeply-held assumptions, to resolve value conflicts, explore alternative values, and to alter beliefs when necessary. The main assumption of the framework is a willingness to change and openness to new knowledge (15,16).

Negative healthcare provider attitudes and behaviour is a phenomenon that is prevalent throughout the world and is not unique to Pakistan. These exercises are useful for any healthcare provider who is involved in the areas of family planning and post-abortion care counselling.

AUDIO

- *Values Clarification (in Urdu)*

Values Clarification Activities

You should also be aware of the values, preferences, and the sociocultural context of the woman's life. For example, women may have a preference for medically induced abortion rather than surgical abortion or vice versa; they may prefer a certain contraceptive to another for religious, cultural, social and family reasons. You should always provide all facts pertinent to care in an accurate and truthful manner (17,18).

The following activities are adapted from Ipas's values clarification toolkit (13). These activities will help you to clarify your values.

ACTIVITY #1: TRUE OR FALSE?

Read the statements provided in Table 3-1. Are they true or false? Type your responses in the second column. The correct answers can be found in the chapter key points.

STATEMENT	TRUE OR FALSE?
Abortion can lead to breast cancer.	
Tubal ligation causes women to lose their sexual desire	
Abortion causes mental health problems.	
Induced abortion is more dangerous than childbirth.	
Contraception is not safe for young people.	
Fertility is permanently compromised by having an abortion.	
Vasectomy makes men become fat and lose their sexual desire.	
Pills can make women infertile.	
Pills can cause cancer or birth defects.	
An Intrauterine Contraceptive Device is a permanent method of family planning.	
Implants are effective for 2-3 months only.	

TABLE 3-1: True or False Exercise Around Common Beliefs on Family Planning and Abortion

ACTIVITY #2: TALKING ABOUT WOMEN'S RIGHT TO CHOOSE (13)

Talking about family planning and abortion with other people may lead to discomfort, awkwardness and, in some cases, defensive or angry reactions. This activity helps you foresee negative comments and reactions from people.

Find a partner to do the following activity. Imagine you overhear a friend or colleague say one or more of the following:

1. *"Why would people use birth control? Children are God's gift!"*
2. *"Abortion is a sin!"*
3. *"Can you believe a woman would ask about birth spacing?!"*

Think about how you would respond in a respectful manner that supports women's right to make their own decisions regarding their reproductive and sexual health. Practice your response with your partner. You can type your response in the box to the right.

Counselling

In the context of maternity care, counselling is defined as an interactive process between the healthcare provider and a woman and her family during which information is exchanged and support is provided so that the woman and her family can make decisions, design a plan and take action to improve their health.

Principles of Counselling

The appropriate counselling intervention can vary with the topic of discussion and the characteristics of the client. For all types of counselling, as a healthcare provider, you should:

- Ask more and assume less.
- Use language and terminology the client knows and understands.
- Correct any misunderstandings and fears.
- Invite the client to come back any time for any reason.
- Provide privacy, both visual and auditory.
- Maintain confidentiality in all aspects of care, including record keeping.
- Help the woman make an informed decision by presenting her with all available options.
- Provide information that is impartial and medically accurate.
- Be aware of your own moral values and beliefs, and if they conflict with the care that the woman needs, then provide immediate referral to another practitioner (18,21).

VIDEO

► *Is this counselling helpful to the woman?*

GLOSSARY

INFORMED DECISION
A decision about care based on clear, accurate, and relevant information and personal values of the woman; a goal of family planning and post-abortion care counseling.

Effective Counselling

Counselling, if done effectively, can produce positive results. For instance, research has indicated that women who are well-informed about their contraceptive options are more likely to be satisfied with and continue use of their desired method (21). Another example comes from first-time users of medroxyprogesterone acetate (DMPA) in Bolivia. Clients who had received more detailed information pertinent to the contraceptive's effectiveness and its side effects were twice as likely to continue using the contraceptive compared with those who had not received information (21).

An effective counsellor can:

- Empower an individual by providing them with all the options and information they need to make an informed decision
- Attenuate fears and misconceptions about certain options
- Help an individual cope with their concerns and promote self-driven behavioral change
- Assist an individual with moving through stages of behavior change. For example, from the pre-contemplation stage, where clients deny that a problem exists, to the contemplation stage, where clients acknowledge the existence of the problem and are open to problem-solving (19,22).

With effective counseling, women:

- Believe they obtained the help they needed
- Know what to do and feel optimistic that they can do it on their own
- Feel respected and valued
- Are comfortable returning for care and use their chosen methods correctly and with satisfaction (19,22)

There are certain phrases and questions, which can be perceived as judgmental and stereotypical, and thus should be avoided. The table below provides some examples of such statements (14,23).

STATEMENTS TO AVOID OR BE CAREFUL ABOUT	WHY?
"So, you are pregnant again"	Even if the speaker intends this as a friendly comment, the woman could perceive it to be as judgmental.
"That's okay, we all make mistakes"	This statement can be seen as judgmental, even if it feels like a very reassuring statement. The woman may or may not see her pregnancy and/or abortion as a mistake.
"How can you be having a baby when you are just a child yourself"	This may keep the adolescent from trusting the provider (adolescents below the age of 18 are also entitled to all human rights) .

TABLE 3-2: Statements to avoid or be careful about

Counselling Approaches

In this book we present two approaches to counselling: GATHER and LIVES. The **GATHER approach** is useful in many situations. This chapter contains only a brief introduction to this approach (24). Other chapters of this book will explain the approach in more detail to assist counselling about family planning and post-abortion care. The LIVES approach is very useful in counselling women who experience domestic violence. More detail about LIVES is described below.

G	*Greet* the woman respectfully
A	*Ask* open-ended questions to determine her needs
T	*Tell* relevant factual information
H	*Help* her to consider her choices
E	*Explain* and provide instructions
R	*Return* – set up a follow-up visit

TABLE 3-3: The Steps of the GATHER Approach

Counselling for Women Facing Violence

Women experiencing violence have special health needs, many of them sexual and reproductive health needs (19). Violence against women can manifest in three different forms: physical, sexual, and psychological. Physical violence can include hitting, beating, slapping and using a weapon. Sexual violence can include forced sex (rape) and unwanted sexual contact. Psychological violence can include restricting a woman's access to family, friends, and resources as well as humiliation and intimidation (19).

Here we use a specific counseling approach, called the **LIVES Approach**. First-line support involves five simple tasks that can be summarized in the acronym: "**LIVES**" — **L**isten, **I**nquire about needs and concerns, **V**alidate, **E**nhance safety, **S**upport.

The following table provides more details on each of the tasks:

AUDIO

▶ *The GATHER approach*

GLOSSARY

VIOLENCE AGAINST WOMEN
Any act of gender-based violence that results in or is likely to result in, physical, sexual or mental harm or suffering to women, whether occurring in public or in private life.

TASK	WHAT DOES THIS INVOLVE?	
Listen	Listen to the woman closely, empathetically, and non-judgmentally. Provide her an opportunity to say what she wants to say in a safe, confidential, and private place. If she does not want to talk about violence, assure her that you are available whenever she needs you.	
Inquire about needs and concerns	Assess and respond to the woman's needs and concerns. Pay particular attention to what she does not say but implies with words or body language. *Respect her ability and her right to make her own choices about her life.*	
Validate	Validating the woman's experience involves letting her know that you are listening closely, that you understand what she is saying, and that you *believe in her* without any judgment or conditions. Some important things that you can say to the woman are: "It's not your fault. You are not to blame." and "You are not alone, and help is available."	
Enhance safety	Discuss a *plan of action* to protect the woman from further harm, should violence occur again. If the woman faces immediate danger, help her consider various courses of action. If not in immediate danger, help her make a longer-term plan. Some potential questions to ask: "Do you feel safe to go home?"; "Are you or your children in danger now?" Provide information about shelter homes, if needed.	
Support	Support the woman by discussing the woman's needs with her. Document the abuse experienced by the woman. Tell her about other sources of help (see ▸ **Appendix B**), such as NGOs involved in social services and child protection; police and legal aid and assist her to get help if she wants it.	

TABLE 3-4: The Steps of the LIVES Approach

AUDIO

▸ *Steps of LIVES Approach*

CHAPTER KEY POINTS

- All women worldwide have a right to access quality sexual and reproductive healthcare without facing discrimination due to their sex, religion, race, socioeconomic status, marital status, or other identifier.
- Unsafe abortion and the consequent preventable morbidity and mortality are a violation of a woman's rights.
- Women also have a right to access trained sexual and reproductive healthcare professionals who treat them with respect, dignity, and also empower them. For healthcare professionals, this includes being aware of values and beliefs that may negatively bias the services that they provide to women seeking abortion and post-abortion care.
- Values clarification exercises can assist in revealing and potentially resolving those ethical conflicts and biases.
- Healthcare professionals should be aware of the different counselling approaches required to deal with different populations with unique needs.
- Activity 1, Table 3-1 answers: all statements are **false**.

UNIT 2

PROVIDING FAMILY PLANNING SERVICES

NAVIGATION

CHAPTER 4

INTRODUCTION TO FAMILY PLANNING

A woman's ability to choose if and when to become pregnant has a direct impact on her and her family's health and well-being. Family planning allows spacing of pregnancies, prevents unintended pregnancies, and enables women to limit the size of their families if they wish to do so (1).

It is important that family planning is widely available and easily accessible through midwives and other trained health workers to anyone who is sexually active, including adolescents (2). Midwives and LHVs should be aware of the locally available and culturally acceptable contraceptive methods and be able to provide counselling to women who wish to use family planning.

Classification of Family Planning Methods

Family planning is achieved through the use of contraceptive methods (3,4). There is a wide range of family planning methods that can be classified into two categories: natural and artificial (5). These are listed below and shown also in Figure 4-1.

Natural methods:

- Breastfeeding (Lactational amenorrhea)
- Fertility awareness methods
- Withdrawal (Coitus interruptus)

Artificial methods:

- Temporary methods are:
  - Hormonal: combined oral contraceptive pills; progestin-only pills; injectables; implants
  - Intra-uterine devices (IUDs): copper IUDs, hormonal IUDs
  - Barrier: male and female condoms, diaphragms, cervical caps, spermicides
- Permanent methods are:
  - Tubal Ligation (female sterilization)
  - Vasectomy (male sterilization)

GLOSSARY

NATURAL FAMILY PLANNING METHODS
Methods of planning or preventing pregnancy based on observation of naturally occurring signs and symptoms of the fertile and infertile phases of the menstrual cycle. The methods include breastfeeding, withdrawal, and fertility awareness.

ARTIFICIAL FAMILY PLANNING METHODS
Contraceptive methods that are scientifically developed and proven to be sound and effective. These include temporary methods such as condoms, pills, IUDs; or permanent methods such as male and female sterilization.

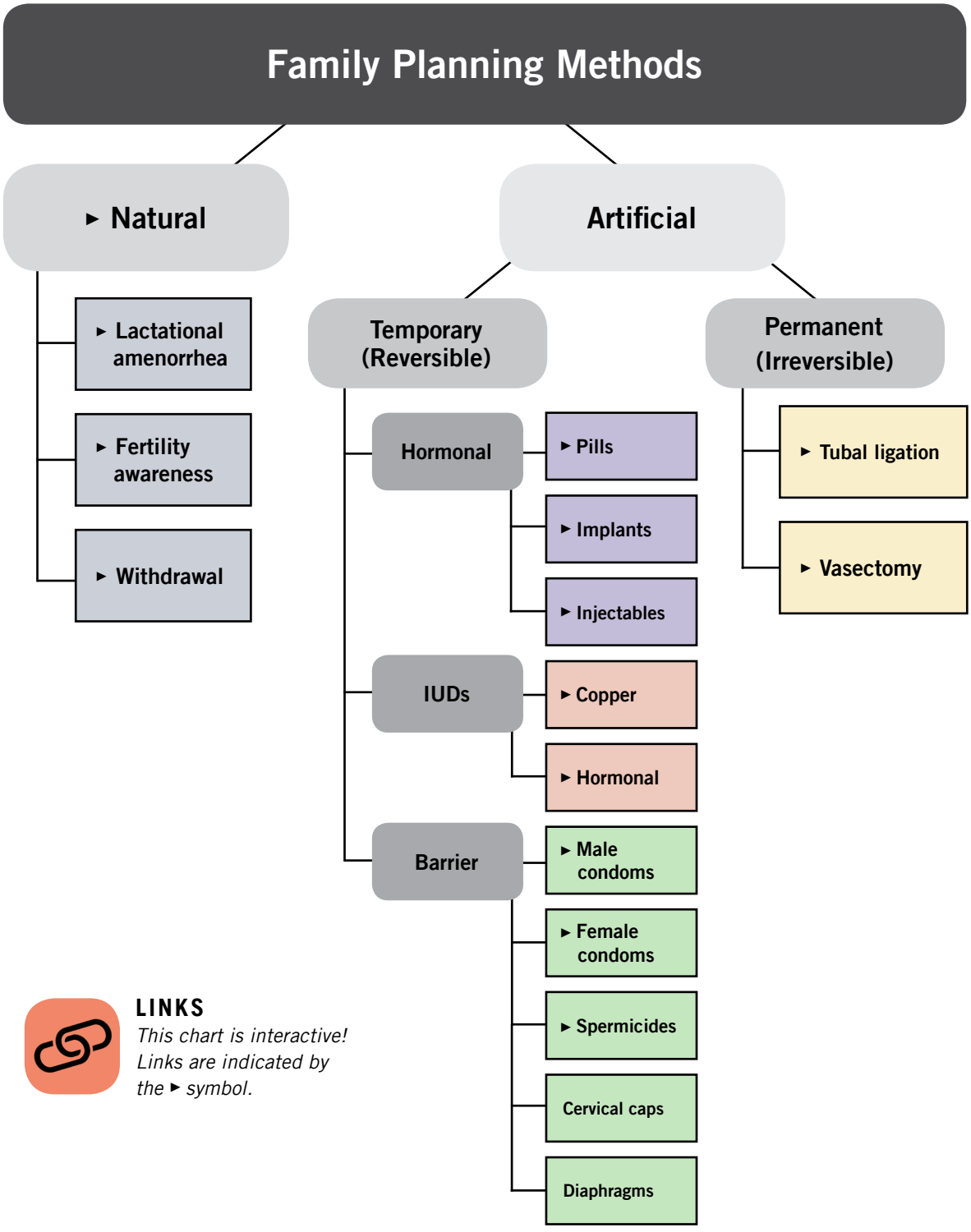


FIGURE 4-1: Classification of Family Planning Methods

How Family Planning Methods Prevent Pregnancy

All family planning methods interrupt one or more steps along the pathway to fertilization (Figure 4-2). The only family planning methods that can prevent both pregnancy and sexually-transmitted diseases are male and female condoms. This is known as dual protection (5).

GLOSSARY

DUAL PROTECTION
Avoiding both pregnancy and sexually transmitted infection.

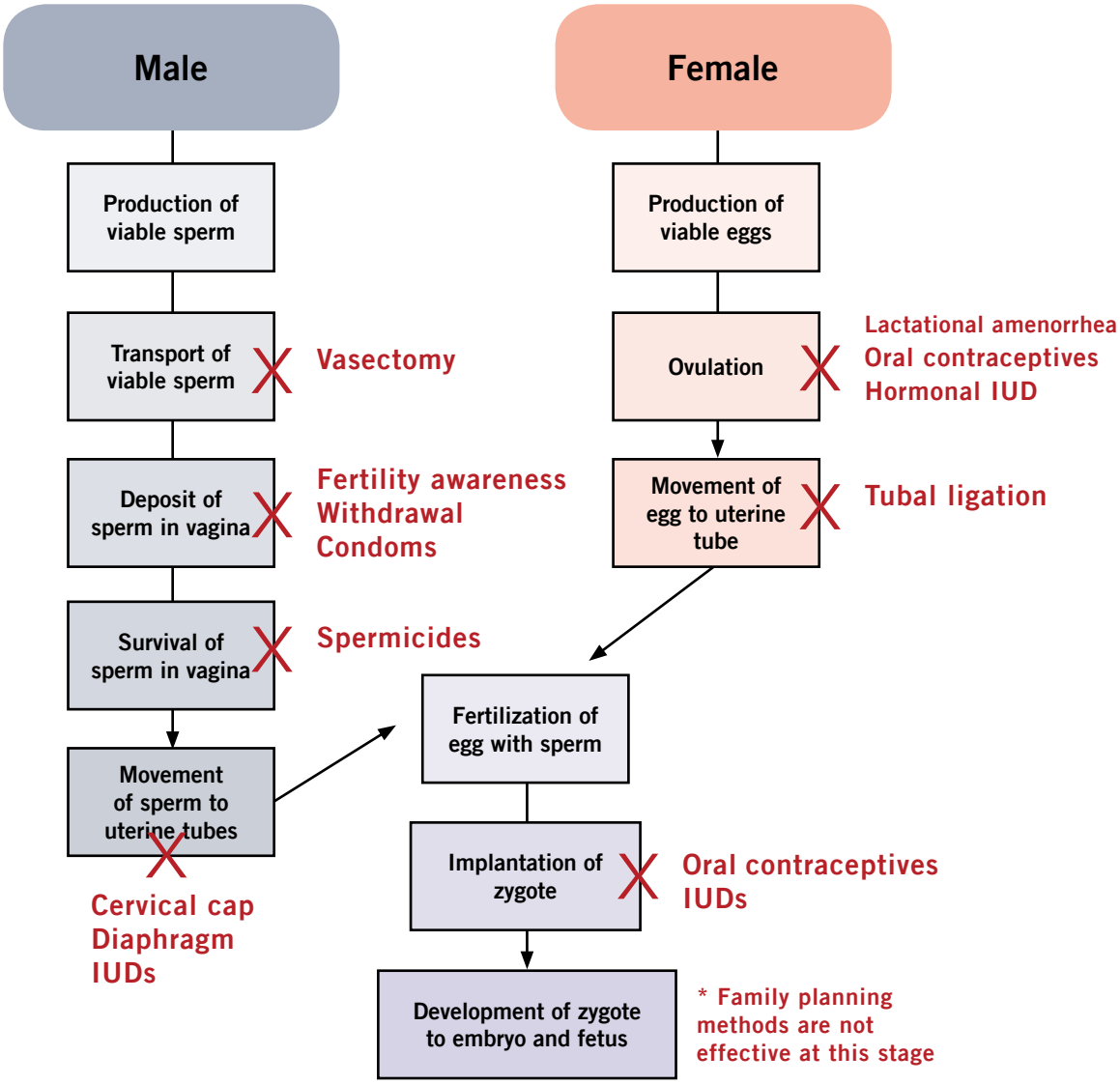


FIGURE 4-2: Where family planning methods act in the pathway to fertilization

Medical Eligibility Criteria (MEC) for the Use of Family Planning Methods

The midwives/LHVs need to know a woman's medical history because certain methods are contraindicated when specific medical conditions exist.

WHO and other family planning organizations have developed a 4-point rating system (see Table 4-1), to help healthcare providers determine which methods can be used when a woman has a specific health issue. The rating system is available online as well as in the format of a mobile application. The information is updated regularly as new evidence becomes available (6–8). WHO also has created a medical eligibility criteria wheel that can be used during family planning counselling. Both English and Urdu versions are available here respectively:

- English
- Urdu

CATEGORY	ACTION
1	Use method in any circumstance
2	Generally, use method
3	Use of method not usually recommended unless other more appropriate methods are not available or acceptable
4	Method NOT to be used

TABLE 4-1: Medical Eligibility Categories and Actions about Contraceptive Use

GLOSSARY

CONTRAINDICATION
If a woman has these specific conditions, under no circumstances should she be offered the contraindicated service or method. Alternatives should be considered, or she should be referred to a facility where she can be offered alternate care.

DID YOU KNOW

A colour-coded chart of similar information is available in ▸ Appendix C..

VIDEO

- *MEC Wheel Demo*

Effectiveness of Family Planning Methods

Family planning methods have different levels of effectiveness. Effectiveness is sometimes defined as the percentage of women experiencing an unintended pregnancy during the first year of typical use of the method. However, it is easier to express the rate as the percentage of women who do NOT become pregnant while using the method. This is how effectiveness is used in this eBook.

Figure 4-3 and Figure 4-4 show the same information; one in words, and one in pictures. Midwives/LHVs may show the pictures when counselling women.

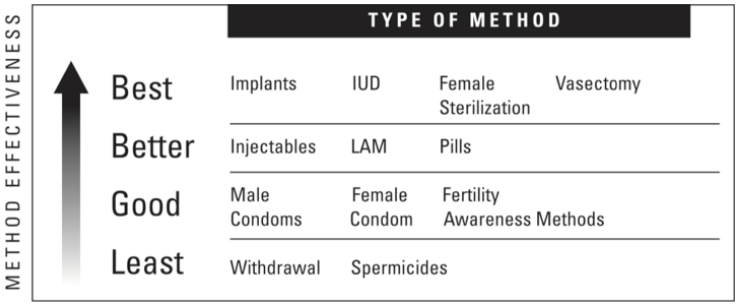


FIGURE 4-3: Effectiveness of family planning methods (9)
© U.S. Agency for International Development (USAID). 2013. Facts for Family Planning. Washington, DC: USAID

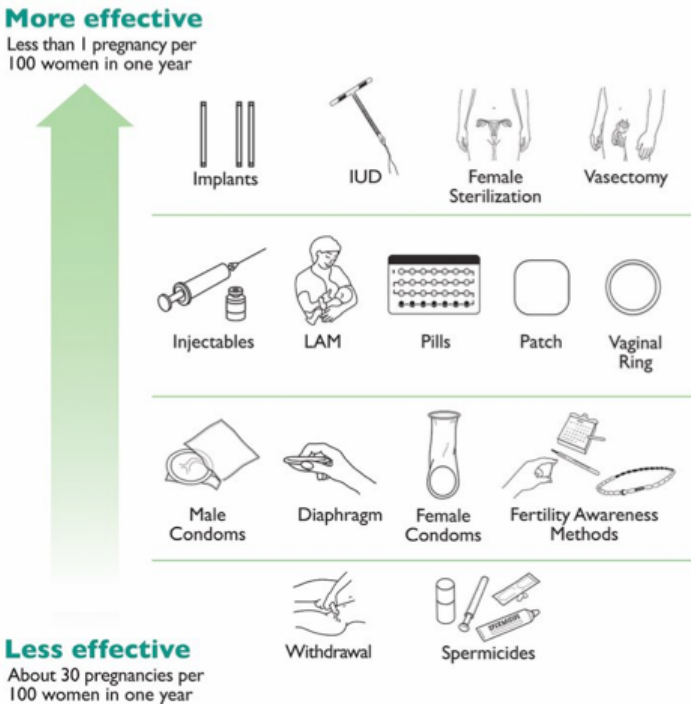


Figure 4-4: Picture of level of effectiveness of family planning methods (4)
© World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs

DID YOU KNOW

There is a distinction between typical use (real life, where mistakes may occur such as occasionally forgetting a pill) vs. perfect use (no mistakes, ideal use every time).

CHAPTER KEY POINTS

- Family planning helps women avoid mistimed or unplanned pregnancies.
- Family planning methods are classified into natural and artificial methods. Artificial methods are either temporary or permanent. here are many temporary methods.
- Not all women are eligible for all family planning methods. The WHO MEC wheel is highly useful to determine medical eligibility.
- Family planning methods have different levels of effectiveness in preventing pregnancies that vary from about 70% to nearly 100%. Counselling about family planning needs to consider personal preferences, medical eligibility, availability and level of effectiveness in order for women and partners to make informed choices.

CHAPTER 5

NATURAL FAMILY PLANNING METHODS

Natural family planning is a term used to describe methods of planning or preventing pregnancy based on observation of naturally occurring signs and symptoms of the fertile and infertile phases of the menstrual cycle (1). People who use natural family planning to avoid or delay pregnancy abstain from sexual relations on possible fertile days.

These methods have no side effects or complications. They can be used by couples who wish to avoid artificial methods for personal, cultural or religious reasons (2). These methods are not as effective in preventing pregnancy as many of the artificial methods of family planning.

The natural family planning methods include:

- Lactational amenorrhea
- Fertility awareness methods
- Withdrawal method

In describing each method, the following outline is used:

1. What is it - a brief definition is given
2. What does it look like - a description or picture is given
3. Brand names in Pakistan
4. Mode of action - a description of how/why it works
5. How to use it - instructions for correct use
6. How effective is it
7. Reasons for preferring
8. Health benefits
9. Common misunderstandings
10. Common side effects that do not require medical attention
11. Symptoms/signs that require medical attention
12. Special instructions
13. Medical eligibility according to WHO

GLOSSARY

LACTATIONAL AMENORRHEA
A form of natural family planning. "Lactational" means breastfeeding and "amenorrhea" means a lack of menstrual periods. It is essentially breastfeeding as a form of birth control.

FERTILITY AWARENESS METHODS
Natural family planning methods that may involve the calendar-based methods, symptoms-based methods (cervical mucus and body temperature) or symptothermal method.

WITHDRAWAL METHOD
The withdrawing, or pulling out, of the erect penis from the woman's vagina right before ejaculation to prevent a pregnancy.

Lactational Amenorrhea

What is it? Lactational amenorrhea is a form of natural family planning. "Lactational" means breastfeeding and "amenorrhea" means a lack of menstrual periods. It is essentially breastfeeding as a form of birth control (2–6).

What does it look like? Fully or nearly-fully breastfeeding the infant.

Mode of action: Frequent breastfeeding temporarily prevents the release of the natural hormones that cause ovulation. No egg means no pregnancy.

How to use it? Lactational amenorrhea requires three conditions. All three must be met:

1. Be within 6 months postpartum,
2. Not have had a menses,
3. Be fully or nearly fully breastfeeding their infant. This means feeding at least every 4 hours in the daytime, and every 6 hours at nighttime.

How effective is it? Prevents pregnancy 98% of the time.

Reasons for preferring:

- Natural family planning method
- Supports optimal breastfeeding, providing health benefits for the baby and the mother
- No direct cost for family planning or for feeding the baby

Health Benefits:

- Encourages regular breastfeeding which is healthy for both the baby and the mother
- Reduces the chances of becoming pregnant

Common Misunderstandings:

- Following special instructions isn't necessary
- Not effective in lean or fat women
- Special foods are required.
- Continued use for 6 months will cause the woman to run out of milk.

AUDIO

► *Breastfeeding*

Common side effects that do not require medical attention: None.

Symptoms/signs that require medical attention: None

Special Instructions:

- Follow lactational amenorrhea criteria: Breastfeed often, with no more than a 4-hour gap during the daytime and a 6-hour gap during the night.
- Do not start foods until after infant is 6 months old.
- Other methods of family planning can be started immediately after birth, but others such as combined oral contraceptives (COCs) may need to be delayed if the woman is breastfeeding.
- Women should be advised that if they are not exclusively breastfeeding, they can get pregnant as soon as four weeks postpartum, even if they have not yet started their menstrual cycle.

What are the Medical Eligibility Criteria? All breastfeeding women can safely use lactational amenorrhea, but a woman in the following situations may want to consider other family planning methods:

- Has HIV
- Is using certain medications during breastfeeding.
- Infant has a condition that makes breastfeeding difficult

Fertility Awareness Methods

What is it? There are different types of fertility awareness methods (2,4–7).

1. Calendar-based methods
2. Symptoms-based methods (cervical mucus and body temperature)
3. Symptothermal method (combination of the above)

What does it look like? The Calendar-based methods involve tracking the menstrual cycle to identify the start and end of the fertile period. For example, the Standard Days Method involves avoiding unprotected vaginal sex on days 8 through 19 of the menstrual cycle.

The *Symptoms-based methods* depend on observing signs of fertility.

- Cervical secretions: When a woman sees or feels cervical secretions, she may be fertile. She may feel just a little vaginal wetness.
- Basal body temperature (BBT): A woman's resting body temperature goes up slightly after ovulation. Pregnancy is unlikely from 3 days after this temperature rise through the start of the next monthly bleeding. The body temperature stays higher until the beginning of the next monthly bleeding. (Note: A specially calibrated thermometer is needed to detect the slight rise in temperature.)

The *Symptothermal method* involves the combination of the above methods: tracking days of the cycle, checking cervical mucus, and taking temperatures.

Mode of action: Prevents pregnancy by avoiding unprotected sexual relations during the fertile days of the menstrual cycle.

How to use it? The Calendar-based methods can involve the use of a birth control chain (such as CycleBeads®) which is a color-coded string of beads.

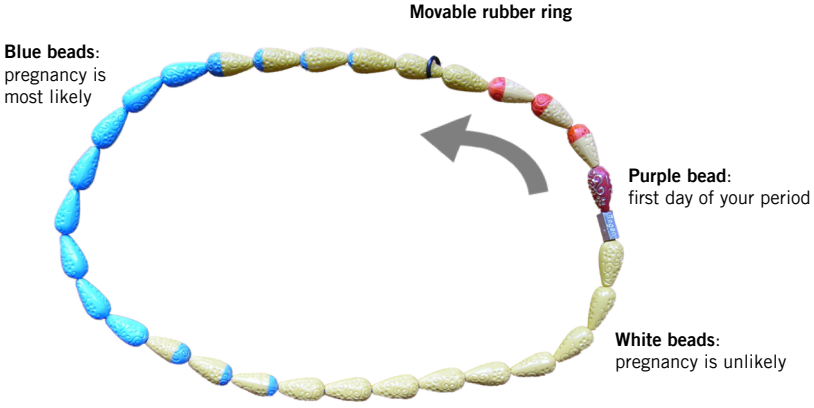


Figure 5-1: A birth control chain (8)
Dellex via Wikimedia [CC BY-SA 3.0 (https://creativecommons.org/licenses/by-sa/3.0)]

How effective is it? The standard days method prevents pregnancy 78% of the time, whereas the symptothermal method prevents pregnancy 98% of the time.

Reasons for preferring:

- No side effects
- No supplies or medicines needed
- Helps women learn about her body and fertility
- Some women think it adheres to religious and cultural norms regarding contraception

Health Benefits: Reduces the risk of pregnancy

Common Misunderstandings:

- Requires advanced education
- Harms men
- Fertile period occurs during monthly bleeding

Common side effects that do not require medical attention: None.

Symptoms/signs that require medical attention: None

Special Instructions:

- Explain the use of CycleBeads to keep track of menstrual cycle.
- Teach use of thermometer for basal body temperature and feel of cervical mucus. Encourage practice at home for a few cycles before relying on this method.
- Avoiding unprotected sex during fertile days requires high motivation and self-control.
- Have a backup FP method at home such as condoms and emergency contraceptive pills if the couple have sex during the fertile period.

What are the Medical Eligibility Criteria?
For Calendar-based or Symptom-based methods:

1. Use caution if menstrual cycles are irregular; identifying the fertile period is more difficult.
2. Delay using this method for at least 3 cycles if the woman recently gave birth or is breastfeeding.
3. Delay until the start of next monthly bleeding if the woman recently had an abortion.

For symptoms-based methods:

1. If a woman has a fever or other changes in body temperature, the method is unreliable.
2. If a woman has a vaginal infection or another condition that changes cervical mucus, the method is unreliable.

Withdrawal (Coitus interruptus)

What is it? The withdrawal method involves the withdrawing, or pulling out, of the erect penis from the woman's vagina right before ejaculation (2,4–6,10).

What does it look like? Pulling out correctly at the right time, during each sexual act.

Mode of action: Prevents pregnancy by keeping the sperm outside of the woman's body.

How effective is it? Can prevent pregnancies 78% of the time.

Reasons for preferring:

- Can be used any time
- Useful when no other method is available or preferred
- Useful when sexual intercourse is infrequent.

Health Benefits: Prevents pregnancy if used correctly each time.

Common Misunderstandings: N/A

Common side effects that do not require medical attention: None

Symptoms/signs that require medical attention: None

Special Instructions:

- It is better and safer to use a more reliable family planning method.
- Some men may have difficulty sensing when they are about to ejaculate, or ejaculate prematurely.
- Use Emergency Contraceptive Pills (ECPs) in case withdrawal is not done on time.

What are the Medical Eligibility Criteria? None.

CHAPTER KEY POINTS

- Natural family planning methods include lactational amenorrhea, fertility-based methods, and withdrawal.
- They can be effective in helping avoid pregnancy, but they require close attention to body changes on a daily basis.
- They may be preferred by couples due to personal, cultural or religious reasons.

CHAPTER 6

INTRA-UTERINE DEVICES (IUDs)

An intra-uterine device (IUD) is a small plastic device that comes in two forms: copper-bearing, or hormone-bearing (1,2). IUDs are a long-term contraceptive method. They are a "get-it-and-forget-it" method because once inserted into the woman's uterus, the woman does not have to worry about it for at least 5 years and up to 10 years (1,3). Only a trained healthcare provider such as a midwife or LHV should insert an IUD.

Women who are not pregnant can have an IUD inserted any time. After childbirth, a woman can have an IUD inserted immediately or within the first two days (1). Otherwise, she will need to wait four to six weeks to do so. When the IUD is removed, a woman can get pregnant immediately (1).

A woman at very high risk of sexually transmitted infections (STIs) or who currently has an active STI, such as gonorrhea or chlamydia, should not have an IUD inserted (1,2). The process of inserting the IUD could push gonorrhea and chlamydia higher into the reproductive tract causing a more serious health problem. STIs should be treated and cured prior to IUD insertion (1,2).

VIDEO

- *Planned Parenthood: What is an IUD?*

Copper-bearing Intra-uterine Devices (IUDs)

What are they? The copper-bearing intrauterine device (IUD) is a small, flexible plastic frame with a copper wire wrapped around it. There are two types of copper-bearing IUDs: Copper T (lasts for up to 10 years) and Multi-load (lasts for up to 5 years). It can have one or two threads tied to it and these threads hang through the cervix into the vagina. These threads are used for removal of the IUD (1,3–6).

What do they look like?

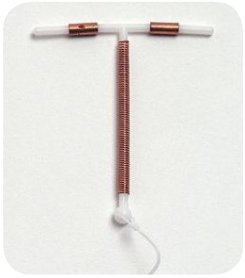


Figure 6-1: Copper IUD (7)
LeiaWonder via Wikimedia [CC BY-SA 4.0 (https://creativecommons.org/licenses/by-sa/4.0)]

Figure 6-2: Multi-load IUD (8)
Aung via Wikimedia [Public domain]

Brand Names: Protect 5®, Safeload®, Heer®, Dhanak®

Mode of action: The copper is toxic to the sperm and kills the sperm before they are able to travel further up the uterus and fertilize an egg. This results in a pregnancy being avoided.

How to use them? IUDs are a 'get-it-and-forget-it' method of family planning. Once they are inserted in the uterus by a trained healthcare professional, nothing else needs to be done. It is a reversible method and can be removed upon request. Copper IUDs can also be used as an emergency contraceptive for up to five days after unprotected intercourse.

How effective are they? Can prevent pregnancy 99.92% of the time.

Reasons for preferring:

- Safe, long lasting and very effective in preventing a pregnancy.
- Private: others cannot tell if the woman is using a contraceptive.
- User does not have to do anything once IUD is inserted.

Health Benefits: Reduce the risk of:

- Pregnancy, including ectopic pregnancy
- Endometrial cancer
- Cervical cancer

Common Misunderstandings:

- Adolescents, or women with children, cannot use this method
- Leads to pelvic inflammatory disease (PID)
- Increases the risk of contracting STIs
- Increases the risk of a miscarriage after an IUD is removed.
- Causes infertility, birth defects, cancer
- Moves to the heart or other parts of the body.
- Causes discomfort or pain for the woman or the man during sex.
- Causes an ectopic pregnancy.

Common side effects that do not require medical attention:

- *Common*: There could be heavier or prolonged bleeding in first three to six months after insertion.
- *Rare*: Other side effects can include more cramps and pain during monthly periods.

Symptoms/signs that require medical attention:

- Severe abdominal pain and tenderness
- Excessive vaginal bleeding (bleeding that is twice as heavy as a woman's regular period).
- Abdominal distention accompanied by nausea, bloating, constipation
- Fever
- Foul vaginal discharge

Special Instructions:

- Advise the woman that she can start using the IUD at any time, provided that it is certain that she is not pregnant
- Advise her that the side effects are temporary and are not uncommon. She can take ibuprofen or acetaminophen (Paracetamol®) as needed.
- Arrange a follow-up visit 3-6 weeks after IUD insertion
- Invite her to return for questions or concerns:
    - Possible expulsion of the IUD.
    - Symptoms of reproductive tract infections e.g. pain during sex and unusual vaginal discharge.
    - Wants the IUD removed for any reason.

What are the Medical Eligibility Criteria? A woman should NOT get an IUD if she has any of the following medical conditions:

- Gave birth more than 48 hours ago, but less than 4 weeks ago
- Reproductive tract infection especially lower genital tract
- Unusual vaginal bleeding
- Urogenital cancer
- HIV/AIDs

GLOSSARY

ECTOPIC PREGNANCY
Pregnancy in which the fertilized egg implants in tissue outside the uterus, most commonly in a fallopian tube but sometimes in the cervix or abdominal cavity.

PELVIC INFLAMMATORY DISEASE (PID)
An infection of the upper genital tract, caused by various types of bacteria.

Hormone-bearing Intra-uterine Devices (IUDs)

What are they? The hormone-bearing intrauterine device (IUD) is a small, flexible, T-shaped plastic device that releases levonorgestrel (a type of progestin). It can have one or two threads tied to it and these threads hang through the cervix into the vagina. These threads are used for removal of the IUD (1,3–6).

What do they look like?

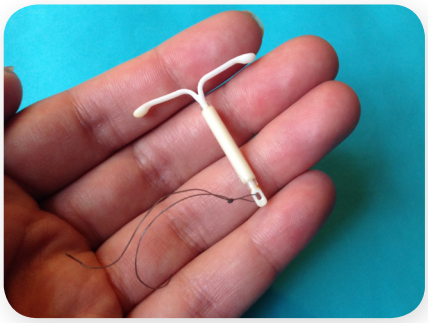


Figure 6-3: Hormonal IUD (9)
Sarahmirk via Wikimedia [CC BY-SA 4.0 (https://creativecommons.org/licenses/by-sa/4.0)]`

Brand Names: Mirena®

Mode of action: The Hormonal IUD releases a progesterone-like hormone.

1. This thickens the cervical mucus, preventing the entry of sperm into the uterus.
2. It prevents ovulation from occurring.

This means pregnancy can be avoided because there will be no sperm to fertilize an egg, and no egg to be fertilized by any sperm that is able to go through the cervical mucus.

How to use them? IUDs are a 'get-it-and-forget-it' method of family planning. Once they are inserted in the uterus by a trained healthcare professional, nothing else needs to be done. It is a reversible method and can be removed upon request.

How effective are they? Prevent pregnancy 99.8% of the time.

Reasons for preferring:

- Safe, long lasting and very effective in preventing a pregnancy.
- Private: others cannot tell if the woman is using a contraceptive.
- User does not have to do anything once IUD is inserted.

Health Benefits: Help reduce the risk of:

- Pregnancy, including ectopic pregnancy
- Cervical cancer
- Endometrial cancer
- Menstrual cramps
- Heavy periods
- Symptoms of endometriosis (pelvic pain, irregular bleeding)

Common Misunderstandings:

- Adolescents cannot use this method
- Women with children cannot use this method
- Leads to pelvic inflammatory disease (PID)
- Increases the risk of contracting STIs
- Increases the risk of a miscarriage after an IUD is removed.
- Causes infertility, birth defects, cancer
- Moves to the heart or other parts of the body.
- Causes discomfort or pain for the woman or the man during sex.
- Causes an ectopic pregnancy.

GLOSSARY

ENDOMETRIOSIS
When endometrial tissue (the uterine lining that is built up and then shed with each menstrual cycle) has begun to grow in areas other than the uterus. Endometriosis occurs in about 10% of women of reproductive age. These areas can include the ovaries, muscles and ligaments in the pelvis, abdominal lining, and uterine smooth muscle.

Common side effects that do not require medical attention:

- Changes in bleeding (slightly prolonged or heavier than usual bleeding)
- Headaches
- Acne
- Nausea
- Breast tenderness

Symptoms/signs that require medical attention:

- Severe abdominal pain and tenderness
- Abdominal distention accompanied by nausea, bloating, constipation
- Fever
- Foul vaginal discharge

Special Instructions:

- Advise the woman that she can start using the IUD at any time, provided that it is certain that she is not pregnant
- Advise her that the side effects are temporary and are not uncommon. She can take ibuprofen or acetaminophen (Paracetamol®) as needed.
- Arrange a follow-up visit 3-6 weeks after IUD insertion
- Invite her to return for questions or concerns:
    - Possible expulsion of the IUD.
    - Symptoms of reproductive tract infections e.g. pain during sex and unusual vaginal discharge.
    - Wants the IUD removed for any reason.

What are the Medical Eligibility Criteria? A woman should NOT get a hormonal IUD if she has any of the following medical conditions:

- Severe liver disease
- Blood clots in lungs or legs, and not on anti-coagulation therapy
- Breast cancer (past or present)
- Unusual vaginal bleeding
- Gave birth more than 48 hours ago, but less than 4 weeks ago
- Reproductive tract infection especially lower genital tract
- Urogenital cancer
- HIV/AIDs

GLOSSARY

VAGINAL BLEEDING

Any bloody vaginal discharge (pink, red, or brown) that requires the use of sanitary protection (pads, cloths, or tampons). Different vaginal bleeding patterns include:

- **Amenorrhea***: No bleeding at all at expected bleeding times.*
- **Breakthrough bleeding***: Any bleeding outside of regular monthly bleeding that requires use of sanitary protection.*
- **Heavy bleeding (menorrhagia):** *Bleeding that is twice as heavy as a woman's usual bleeding.*
- **Infrequent bleeding:** *Fewer than 2 bleeding episodes over 3 months.*
- **Irregular bleeding:** *Spotting and/or breakthrough bleeding that occurs outside of regular monthly bleeding.*
- **Menstrual bleeding,** *monthly bleeding: Bleeding that takes place, on average, for 3–7 days about every 28 days.*
- **Prolonged bleeding:** *Bleeding that lasts longer than 8 days.*
- **Spotting:** *Any bloody vaginal discharge outside of expected bleeding times that requires no sanitary protection.*

CHAPTER KEY POINTS

- IUDs are small, plastic devices inserted into the uterus.
- Two types of IUDs exist: copper and hormonal.
- IUDs can last for up to 10 years and are a ‘get-it-and-forget-it’ method.
- IUDs prevent pregnancy more than 99% of the time.

CHAPTER 7

HORMONAL METHODS OF CONTRACEPTION

Hormonal methods contain either one or two female sex hormones that are similar to the hormones naturally produced by a woman's body (1). They all prevent pregnancy mainly by stopping a woman's ovaries from releasing eggs. Without an egg, there is nothing for the sperm to fertilize, so pregnancy cannot occur (1).

The hormonal family planning methods include:

- Combined oral contraceptive pills
- Progestin-only pills
- Injectables
- Implants

Emergency Contraceptive Pills (ECPs) also use high dosage of hormones (1). However, they are not recommended to be used as a routine family planning method. Continuous use of ECPs can have negative health consequences (2).

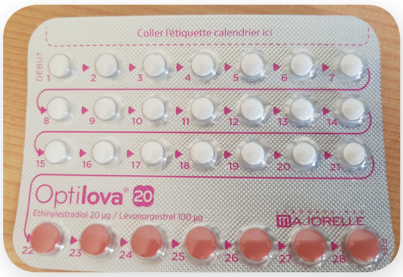
When used correctly, hormonal methods are highly effective in preventing pregnancies, and nearly all women can use them. It is helpful if a woman talks with the midwife or LHV to make sure she has no health conditions that may make a method unsuitable, to learn the specifics about the method, and to choose one that is right for her. Some hormonal methods are short-acting (pill and injectables), and some are long-acting (implants).

Pills can be categorized as combined oral contraceptives (COCs) or progestin-only pills (POPs) and emergency contraceptive pills (ECPs) (1–10).

Combined Oral Contraceptives (COCs)

What are they? Pills that contain low doses of two hormones — a progestin and an estrogen (1–10).

What do they look like?



Brand Names: Ovral®, Famila-28®, Lo-Femenal®, Microgynon-30®, Novodol®, Yasmin®, Desogen®, Alesse® and Nordette®

Mode of action: The hormones are released into the bloodstream. They work by preventing ovulation. This means a pregnancy will not occur since there is no egg for a sperm to fertilize.

Figure 7-1: 28-pill pack of combined oral contraceptive (11)
Irma2403 via Wikimedia [CC BY-SA 3.0 (https://creativecommons.org/licenses/by-sa/3.0)]

How to use them?
28-pill packs: When one pack is finished, then the woman should take the first pill from the next pack on the very next day.

21-pill packs: After the woman takes the last pill from one pack, she should wait 7 days and then take the first pill from the next pack.

It is very important to start the next pack on time. Starting a pack late risks pregnancy.

How effective are they? COCs can prevent pregnancy 93% of the time.

Reasons for preferring:

- Controlled by the woman.
- Can be stopped without seeing a healthcare provider.
- Easy to acquire and utilize.
- Does not interfere with sexual intercourse.

Health Benefits: Can help reduce the risk of:

- Pregnancy
- Endometrial cancer
- Ovarian cancer
- Pelvic inflammatory disease
- Ovarian cysts
- Iron-deficiency anemia
- Menstrual cramps, bleeding problems
- Ovulation pain
- Excessive facial or bodily hair
- Acne

Common Misunderstandings:

- Causes hormonal buildup in the woman's body.
- Need to take a 'break' from pills.
- Have to be taken on the day when the woman has sex.

AUDIO

► *Oral Contraceptive Pills*

- Causes infertility.
- Causes an abortion by disrupting an existing pregnancy
- Causes birth defects
- Alters women's sexual behavior.
- Collects in the stomach

Common side effects that do not require medical attention:

- *Common*: bleeding (none/irregular/prolonged), nausea, headaches, breast tenderness
- *Rare*: Mood changes, weight changes, acne

Symptoms/signs that require medical attention:

- Severe headaches
- Blurred vision
- Slurred speech
- Chest pain
- Calf pain
- Severe abdominal pain

Special Instructions:

- Advise the woman that she can start using the pills at any time, provided that it is certain that she is not pregnant
- Advise her that the side effects are temporary and are not uncommon.
- Take the pills at the same time every day.
- Do not skip pills but take a missed pill as soon as possible.
- Use a backup method such as condoms if woman forgets a pill.

What are the Medical Eligibility Criteria? A woman should not get COCs if she has any of following the medical conditions:

- Fully or nearly fully breast feeding a baby less than 6 months old
- Partially breastfeeding and less than 6 weeks since childbirth
- Not breastfeeding and less than 3 weeks since childbirth
- 35 years or older, and smokes cigarettes
- Liver disease (cirrhosis or tumour or jaundice) while using COCs previously
- Blood pressure is 160/100 mmHg or higher
- Breast cancer (past or present)
- Have gallbladder disease or taking medication for gallbladder disease
- Planning a major surgery that will prevent walking for a week or more
- Migraine headaches without aura, and 35 years or older. An aura is a transient visual, sensory or other neurological symptom that usually precedes or accompanies headache.
- Several conditions that could increase chances of coronary artery disease or stroke, such as older age, smoking, high blood pressure, or diabetes
- Taking medications for seizures
- Taking rifampicin for tuberculosis or other illness
- Diabetes for more than 20 years

Progestin-only Pills (POPs)

What are they? Pills that contain low doses of the hormone, progestin (1–10).

What do they look like?

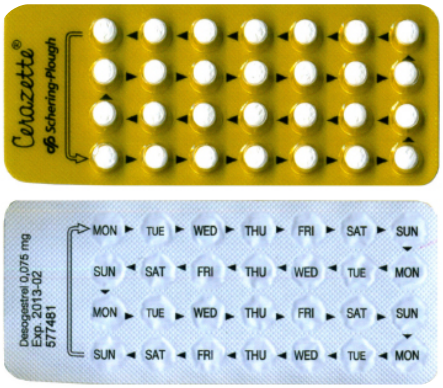


Figure 7-2: A Pack of Progestin-only Pills (7)
© Family Planning New Zealand. Used with permission.

Brand Names: Mini-pill

Mode of action: The progestin in the POPs:

1. Thickens the cervical mucus, stopping the entry of sperm into the uterus.
2. Prevents ovulation from occurring.

This means pregnancy can be avoided because there will be no sperm to fertilize an egg, and no egg to be fertilized by any sperm that is able to go through the cervical mucus.

How to use them? Take one pill each day until the pack is finished. Then start the next pack the very next day. It is very important to start the next pack on time. Starting a pack late risks pregnancy.

How effective are they? POPs can prevent pregnancy 93% of the time.

Reasons for preferring:

- Controlled by the woman.
- Can be stopped without seeing a healthcare provider.
- Easy to acquire and utilize.
- Does not interfere with sexual intercourse.

Health Benefits: Can help reduce the risk of:

- Pregnancy
- Endometrial cancer
- Ovarian cancer
- Pelvic inflammatory disease
- Ovarian cysts
- Iron-deficiency anemia
- Menstrual cramps, bleeding problems
- Ovulation pain
- Excessive facial or bodily hair
- Acne

Common Misunderstandings:

- Causes hormonal buildup in the woman's body.
- Need to take a 'break' from pills.
- Have to be taken on the day when the woman has sex.
- Causes infertility.
- Causes an abortion by disrupting an existing pregnancy
- Causes birth defects
- Alters women's sexual behavior.
- Collects in the stomach

Common side effects that do not require medical attention:

- *Common*: bleeding (none/irregular/prolonged), nausea, headaches, breast tenderness
- *Rare*: Mood changes, weight changes, acne

Symptoms/signs that require medical attention:

- Severe headaches
- Blurred vision
- Slurred speech
- Chest pain
- Calf pain
- Severe abdominal pain

Special Instructions:

- Advise the woman that she can start using the pills at any time, provided that it is certain that she is not pregnant
- Advise her that the side effects are temporary and are not uncommon.
- Take the pills at the same time every day.
- Do not skip pills but take a missed pill as soon as possible.
- Use a backup method such as condoms if woman forgets a pill.

What are the Medical Eligibility Criteria? A woman should not get POPs if she has any of following the medical conditions:

- Liver disease (cirrhosis or tumour)
- Breast cancer (past or present)
- Taking medications for seizures
- Taking rifampicin for tuberculosis or other illness
- Current blood clot in a leg (affecting deep veins) or in a lung, and not on anticoagulant therapy

Injectables

What are they? Injectables can come in different versions. They can be three-monthly progestin-only (DMPA) injectables, or monthly injectables that contain the hormones estrogen and progestin (1–5,10,12,13).

What do they look like?

Figure 7-3: Femi-Ject® (14)

Figure 7-4: Depo-Provera® (15)
User:Ciell via Wikimedia [CC BY-SA 2.5 (https://creativecommons.org/licenses/by-sa/2.5)]

Brand Names: Femi-ject® (1 month), Depo-Provera® (3 months)

Mode of action: The hormones are slowly released into the bloodstream. They primarily work by preventing ovulation. This means a pregnancy will not occur since there is no egg for a sperm to fertilize.

How to use them? A qualified healthcare provider such as a midwife or LHV can administer the injection. Depending on the type of injection, it can be administered intramuscularly or subcutaneously.

How effective are they? Injectables prevent pregnancy 94% of the time.

Reasons for preferring:

- Privacy: others cannot tell if the woman is using a contraceptive;
- Can be stopped when desired
- Do not require daily action. No daily pill taking.
- Help space births.

Health Benefits: Long term benefits unknown. However, researchers believe they are similar to those of Combined Oral Contraceptives (COCs).

Common Misunderstandings:

- The stopping of monthly bleeding means blood is building up inside the woman.
- Disrupts an existing pregnancy.
- Causes permanent infertility.

Common side effects that do not require medical attention:

- *Common*: bleeding (none/irregular/prolonged)
- *Rare*: Mood changes, headaches, nausea, breast tenderness, weight changes, loss of bone density, decreased libido (sex drive)

Symptoms/signs that require medical attention:

- Severe headaches
- Blurred vision
- Slurred speech
- Chest pain
- Calf pain
- Severe abdominal pain

Special Instructions:

- Advise the woman that she can start using injectables at any time, provided that it is certain that she is not pregnant.
- Advise her that the side effects are temporary and are not uncommon.
- Any weight gain can be moderated with exercise.
- Arrange a follow-up visit for the next injection. For example, progestin-only injections are given every 12-13 weeks (every 3 months), and monthly injectables that contain both estrogens and progestins are given every 4 weeks (every 1 month).
- Invite her to return for questions or problems.

What are the Medical Eligibility Criteria? A woman should NOT get a monthly or a three-monthly injectable if she has any of following the medical conditions:

- Severe liver disease
- Systolic blood pressure is 160 mmHg, or higher or diastolic blood pressure is 100 or higher
- Diabetes for more than 20 years or diabetes with complications
- Stroke, blood clot in your leg or lungs, heart attack, or other serious heart problems
- Very unusual vaginal bleeding
- Several conditions that could increase chances of coronary artery disease or stroke, such as high blood pressure and diabetes

In addition, a woman should NOT get a monthly injectable if she also has any of following the medical conditions:

- Smoke 15 or more cigarettes a day
- Systolic blood pressure is 140 mmHg, or higher or diastolic blood pressure is 90 or higher
- Breast cancer (past or present)
- Taking lamotrigine (Lamictal ®) (medicine for epilepsy and bipolar disorder)
- Migraine headaches without aura, and 35 years or older.

Implants

What are they? Implants are small flexible rods that are placed just under the skin (subdermally) of the upper arm. They are thin and tiny, roughly the size of a matchstick (1–5,10,16).

What do they look like?

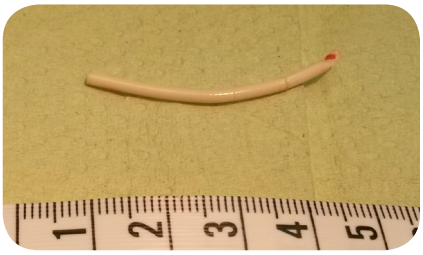


Figure 7-5: Implant (17)

Brand Names: Femplant®, Jadelle®, Implanon®

Mode of action: The implant releases the hormone progestin, which is similar to the natural human hormone called progesterone.

1. This thickens the cervical mucus, stopping the entry of sperm into the uterus.
2. It prevents ovulation from occurring.

This means pregnancy can be avoided because there will be no sperm to fertilize an egg, and no egg to be fertilized by any sperm that is able to go through the cervical mucus.

How to use them? Implants are a 'get-it-and-forget-it' method of family planning. Once they are inserted by a trained healthcare professional using a minor surgical procedure, nothing else needs to be done. One, or sometimes two rods are placed subdermally. It is a reversible method and can be removed upon request for example, if the woman wishes to become pregnant again.

How effective are they? Implants can last 3 to 5 years, depending on the type used. Implants prevent pregnancy 99.95% of the time.

Reasons for preferring:

- Does not interfere with sexual intercourse.
- Long lasting and reversible.
- Does not require user to do anything once implant is inserted.

Health Benefits: Reduce the risk of:

- Pregnancy, including ectopic pregnancy
- Symptomatic pelvic inflammatory disease
- Iron-deficiency anemia

Common Misunderstandings:

- The hormones remain in a woman's body after the implant is removed.
- Causes harm by stopping monthly bleeding.
- Makes a woman infertile.
- Increases the risk of (tubal) ectopic pregnancy.

Common side effects that do not require medical attention:

- *Common*: bleeding (none/irregular/prolonged)
- *Rare*: Pain or bruising at the site of implant, headaches, nausea, breast pain, weight gain

Symptoms/signs that require medical attention:

- Redness, swelling or discharge at insertion site
- Severe abdominal pain, especially during menstrual period

Special Instructions:

- Advise the woman that she can start using the implant at any time, provided that it is certain that she is not pregnant
- Advise her the side effects are usually temporary and are not uncommon.
- Invite her to return for questions or problems, especially for inflammation at the implant site, or removal of the implant or have a new implant inserted.

What are the Medical Eligibility Criteria? A woman should not get an implant if she has any of following the medical conditions:

- Severe liver disease
- Blood clots in lungs or legs, and not on anti-coagulation therapy
- Breast cancer (past or present)
- Unusual vaginal bleeding

Emergency Contraceptive Pills (ECPs)

What are they? ECPs can contain estrogen and a progestin, or just a progestin (levonorgestrel, norgestrel, or norethindrone (also called norethisterone) (1–5,10,18).

What do they look like?

Figure 7-6: Emergency Contraceptive Pill Pack (19)

Reasons for preferring:

- Can be used as needed
- Offer a second chance at preventing unwanted pregnancy
- Enable a woman to avoid pregnancy if sex was forced or she was prevented from using contraception
- Are controlled by the woman
- Reduce the need for abortion in the case of contraceptive errors or if contraception is not used

Health Benefits: Prevents unplanned pregnancy

Common Misunderstandings:

- Promotes risky sexual behaviour
- Causes an abortion
- Can only be used by young women
- Makes a woman infertile
- Lead to birth defects if pregnancy does occur

Brand Names: ECP by GreenStar Pakistan

Mode of action: Delay or prevent ovulation from occurring. This means pregnancy can be avoided because there will be no egg to be fertilized by any sperm.

How to use them? Take it as soon as possible after unprotected sexual intercourse, up to a maximum of five days.

How effective are they? ECPs prevent pregnancy 90% of the time, if taken within 24 hours of unprotected sex.

Common side effects that do not require medical attention:

- Spotting for 1-2 days after taking ECP pills
- Dizziness
- Fatigue
- Headaches
- Nausea
- Breast tenderness

Symptoms/signs that require medical attention: Unknown for frequent use.

Special Instructions:

- Use within 5 days of unprotected sex. The sooner the better.
- Do not use as a regular option for family planning.

What are the Medical Eligibility Criteria?
All women can use ECPs safely and effectively, including women who cannot continually use hormonal contraceptive methods. Due to the short-term nature of their use, there are no medical conditions that make ECPs unsafe for any woman.

CHAPTER KEY POINTS

- Hormonal family planning methods include combined oral contraceptive pills, progestin-only-pills, injectables and implants.
- Oral contraceptive pills should be taken according to the pack type instructions. They are most effective when no pills are missed, the pill is taken at the same time every day, and each new pack of pills is started without a delay.
- Injectable contraceptives are given once every 1 or 3 months, depending on the type of injectable. Injectables are most effective when women remember to come back for repeat injections on time.
- Contraceptive implants are inserted under the skin of a woman's upper arm and provide continuous and highly effective pregnancy protection for 3 to 5 years. When this time is over, new implants can be inserted during the same visit that the old set is removed.
- ECPs are also hormonal but are NOT a long-term family planning method.

CHAPTER 8

BARRIER METHODS OF CONTRACEPTION

Barrier methods are either devices (male and female condoms) that physically block sperm from reaching an egg, or chemicals (spermicides) that kill or damage the sperm in the vagina (1). Barrier methods should be used every time a couple has sex. The effectiveness of barrier methods depends greatly on people's ability to use them consistently and correctly. If a woman is fertile and does not use the method consistently and correctly, she can become pregnant (1).

Male and female condoms are the only contraceptive methods that provide protection from sexually transmitted infections (STIs), including HIV, in addition to pregnancy.

Male Condoms

What are they? A sheath that can be rolled onto an erect penis before having sex. They are usually made out of latex, and some are made out of rubber (2–8).

What do they look like?

Figure 8-1: Male Condom (9)

Brand Names: Saathi®, Durex®, Josh®, Rough rider®, Klimax®, Hamdam®

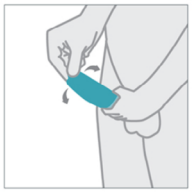
Mode of action: The tip of the condom can collect the ejaculated semen, preventing it from entering the female reproductive tract. Since the condom creates a barrier between the penis and the partner's genitals, it also prevents the transmission of sexually-transmitted diseases from one partner to the next.

How to use them?

Carefully open and remove condom from wrapper.

Place condom on the head of the erect, hard penis. If uncircumcised, pull back the foreskin first.

Pinch air out of the tip of the condom.



Unroll condom all the way down the penis.

After sex but before pulling out, hold the condom at the base. Then pull out, while holding the condom in place.

Carefully remove the condom and throw it in the trash.

Figure 8-2: How to use a condom (10)

VIDEO

- *Planned Parenthood: What is a Condom and How is it Used?*

How effective are they? Male condoms prevent pregnancy 87% of the time.

Reasons for preferring:

- No hormonal side effects
- Can be used as a regular, temporary or backup method
- Can be used without seeing a health care provider
- Sold in many places and generally easy to obtain
- Helps protect against both pregnancy and STI
- Can have sex for longer period of time

Health Benefits: Can help reduce the risk of:

- Pregnancy in the other partner
- Contracting STIs such as HIV, and the conditions caused by those STIs such as infertility, cervical cancer, and pelvic inflammatory disease.

Common Misunderstandings:

- Can get lost inside the woman's body
- Causes cancer
- Causes a decrease in the male's interest in sex.
- Causes illness in men by making sperm "back up".
- Causes illness in the woman
- Causes men to become sterile and weak.
- Only for use outside marriage.

Common side effects that do not require medical attention: May dull the sensation of sex for some partners.

Symptoms/signs that require medical attention: Allergic reaction to latex (male or female).

Special Instructions:

- Do not use the male and female condom at the same time
- Use a new condom for each sex act.
- Advise the woman to come back if she and her partner are having difficulty using the condoms correctly
- Use non-latex condoms if the woman or her partner has latex allergy.

What are the Medical Eligibility Criteria? Some men or women may have an allergy to latex. They should be advised to use non-latex condoms to avoid pregnancy and the spread of STIs.

Female Condoms

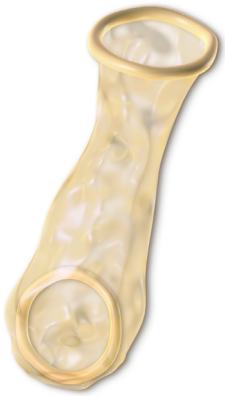


Figure 8-3: Female Condom (11)

BruceBlaus via Wikimedia [CC BY-SA 4.0 (https://creative-commons.org/licenses/by-sa/4.0)]

What are they? A pouch that can be inserted into the vagina before having sex. They are usually made out of nitrile polymer (same material as medical gloves) (2,4–8).

What do they look like? 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.

Brand Names: Durex®, Black Cobra®

Mode of action: The condom can collect the ejaculated semen, preventing it from entering the uterus. Since the condom creates a barrier between the penis and the partner's genitals, it also prevents the transmission of sexually-transmitted diseases from one partner to the next.

VIDEO

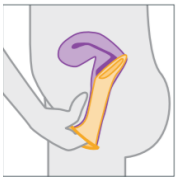
- *Planned Parenthood: What is a Female Condom and How is it Used?*

How to use them?

Carefully open and remove female condom from package to prevent tearing.

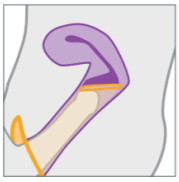
The thick, inner ring with closed end is used for placing in the vagina and holds condom in place. The thin, outer ring remains outside of body, covering vaginal opening.

Find a comfortable position. While holding outside of condom at closed end, squeeze sides of inner ring together with your thumb and forefinger and insert into vagina. It is similar to inserting a tampon.

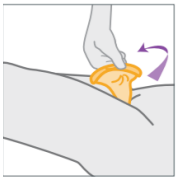


Using your finger, push inner ring as far up as it will go until it rests against cervix. The condom will expand naturally and you may not feel it.

Be sure condom is not twisted. The thin, outer ring should remain outside vagina.



Guide partner's penis into opening of female condom. Stop intercourse if you feel penis slip between condom and walls of vagina or if outer ring is pushed into vagina.



To remove, gently twist outer ring and pull female condom out of vagina.

Throw away female condom in trash after using it one time. Do not reuse.

Figure 8-4: How to use a female condom (12)

How effective are they? Female condoms prevent pregnancy 79% of the time.

Reasons for preferring:

- Controllable by woman.
- Protects against STIs and pregnancy.
- Can be used without seeing a healthcare provider.
- Does not interrupt sex as it can be inserted ahead of time

Health Benefits: Reduces the risk of pregnancy

Common Misunderstandings:

- Used only by unmarried couples
- Makes a woman ill by preventing entry of sperm
- Enters the uterus and gets lost inside the body

Common side effects that do not require medical attention: May dull the sensation of sex for some partners.

Symptoms/signs that require medical attention: Allergic reaction to latex (male or female).

Special Instructions:

- Ask the woman to practice inserting and removing the condom.
- Replace the condom after every sex act
- Ask woman to come back if she has difficulty using the condom.

What are the Medical Eligibility Criteria? Some men or women may have an allergy to latex. They should be advised to use non-latex condoms to avoid pregnancy and the spread of STIs.

Spermicides

What are they? Chemicals that kill the sperm before they reach an egg (2,4,6–8).

What do they look like? Spermicides come in different forms:

- Cans of pressurized foam
- Foaming tablets
- Melting or foaming suppositories (soft inserts that melt into a cream inside the vagina)
- Melting film
- Jelly
- Cream

Mode of action: The chemicals breaking the cell membrane of sperm cells, killing them or slowing their movement. This keeps sperm from meeting and fertilizing an egg.

How to use them?

1. Check the expiration date.
2. Relax and get into a comfortable position.
3. Gently insert the cream, film, foam, gel, or suppository deep into the vagina using either fingers or the applicator that came in the package.
4. Timing is important. Usually, the spermicide should be applied into the vagina at least 10-15 minutes before sex to achieve optimal effectiveness. Many spermicides are only effective for one hour after application, requiring multiple application for multiple sex acts.

How effective are they? Spermicides prevent pregnancy 79% of the time.

Reasons for preferring:

- Controlled by the woman
- No hormonal side effects
- Increases vaginal lubrication
- Can be used or stopped without seeing a healthcare provider
- Does not interrupt sexual intercourse if used correctly

Health Benefits: Reduces the risk of pregnancy

Common Misunderstandings:

- Reduces vaginal secretions or causes bleeding during sex.
- Changes men or women's interest in sex.
- Stops women's monthly bleeding.
- Causes cervical cancer or birth defects.
- Protects against STIs.

Common side effects that do not require medical attention: Irritation in or around the vagina or the penis. Physical changes may include vaginal lesions.

Symptoms/signs that require medical attention: Severe allergic reaction.

Special Instructions:

- Apply additional spermicide before each sex act.
- Do not wash the vagina after sex.

What are the Medical Eligibility Criteria? All women can safely use spermicides except those who are at high risk for HIV infection, or currently have an HIV infection.

CHAPTER KEY POINTS

- Barrier methods can be physical (condoms) or chemical (spermicides).
- Use a new condom for each sex act.
- Condoms are the only contraceptive method that can prevent both pregnancy and the spread of STIs.
- Spermicides are less effective as a contraceptive method if used alone.

CHAPTER 9

PERMANENT CONTRACEPTION

The permanent methods of family planning include male sterilization (vasectomy) and female sterilization (tubal ligation) (1). Both male and female sterilization are relatively safe and simple and usually does not require hospitalization (1). Once a woman or man has the procedure, it is very likely that she or he cannot have any more children because generally the procedure cannot be reversed (1). The couple must talk over the decision to use a permanent method carefully and be certain that they will not want more children.

Vasectomy (Male Sterilization)

What is it? Vasectomy is a permanent surgical procedure that blocks or cuts the vas deferens, the tube through which sperm travel from the testes up to the urethra (1–6).

What does it look like?

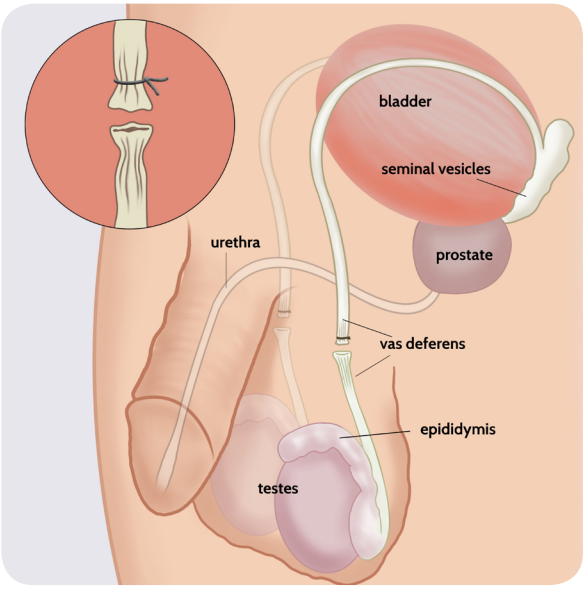


Figure 9-1: Anatomy of a vasectomy (3)
Timdwilliamson via Wikimedia [CC BY-SA 4.0 (https://creativecommons.org/licenses/by-sa/4.0)]

Mode of action: Since the vas deferens are cut, the sperm can no longer travel up towards the urethra. This means that the ejaculated semen will no longer contain sperm. No sperm means no pregnancy.

How to use it? Vasectomy is performed by a qualified healthcare professional, usually a urologist. It is typically an irreversible procedure.

How effective are they? Vasectomy can prevent pregnancy 99% of the time.

Reasons for preferring:

- Is safe, permanent, and convenient
- Nothing to do or remember post-sterilization
- Takes burden off the woman for contraception
- Increases enjoyment and frequency of sex

Health Benefits: Helps protect against pregnancy in the partner.

Common Misunderstandings:

- Involves removal of the testicles.
- Decreases male's interest in sex.
- Causes a man to become fat or become weak, less masculine, or less productive.
- Prevents transmission of STIs such as HIV.

Common side effects that do not require medical attention:

- Bruising
- Pain and swelling at site of incision

Symptoms/signs that require medical attention:

- Infection during or after surgery at the site of incision
- Severe scrotal/testicular pain that lasts for months or years
- Bleeding underneath the skin that may cause swelling.

Special Instructions:

- Advise the man that he may have scrotal pain after the procedure which goes away after 2-3 days. Pain medicines (except for aspirin) and ice packs can be used to relieve pain, if needed.
- Advise the man to use condoms or another family planning method for 3 months after the procedure to ensure there are no sperm in the ejaculate.
- Follow-up with the man 3 months after the procedure for semen analysis.

What are the Medical Eligibility Criteria?

► Click this link

Tubal Ligation (Female Sterilization)

What is it? A permanent surgical procedure that blocks or cuts the Fallopian tubes. Depending on the approach taken the tube may be cut and cauterized; cut and tied; or banded (1,2,5–8).

What does it look like?

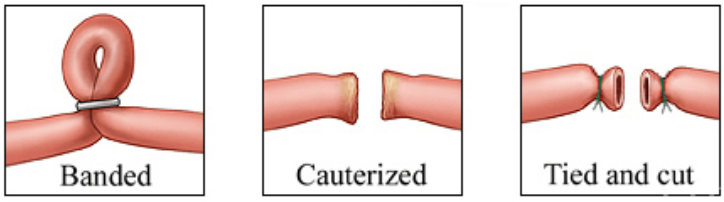


Figure 9-2: Different methods of tubal ligation (9)

Mode of action: Since the Fallopian tubes are cut, the egg released by the ovary cannot move down the tube. The sperm and egg can no longer meet. This means there will be no fertilization and hence, no pregnancy.

How to use it? Tubal ligation is performed by a qualified healthcare professional, usually a surgeon. Different surgical approaches can be used such as mini-laparotomy or laparoscopy in order to access the Fallopian tubes and then block or cut them. It is almost always an irreversible procedure.

How effective is it? Prevents pregnancy 99.5% of the time.

Reasons for preferring:

- No side effects.
- Nothing to do or remember post-sterilization.
- No more worrying about contraception, pregnancy, and abortion.

Health Benefits: Reduces the risk of:

- Pregnancy, including ectopic pregnancy
- Pelvic inflammatory disease
- Ovarian cancer

Common Misunderstandings:

- Makes a woman weak.
- Causes prolonged pain in abdomen, uterus, or back.
- Removes a woman's uterus.
- Causes hormonal imbalances.
- Leads to changes in women's menstrual cycles.
- Leads to changes in weight, appetite, or appearance.
- Changes women's sexual behavior or sex drive.
- Causes ectopic pregnancy.

Common side effects that do not require medical attention: Pain at site of procedure.

Symptoms/signs that require medical attention: Redness, swelling, and discharge at site of incision.

Special Instructions:

- Advise the woman that she may have abdominal pain after the procedure which goes away after a few days. Pain medicines, except for aspirin, can be taken if needed.
- Follow-up with the woman within 7-14 days after the procedure to observe for any signs of infection, or to remove stitches.

What are the Medical Eligibility Criteria? ▸ **Click this link**

GLOSSARY

MINI-LAPAROTOMY
This is a minimal abdominal surgical approach to the ovarian tubes using by means of an incision less than 5 cm in length.

LAPAROSCOPY
A surgical procedure in which a fiber-optic instrument is inserted through the abdominal wall to view the organs in the abdomen or to permit a surgical procedure.

CHAPTER KEY POINTS

- There are two types of permanent methods: vasectomy and tubal ligation. Both are minor, out-patient surgical procedures.
- Vasectomy is a procedure involving the cutting of the vas deferens in the male.
- Tubal ligation is a procedure involving the tying or cauterizing of both Fallopian tubes in the female.

CHAPTER 10

COUNSELLING ABOUT FAMILY PLANNING METHODS

It is important to help women and their partners to gain increased control over their reproductive health. One of the main ways a midwife/LHV can do this is through family planning counselling. There is no single method of family planning that is suitable for everyone. Therefore, the role of the midwife/LHV during family planning counselling is to support a woman and her partner in choosing a method that is most appropriate for them, and to support them in resolving any issues that may occur with the selected method. If a woman, especially along with her partner, is able to make an informed choice, she is more likely to be happy with, and continue, her chosen method.

GLOSSARY

FAMILY PLANNING COUNSELLING
Counselling that supports a woman and her partner in choosing a family planning method that is most appropriate for them, and to support them in resolving any issues that may occur with the selected method.

When to counsel on family planning?

A woman might approach a midwife for family planning counselling at any time. The midwife/LHV should always initiate family planning counselling with the woman during her pregnancy, especially in the third trimester, after birth and in the immediate postpartum period. The WHO has outlined nine human rights principles that should be used to guide family planning counselling (Table 10-1) (1).

#	PRINCIPLE	YOUR ROLE
1	Non-discrimination	Respect every client's needs and wishes. Set aside your personal judgments and any negative opinions.
2	Availability of contraceptive information and services	Know about all available family planning methods and how to provide them. Do not rule out any method for a client. Do not withhold information.
3	Accessible information and services	Make sure that everyone can use your facility. Do not ask any woman to get someone else's permission to use family planning.
4	Acceptable information and services	Be friendly and welcoming, and empathetic. Think about what is important to the clients, what they want and how they want it provided.
5	Quality	Keep your knowledge and skills up-to-date. Use good communication skills.
6	Informed decision-making	Explain family planning methods clearly, including their use, side effects, and effectiveness. Help women think about what is important to them in a family planning method.
7	Privacy and confidentiality	Do not discuss any information about your women with others except with permission and if needed for their care. When talking with clients, find a place where others cannot see or hear. Make sure clients' records are placed somewhere secure.
8	Participation	Ask women what they think about family planning services. Act on what they say to improve care.
9	Accountability	Hold yourself accountable for the care that you give women and for their sexual and reproductive rights.

TABLE 10-1: The 9 Human Rights Principles

The GATHER Approach can be used along with the 9 human rights principles during family planning counselling as shown in **Table 10-2** (2).

G	*Greet* the woman respectfully
A	*Ask* the woman about her family planning needs
T	*Tell* her about the different family planning methods that are available
H	*Help* her to make decisions about her choice of family planning
E	*Explain* and demonstrate how to use her method of choice
R	*Return*: schedule and carry out a return visit and follow up

TABLE 10-2: GATHER Approach in Family Planning

The GATHER Approach in Detail

1. **Greet the woman respectfully:**
    - o This can assist in forming a therapeutic relationship with the woman.
    - o The woman is more likely to open up and discuss sensitive issues in a caring and safe environment.
    - o Invite her to sit and make her comfortable (2,3).

2. **Ask her about her family planning needs:**
    - o You can ask if she knows about family planning, what she has heard about it, and if she knows it is important.
    - o You should also ask whether the woman or couple already have a family planning method in mind. You can then help her/them assess if this method suits their situation and needs.
    - o When discussing her needs and situation, you can ask about:

        Health issues which can affect her appropriateness for a certain method.

        Plans for having more children.

        Previous methods used and reasons for success or failure.

        Any experiences with side-effects.

        Number of sexual partners.

        Her and her partner's HIV status or risk factors for HIV.

        Regularity of sexual intercourse.

        Partner's or family's views about family planning methods.

        Ability to keep to routines.

VIDEO

- ▶ *GATHER: Greeting and Ask*

3. Tell her about available family planning methods:

The key characteristics of each method can be discussed:

- How effective is it?
- Are there any side-effects?
- Does it provide protection from STIs such as HIV?
- How easy is it to start and stop its use?
- Is it reversible? If irreversible, be sure that they make a thoughtful and informed decision about it.
- How quickly will fertility return once method is stopped?
- Can it be used while breastfeeding?

4. Help the woman to make decisions.

- It is important that a woman is provided with the opportunity to think about her situation and try to resolve her needs before making a final decision which she can implement.
- If you make decisions for a woman, then responsibility and control is taken away from her. This may lead to feelings of powerlessness and an unhealthy reliance on the midwife during decision-making.
- Have the woman think about the advantages and disadvantages of each method. Explore each alternative method one by one with her.
- One strategy to facilitate decision-making is to ask the woman to list all the possible solutions that she has identified. Assist her when and if deemed necessary.
- Continue summarizing what has been discussed and repeat this back to her so she can keep track of what has already been discussed.
- Address any beliefs that women may have about family planning to facilitate an informed decision. Some common beliefs are shown in **Table 10-3.**

VIDEO

▶ *GATHER: Tell*

VIDEO

▶ *GATHER: Help*

ACTIVITY #1

Consider the beliefs in Table 10-3.

Do you think each belief is true or false? Type your answer in the second column.

Check your answers from the Chapter Key Points.

STATEMENT	TRUE OR FALSE?
1. Contraception is not safe for young people.	
2. Pills can make women infertile.	
3. Tubal ligation causes women to lose their sexual desire	
4. Vasectomy makes men become fat and lose their sexual desire.	
5. Pills can cause cancer or birth defects.	

TABLE 10-3: Common Beliefs Regarding Family Planning

5. **Explain and demonstrate how to use the chosen method:**
   - o Before giving out detailed information on method use, verify if the woman is eligible to use the method.
   - o Here are some key pieces of information that must be accurately explained:
     - What the method is and how it works.
     - How effective it is at preventing pregnancy.
     - How to deal with any side-effects.
     - How to use the method correctly.
     - What to do in case of a mistake in the use of the method (missed pills, condom splits).
     - Information on when to come back to the clinic.
     - Signs of complications to look for.
   - o Demonstrate the use of the method to her. Then ask her to repeat back the demonstration to ensure that she has fully understood it.
   - o Also ask her to explain to you in her own words how to use the method in order to double check her understanding of the method.

6. **Return: schedule a return visit to provide follow up care.**
   - o Assure the woman that she can come back at any time if she has any concerns with her method, or if she is having any unusual side-effects or complications.
   - o Schedule the next appointment when necessary. For example, a three-month follow-up for the next injection, if the woman is taking injectables as a form of birth control.

VIDEO

► *GATHER: Explain*

VIDEO

► *GATHER: Return*

ACTIVITY #2

Three descriptions of family planning needs were presented in the Overview of this book.

Consider how you would respond to these women after learning more about counselling. Have your responses changed since reading them in the Overview? If yes, how did they change?

Discussing these situations with others may also help LHVs/midwives provide effective counselling in complex situations such as those presented.

CHAPTER KEY POINTS

- Helping women and their partners create the families that they envision requires care before, during, and after a pregnancy, and is integral to the full spectrum of reproductive care.
- Midwives and Lady Health Visitors can serve women in their communities well by being informed, by helping them separate fact from fiction, by teaching them on the correct use of a method, and by making timely referrals when needed.
- Discussions about family planning should be started as early as possible and should be carried out in a manner that is respectful of the woman's needs and wishes.
- This chapter discusses the knowledge, skills and behaviours required to engage in successful family planning counselling namely, the nine human rights principles and the GATHER approach for family planning counselling.
- Table 3 answers: all false!

UNIT 3

PROVIDING CARE FOR WOMEN EXPERIENCING UNEXPECTED OR MISTIMED PREGNANCY

NAVIGATION

CHAPTER 11

DEVELOPING WOMEN-CENTERED POST-ABORTION CARE

Post-abortion care (PAC) is an important component of sexual and reproductive health care that is too often not provided in health facilities (1). It involves follow-up care for women after a spontaneous or induced abortion, including assessment of possible complications and provision of first line treatment (1,2). Post-abortion care however is a broader area of practice than the focus on immediate assessment and treatment.

A conceptual model of PAC is illustrated in Figure 11-1. In this model, there are five components:

1. Treatment of incomplete, missed or unsafe abortion (► Chapter 12, ► Chapter 13)
2. Compassionate post-abortion care counseling (► Chapter 14)
3. Family Planning and Contraceptive Counselling (► Chapter 10)
4. Sexual and reproductive health care provided on site, if needed.
5. Referrals, if needed, to accessible facilities and community-service provider partnerships.

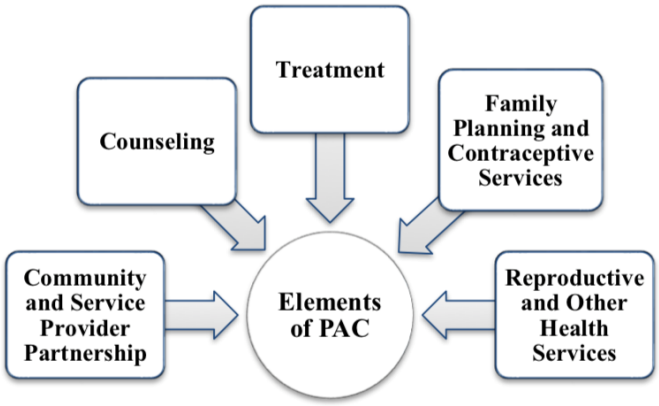


FIGURE 11-1: Five Elements of Post-Abortion Care (3)

The first three elements of this conceptual framework are covered in previous chapters. This chapter will describe the fourth and fifth elements.

Reproductive and Other Health Services

It is highly beneficial to women to receive reproductive health care within a comprehensive context that does not separate post-abortion care from other important services. Such services can include general information about menstrual health, prevention and treatment of sexually transmitted infections. cancer screening and family planning. Ideally, pregnancy and postnatal care are also provided so that the entire range of reproductive care services are accessible within a woman-centered environment. Issues related to intimate partner violence or other family concerns may arise that require counselling services. High quality reproductive health care can contribute to women's improved health status. Quality care has been described as including:

- Care that takes account of the social circumstances and individual needs of a woman
- Respect and empathy toward women seeking care.
- Non-judgmental and non-discriminatory behaviour from caregivers
- Complete and accurate information about options for care, including procedures or medications Opportunities for a woman to ask questions and receive explanations about procedures in a manner appropriate to her educational level
- Confidentiality and privacy during interactions between women and healthcare providers
- Up-to-date clinical standards and protocols for prevention and management of symptoms and complications

GLOSSARY

QUALITY CARE
Health-care services that are safe, confidential, effective, accessible, client-centered, equitable, and observe the accepted local standards, clinical guidelines and practices.

Community and Service-Provider Partnerships

Providers of reproductive health care need to actively build partnerships with community members, groups and agencies (where they exist) (4). By working with community members, providers such as midwives and LHVs can better understand the variation in women's circumstances and the barriers that exist in accessing high quality care (5). To establish strong alliances with community members, providers can:

- Consult with community leaders and representatives from diverse tribal, ethnic, civic and religious groups. The leaders could include:
    - Traditional leaders
    - Traditional birth attendants and medicine healers
    - Student leaders
    - Religious leaders
    - Local government officials
    - Leaders of women's, men's and youth groups

- Law-enforcement officials
- Health-committee members
- Community-based health workers

- Take account of local norms about having men and women in the same group for discussion. Women may lack permission or confidence to speak in a group that has both men and women.
- Place special effort into including young women in community meetings or meet with young women separately. They might be reluctant to speak openly about their concerns when others are present.
- Create community-based outreach programs to provide locally appropriate information, support and care to community members (See Table 11-1.)

AUDIENCE	TOPICS	MODES OF COMMUNICATION
Women, family members, teachers, student groups, taxi drivers, pharmacists	• Unwanted pregnancies • Post-abortion care services • Contraceptive methods	**VENUES**: Youth centers, town halls, schools, hospitals, universities, women centres. **MEDIA**: Newspapers, magazines, posters, flyers, radio, TV, talks, dramas
Public health officials, medical and legal professionals	• Prevalence, and impact of unsafe abortion and unwanted pregnancies in the community • Women's rights regarding abortion and post-abortion care • Relevant access issues and the impact on health and resources • Costs of providing emergency treatment for unsafe abortion • Need to legislate for funding of high-quality reproductive health services for women	**VENUES**: Conferences, governmental hearings **MEDIA**: Newspapers, magazines, posters, flyers, radio, TV, talks, dramas
Traditional and religious leaders	• Importance of educating community members to prevent and seek help with unwanted pregnancies • Where and how contraception and other reproductive healthcare services can be obtained • Impact on families and the community of maternal morbidity and mortality due to unwanted pregnancy and unsafe abortion • Current abortion law and service policies	**VENUES**: Religious meetings such as in churches, mosques and temples. **MEDIA**: Conversation, dramas, talks, media

TABLE 11-1: Examples of Audiences, Topics and Modes of Communication for community-outreach programs (2)

Healthcare providers and members of the community can conduct a community or situational assessment in order to better understand the challenges that might affect choice, quality and access to sexual and reproductive healthcare (2). Such an assessment could include discussions about the following:

- The availability of, and knowledge about sexual and reproductive health resources in the community;
- The characteristics of local health facilities that make them desirable or undesirable.
- The level of importance for women and their families, and especially young women, of having comprehensive reproductive health services available; .
- Community perceptions about the need for family planning services and post-abortion care;
- Where community members might be accessing abortion services including those from traditional birth attendants (TBAs) and lay health workers and healers;
- The level of knowledge about maternal mortality and morbidity and the contribution unsafe abortion makes to high rates;
- Scope of concerns about societal issues that impact health, such as poverty, unemployment and inadequate housing.

Health-care providers can then analyze information gathered in the community assessment to implement and evaluate solutions that connect reproductive health services (including post-abortion care) to community needs and priorities. A vital component of planning for small communities that may have limited access to a wide range of health care services is establishing linkages that facilitate transfer of urgent situations when needed. Agreements about where, to whom and by what means need to be known to all providers and to the community at large to prevent undue delay and inadequate transfer of information. Providers and community members should work together to implement plans and procedures that are widely known and endorsed since they are more likely to be sustainable.

CHAPTER KEY POINTS

- Woman-centred reproductive health care includes specific aspects of post-abortion care but is comprehensive in its approach so that family planning services, sexual and reproductive health concerns and community linkages are all present and contribute to a of quality services.
- Health care providers working in conjunction with a diversity of community members can gain an understanding of needs and priorities and establish more sustainable services.

CHAPTER 12

METHODS OF UTERINE EVACUATION

The overview to this ebook has information about the law concerning abortion in Pakistan. Women may ask questions about the ways safe uterine evacuations are done and what problems could occur. This chapter is intended to provide information about the methods of uterine evacuation for LHVs/midwives in order for them to provide safe care, accurately answer questions and support women when an abortion may be considered or has taken place.

Knowing about the methods used to evacuate the uterus is especially important to the provision of post-abortion care because the method and timing of an evacuation alerts the LHV/midwife to potential complications and their management.

Methods of Uterine Evacuation

There are two main methods for uterine evacuation in early pregnancy: medical and surgical. WHO recommends medical methods of abortion over surgical methods (1); within surgical methods, manual vacuum aspiration (MVA) is recommended over dilatation and curettage (D&C), and dilatation and evacuation (D&E). The method used depends on the woman's health condition and personal preference, the resources available in the facility including equipment and trained staff, and the cost of the medication or surgical procedure (1,2).

AUDIO

- *MVA over D&C*

Medical Approach (1-4)

What is it?	• Use of misoprostol tablets. • Available brand names: Cytotec®, S.T. Mom®, Misoclear®, Prosotec®.
What it looks like:	 **FIGURE 12-1:** Cytotec® Tablets (5)
When is it given?	• Early pregnancy. • Most guidelines recommend use up to 9-10 weeks (63-70 days from first day of LMP). • Using after 9-10 weeks is less effective.

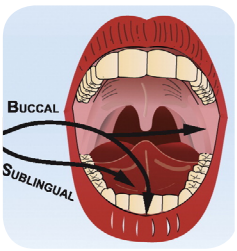
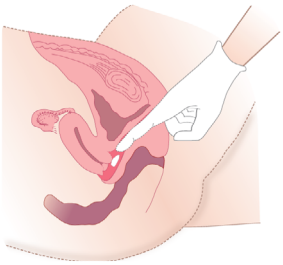
Mechanism of action:	• Causes uterus to contract. • Bleeding and cramping occur. • Loss of products of conception in 12-24 hours
Mode of administration:	• Sublingual: Pills are placed under the tongue and swallowed after 30 minutes; fever, chills, diarrhoea and vomiting increased compared to vaginal route. • Buccal: Pills are placed between the cheek and gums and swallowed after 30 minutes. More fever and chills than with the vaginal route. • Vaginal: Pills are placed in the vaginal fornixes (deepest portions of the vagina) and the woman is instructed to lie down for 30 minutes. Lowest rate of side-effects.  **FIGURE 12-2:** Buccal and sublingual (6)  **FIGURE 12-3:** Vaginal (7)
Dosages:	• *Incomplete Abortion*: Misoprostol 600mcg orally or 400mcg sublingually or vaginally (in the absence of vaginal bleeding) in a single dose. • *Missed Abortion*: Misoprostol 800mcg vaginally in a single dose or 600mcg sublingually every 3 hours until expulsion, for a maximum of 3 doses
Effectiveness in evacuating uterus:	• *Incomplete Abortion*: 80-99% • *Missed Abortion*: 88-92%
Contraindications:	• Severe anemia • Bleeding disorder • Previous allergic reaction to misoprostol or another prostaglandin • Known or suspected ectopic pregnancy • Signs of pelvic infection and/or sepsis
Side effects:	• Shivering • Fever • Nausea • Vomiting • Diarrhea
Advantages:	• Most cost-effective method for uterine evacuation in Pakistan • Tablets easily accessible • Long shelf life • Stable in usual climate conditions unless packaging damaged • Can be done at home
Counselling women about what to expect:	• Significant cramping over several hours; pain medication may be needed. • More than one dose of medication may be required before uterus expels contents. • Bleeding heavier than a period; may soak 2-4 large pads over 2 hours. • Spotting may persist until the first period. • Shivering and shaking, fever may last up to 6 hours.

TABLE 12-1: Medical Approach to Uterine Evacuation

Surgical Approach (8)

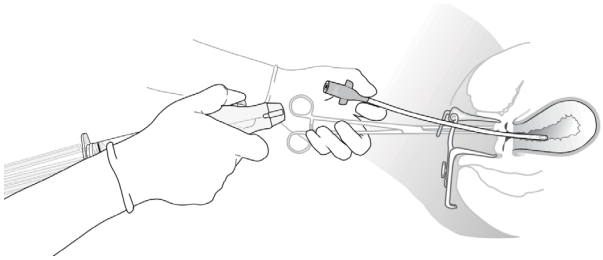
What is it?	Manual Vacuum Aspiration (MVA)
What it looks like:	 **Figure 12-4:** MVA Instrument (9)
When is it given?	Early pregnancy up to 12 weeks
Mechanism of action:	Hand-held suction device with a flexible plastic tube inserted through the cervix to empty the uterus.
Mode of administration:	▸ **Steps for Performing MVA**
Effectiveness in ending pregnancy:	99% effective
Contraindications:	• Uterine size over 12 weeks LMP • Pelvic infection • Large fibroids
Side effects:	• Discomfort during procedure • Abdominal cramping • Pain • Nausea • Bleeding • Vomiting
Advantages:	• No electricity needed. • Device can be high-level disinfected for further use. • Can be used without sedation.
Counselling women about what to expect:	• Cramping and bleeding for a day or two after the procedure; medication may be used for pain. • Bleeding is longer if the procedure is later in the first trimester. • At day 4 to 7 the woman may experience a slight increase in bleeding or a gush of blood as the final emptying of the uterus. • Most bleeding stops by 2 weeks, but spotting may last until the first period begins, usually 4 weeks after the abortion. • If there was breast tenderness or nausea with the pregnancy, those signs should go away within 48 hours. • There should be NO fever or foul vaginal discharge.

TABLE 12-2: Surgical Approach to Uterine Evacuation

There are two other surgical methods that midwives may see used despite them being considered **obsolete** methods. Obstetric experts and current practice guidelines do not support their use because the procedures are more invasive, anesthesia is needed, and costs and complication rates are higher (10).

1. **Sharp curettage (Dilation and Curettage; D&C)**.
    - *WHEN*: Up to 12-14 weeks gestation
    - *HOW IT WORKS*: Semi-sharp instruments are used to scrape the pregnancy from the uterine walls.
    - *EFFECTIVENESS*: Effective in ending pregnancy. If done, the procedure should only be carried out by skilled person using sterile instruments. May lead to placental complications in future pregnancies
2. **Surgical interruption of pregnancy (Dilation and Evacuation: D&E)**.
    - *WHEN*: In second trimester (after about 14 weeks)
    - *HOW IT WORKS*: Placement of forceps and sharp instruments into the uterus; cervix must be dilated to extract fetus.
    - *EFFECTIVENESS*: Effective in ending pregnancy but serious complications may result from this procedure. Should never be done by an unskilled provider.

Unsafe Abortion

LHVs/Midwives need also to be aware of the possibilities of hidden abortions that may be performed by unskilled providers in unhygienic settings. Estimates of the extent of hidden abortion in Pakistan are disturbingly high and LHVs/midwives are likely to encounter situations where unsafe procedures have been used (11). Regardless of how or who carried out a procedure, care providers are expected to ensure women receive quality comprehensive post-abortion care.

DID YOU KNOW

LHVs/midwives may hear claims about the use of herbs that are taken by mouth or placed in the vagina. There is no research evidence to support the use of such substances and they may cause chemical burns to the genital area.

GLOSSARY

MISOPROSTOL
A drug that causes uterine contractions and is used to induce an abortion or assist in evacuating the uterus after an incomplete or missed abortion. It is also used in combination with mifepristone in many countries.

INCOMPLETE ABORTION
A spontaneous or induced abortion in which some pregnancy tissue passes out of the uterus, but some remains.

MISSED ABORTION
A spontaneous abortion in which the pregnancy ends, but the tissue remains in the uterus.

HIGH-LEVEL DISINECTION
A process that inactivates most disease-causing microorganisms on non-living objects. High-level disinfection through boiling or the use of chemicals inactivates all microorganisms except some bacterial endospores.

CHAPTER KEY POINTS

- Medical methods of uterine evacuation are preferred to surgical methods
- Misoprostol can cause early pregnancy abortion. Misoprostol is used to treat incomplete or missed abortion.
- The dose of misoprostol is dependent on the route of administration (oral, buccal, vaginal).
- Manual vacuum aspiration is preferable to D&C or D&E for uterine evacuation.
- Unsafe abortion occurs often, and women may need care for complications.

CHAPTER 13

CARE OF WOMEN WITH POST-ABORTION COMPLICATIONS

An essential competency of midwifery care is the provision of high-quality post-abortion care that protects the health and wellbeing of the woman. LHVs/midwives may be providing care to women following a uterine evacuation as part of routine follow-up to be sure the pregnancy has ended, or they may be sought to assess and treat complications following an abortion. The range and extent of complications can vary from mild to life threatening. Therefore LHVs/midwives require skills to rapidly assess a woman's condition, determine the level of danger and institute emergency procedures as needed along with implementing a well-developed plan for transferring a woman who needs emergency medical care.

Detecting and Treating Complications

It is important to know the major complications that can arise from the different methods used to evacuate the uterus and to know what steps to take when a midwife/LHV is presented with complications. A history and physical assessment should be carried out as needed to determine the extent of reported problems (1–3).

In describing each complication, the following scheme will be used:

- Clinical presentation
- Estimated frequency
- Appropriate treatments

AUDIO

► *PAC Complications*

Potential Complications Arising from Either Medical or Surgical Methods of Uterine Evacuation

Heavy bleeding/hemorrhage

Clinical Presentation: Usually defined as bleeding more than 250mL, or bleeding that is twice as heavy as a woman's usual bleeding.

Estimated frequency: 0.1%.

Appropriate treatments:

- Look for the cause (perforation, trauma, retained products of conception) and treat accordingly.
- Re-evacuation of the uterus (aspiration may be indicated if there is retained tissue in the cervix).
- Administration of uterotonic drugs to contract uterus and expel retained products. (See Table 13-1) (2).

DRUG	DOSE	CONTRAINDICATIONS
Prostaglandin E1 Misoprostol (Cytotec®)	200mcg buccal + 600mcg rectal	Misoprostol allergy
Ergot Alkaloids Methyl-Ergonovine (Ergometrine) (Methergine®)	250 mcg IM Do NOT give IV	Hypertension
Oxytocin (Syntocin®)	50-80 units in 1 litre of normal saline High doses are needed in the first and second trimesters	Hyponatremia

TABLE 13-1: Uterotonic Medications

- Administration of IV fluids, if needed.
- Evaluate hemoglobin and hematocrit.
- Stabilize and immediately refer woman with hemorrhage to an urgent medical care facility.
- If there is a delay in obtaining medical attention, administering IV fluids and uterotonics, using uterine massage, and packing the vagina with gauze to tamponade bleeding may be life-saving until the woman can receive urgent medical care.

Incomplete uterine evacuation

Clinical Presentation:

- Continuous bleeding and continuous symptoms of pregnancy
- If b-hCG is used for follow-up, the pregnancy hormone decreases, but it is not a good predictor of incomplete expulsion.
- If ultrasound is used, a persistent gestational sac without cardiac activity is seen.

Estimated frequency: Varies with method used. Can be up to ~20% if misoprostol alone has been taken (5). Surgical procedures have a much lower rate (1-2%).

Appropriate treatments:

- If the woman is stable and symptoms of pregnancy are decreasing, can wait and repeat investigations in a week.
- A preferable option for some women is a second dose of misoprostol, 400 mcg sublingual or 600 mcg oral, and follow-up in a week.
- If available, aspiration and follow-up is also an option.
- Typically, aspiration is performed if two weeks following the medical abortion, there is a persistent gestational sac.
- Aspiration is indicated also for pain, bleeding, or infection.

DID YOU KNOW

Research findings have shown that midwives when properly taught can safely diagnose incomplete abortion and provide treatment. (4)

Infection (including endometritis/local infection and sepsis)

Clinical Presentation:
Common signs and symptoms of infection include:

- Lower abdominal or pelvic pain,
- Foul-smelling discharge,
- Prolonged vaginal bleeding or spotting,
- Fever beyond 6 hours from misoprostol use,
- Elevated white blood cell count (if performed).

Fever that lasts more than 24 hours without other symptoms should *still* be considered infection.

Estimated frequency: 1% (0.1% for sepsis).

Appropriate treatments:

- For mild infection, treatment with a cephalosporin, penicillin, or doxycycline for one week is appropriate.
- For more severe infection, refer for IV or IM cephalosporin and oral doxycycline.
- Recommend acetaminophen for relief of fever.
- If there is suspicion of retained products or a large amount is seen on imaging, aspiration is advised.

AUDIO

▶ *STI PAC*

GLOSSARY

SEPSIS
The presence of various pus-forming and disease-causing organisms, or toxic substances that they produce, in the blood or body tissues.

DID YOU KNOW

Sepsis is a leading cause of morbidity and high mortality from unsafe abortion.

Potential Complications from Medical Methods of Uterine Evacuation

- Overall, complications are rare, especially if the gestational age is under 10 weeks.
- Mortality (0.4-0.7 per 100,000) is usually from a ruptured or unrecognized ectopic pregnancy, or sepsis.
- If misoprostol is administered at a gestational age beyond 12 weeks, there is risk of toxicity, hemorrhage, uterine rupture and death.
- ***Always*** think about ectopic pregnancy as a possibility, especially with one-sided pain, minimal vaginal bleeding, unstable vital signs.

Severe pelvic pain

Clinical Presentation: Typically occurs during the expulsion phase; more often seen in women of young age, history of painful menses, low parity, and anxiety

Estimated frequency: 1%

Appropriate treatments: Includes pain medications as needed (Table 13-2) (2).

MEDICATION	COMMON BRAND NAMES	DOSE	CONTRAINDICATIONS
Acetaminophen	Paracetamol®, Panadol®	500mg po q4h	Liver Dysfunction
Ibuprofen	Brufen®	400mg po q8h	Gastric Ulcer Renal Failure
Naproxen	Naprosyn®	250-500mg po q8h	
Ketorolac	Toradol®	10mg po q6-8h	
Mefenamic Acid	Ponstan®	500mg po q6h	

TABLE 13-2: Medications for Pain Control

Continuing pregnancy

Clinical Presentation: Symptoms of continued pregnancy (breast tenderness, nausea, vomiting, bleeding gums). Follow-up hCG rising, or fetal heartbeat on ultrasound.

Estimated frequency: 0.5%; up to 7% when misoprostol alone is taken (5). Risk higher for advanced gestational age, multiple pregnancy, use of oral misoprostol, lack of confirming original gestational age.

Appropriate treatments:

- If woman is less than 10-12 weeks pregnant, can retry misoprostol, or MVA.
- Beyond 12 weeks, requires surgical methods of uterine evacuation.

Potential Complications from Surgical Methods of Uterine Evacuation

Post-abortion syndrome (hematometra)

Clinical Presentation:

- Usually presents immediately after procedure, but late presentation can occur.
- Woman has serious pelvic or rectal pain and less bleeding than expected.
- Rarely, woman may be hypotensive.

Estimated frequency: <1%

Appropriate treatments: Treatment consists of dilating the cervix to allow material to pass, or re-aspiration.

Uterine perforation

Clinical Presentation:

- Most common sign is continued bleeding.
- Consider perforation of the uterus if the MVA cannula appears to continue without resistance.

Estimated frequency: 0.125 - 0.25%

Appropriate treatments:

- First line treatment is drugs to contract the uterus. If bleeding persists, consider perforation and refer promptly. An injury to an artery can be concealed (retroperitoneal hemorrhage) and the woman can be unstable despite minimal visible bleeding.
- Institute emergency care, stabilize as possible and make urgent transfer to hospital for surgery
- After referral, imaging is done to ensure that no bowel has been drawn into the uterine cavity. If the woman is stable and no bowel is seen on imaging and close observation for a day or so shows no problem, no further treatment is needed.
- If there is lateral perforation, the risk of serious injury is high. The woman needs urgent medical care to detect or rule out injury to the uterine arteries.

GLOSSARY

POST-ABORTION SYNDROME (HEMATOMETRA)
Occurs when there is a blockage of the cervical canal usually from a fragment of placenta or a clot, resulting in an accumulation of blood within the uterus.

Special Considerations

Ectopic pregnancy

Clinical Presentation:

- May be missed more often in low-resource setting where ultrasound and close follow-up are less available
- Consider ectopic pregnancy when an intrauterine pregnancy is not clearly seen on ultrasound, or if ultrasound is not done prior to taking medication.
- Signs that immediate medical care is needed include:
    - One-sided pain
    - Shoulder tip pain
    - Shortness of breath
    - Abdominal distention
    - Loss of consciousness
    - Fainting

Estimated frequency: <0.1%

Appropriate treatments:

- Expectant management: If there are no symptoms or mild symptoms and the pregnancy is very small or can't be found, then the woman only needs to be closely monitored.
- Medication: if expectant management not suitable, then refer for medical treatment. Surgery may be needed.

Trauma secondary to unsafe abortion

Clinical Presentation: May consist of chemical burns, vaginal or cervical trauma, uterine perforation, and even bowel injuries.

Appropriate treatments: Refer for appropriate management after assessing the type and severity of the trauma.

AUDIO

► *Differentiating Between Ectopic Pregnancy Vs. Unsafe Abortion*

DID YOU KNOW

If abortion is self-inflicted, sharp objects may have been inserted into the vagina or cervix, or caustic chemicals may be used in a douche.

AUDIO

► *Definition of Unsafe Abortion*

CHAPTER KEY POINTS

- Post-abortion complications range from mild to life-threatening.
- The most common complications include incomplete abortion with bleeding, pain and infection. Hemorrhage and sepsis can occur and require emergency measures to stabilize and transfer as needed.
- LHVs/midwives must be alert to rare but serious complications, e.g. ectopic pregnancy.

CHAPTER 14

COUNSELLING AS PART OF POST-ABORTION CARE

It is important to help women and their partners achieve control over their reproductive health. One way a midwife or LHV can do this is through post-abortion counselling that supports a woman and her partner to resolve any issues that may occur as a result of an incomplete or unsafe abortion. This includes providing information about recognizing and managing complications as well as ensuring that a family planning method has been initiated before the woman leaves a health care facility.

Providing Post-Abortion Care Counselling

A woman might approach a midwife for post-abortion care at any time after an abortion, whether spontaneous or induced. The midwife should always initiate discussion about family planning with the woman as part of post-abortion counselling (1–3).

The steps in the counselling process are as follows:

G	*Greet* the woman/couple respectfully
A	*Ask* about the experience of pregnancy loss and any concerns
T	*Tell*: provide information about follow-up management to address concerns; discuss future family planning methods
H	*Help* make decisions or choices
E	*Explain* any complications and the recommended management
R	*Return*: schedule and carry out a follow up assessment

TABLE 14-1: The Steps of the GATHER Approach to Counselling

The GATHER Approach in Detail

1. **Greet the woman respectfully:**
    - This can assist in forming a therapeutic relationship with the woman.
    - The woman is more likely to open up and discuss sensitive issues in a caring and safe environment.
    - Invite her to sit and make her comfortable (2,3).

2. **Ask about the experience of pregnancy loss and any concerns.**
    - Experiencing the loss of a pregnancy can be an emotional time for the women and/or her partner. The woman may be upset, anxious or sad. If it is a miscarriage, she might be worried that something she did caused the pregnancy loss.
    - Ask about her feelings and respond with empathetic statements, addressing any concerns that she (and her partner) may have.

3. **Tell the woman about any follow-up management to address concerns; discuss family planning methods.**
    - Offering family planning and treatment for abortion related services in the same place can result in more effective family planning use, reduction of repeat abortions, and healthy timing and spacing of pregnancies.
    - The needed care for any complications can be discussed:
        - What will be done?
        - Where will it be done?
        - What to expect from the procedure, including possible side-effects?
    - The key points about family planning options can be discussed:
        - How effective is it?
        - Are there side-effects?
        - Does it provide protection from STDs such as HIV?
        - How easy is it to start and stop its use?
        - Is it reversible?
        - How quickly will fertility return when method is stopped?

4. **Help the woman to make decisions.**
    - It is important to provide an opportunity to think about the current situation and try to resolve any conflicting views about reproductive choices. If caregivers make decisions for a woman, responsibility and control is taken away from her.
    - One strategy to facilitate decision-making is suggesting the woman list possible choices for her situation. A caregiver can suggest other choices if appropriate.
    - Summarize the benefits and problems of options, as a means of keeping the discussion focused and helping the woman move to a decision.

VIDEO

- ▶ *PAC Counselling - Part I*

ACTIVITY #1

This scenario was presented in the Overview. You were asked to consider your reactions to this situation and how you would respond. Now compare your reaction after reading about counselling approaches to your first reaction when you read this scenario:

A 17-year-old girl comes to your clinic. She presents to you with bleeding that is foul-smelling. She tried to end the pregnancy a few days ago by inserting a metal object into her vagina. She has not been to the hospital and has not seen any other healthcare provider. She is afraid to tell anyone at home that she feels unwell.

- Address any beliefs the woman may have about abortions to facilitate an informed decision. Some common beliefs are listed in Table 14-2.

STATEMENT	TRUE OR FALSE?
Abortion can lead to breast cancer.	
Abortion causes mental health problems.	
Induced abortion is more dangerous than childbirth.	
Fertility is permanently compromised by having an abortion.	

TABLE 14-2: Common Beliefs About Abortion

ACTIVITY #2

Consider the beliefs in Table 14-2.

Do you think these beliefs about abortion are true or false? Type your answer in the right column.

Check your answers from the Chapter Key Points.

5. **Explain management approaches.**
   - Explain treatment of a missed or incomplete abortion with misoprostol pills; include details regarding the dose, route and frequency, and potential side effects.
   - Explain Manual Vacuum Aspiration (MVA) if it will be used to treat an incomplete abortion
   - Explain as possible any emergency treatment in urgent situations such as hemorrhage, trauma to the reproductive tract, sepsis
   - Explain the possible choices of a family planning method and inquire about preferred method(s). Before giving information on a preferred family planning method verify the woman is medically eligible to use the method. Here are some key pieces of information that must be accurately explained:
     - Description of the method and how it works
     - How to use the method correctly
     - Its effectiveness in preventing pregnancy
     - How to manage side-effects
     - What to do in case of a mistake, e.g. missed pills, condom splits
     - When to return for a follow-up visit
     - Signs of complications
   - Demonstrate the use of the family planning method to her. Then ask her to repeat the demonstration to ensure that she has fully understood it.
   - Also ask her to explain to you in her own words how to use the method in order to check her understanding of the method.

VIDEO

- *PAC Counselling - Part II*

6. Return: schedule and carry out a return visit and follow up.

- Assure the woman that she can come back if she has concerns about her health.
- Tell the woman to immediately return for care for any of these danger signs:
  - Increased bleeding or continued bleeding for 2 days
  - Fever, feeling ill
  - Dizziness or fainting
  - Abdominal pain
  - Backache
  - Nausea or vomiting
  - Foul-smelling vaginal discharge
- Schedule the next appointment as indicated.

CHAPTER KEY POINTS

- This chapter discusses the knowledge, skills and behaviours required to engage in successful post-abortion care counselling using the GATHER approach.
- Discussions about family planning should always occur as part of post-abortion counselling and should be done in a manner that is respectful of the woman's needs and wishes.
- Table 2 answers: all **false**!

END MATTER

NAVIGATION

APPENDIX A

Pakistan's abortion provisions

The complete text of the Pakistan Penal Code describing the law on abortion follows (1):

PAKISTAN PENAL CODE (ACT XLV OF 1860), CHAPTER XVI, SECTION 338(A)-(C).

338. Isqat-i-Hamal. – Whoever causes woman with child whose organs have not been formed, to miscarry, if such miscarriage is not caused in good faith for the purpose of saving the life of the woman, or providing necessary treatment to her, is said to cause isqat-i-haml.

338-A. Punishment for Isqat-i-haml. – Whoever, cause isqat-i-haml shall be liable to punishment as ta'zir-

a. with imprisonment of either description for a term which may extend to three years, if isqat-i-haml is caused with the consent of the woman; or
b. with imprisonment of either description for a term which may extend to ten years, if isqat-i-haml is caused without the consent of the woman.–

Provided that, if as a result of isqat-i-haml, any hurt is caused to woman or she dies, the convict shall also be liable to the punishment provided for such hurt or death as the case may be.

338-B. Isqat-i-janin. – Whoever, causes a woman with child some of whose limbs or organs have been formed to miscarry, if such miscarriage is not caused in good faith for the purpose of saving the life of the woman, is said to cause Isqat-i-janin.

338-C. Punishment for Isqat-i-janin. – Whoever, causes isqat-i-ianin shall be liable to;

a. one-twentieth of the diyat if the child is born dead;
b. full diyat if the child is born alive but dies as a result of any act of the offender; and
c. imprisonment of either description for a term which may extend to seven years as ta'zir–

Provided that, if there are more than one child in the womb of the woman, the offender shall be liable to separate diyat or ta'zir, as the case may be/for every such child.–

Provided further that if, as a result of isqat-i-fanin, any hurt is caused to the woman or she dies, the offender shall also be liable to the punishment provided for such hurt or death, as the case may be.

APPENDIX B

TABLE 1: Examples of Organizations Providing Social Support to Women in Pakistan (2)

City	Name of agencies	Phone Number	Website
All over Pakistan	Edhi Centre	115	www.edhi.org
	Human Rights Commission of Pakistan	042-35838341 042-35864994	www.hrcp-web.org
Karachi	Ansar Burney Welfare Trust	021-32623381 021-32623383	www.ansarburney.org
	Citizen Police Liaison Committee (CPLC)	021-35682222 021-35683333	www.cplc.org.pk
	Lawyers for Human Rights & Legal Aid (LHRLA)	111-911-922 021-35674031	www.lhrla.com.pk
	Pakistan Women Lawyers Association	021-35673286	
	Panah	021-36360025 021-36360028	www.panahshelter.org
Karachi & Lahore	War Against Rape (WAR)	021-35373008	www.waragainstrape.org.pk
	AURAT Foundation	021-35630195	www.auratfoundation.com
Peshawar & Quetta	AURAT Foundation	091-570458283 081-2821282	info-gep@af.org.pk
Lahore	AGHS Legal Aid Cell: DASTAK	042-5763235	aghs@brain.net.pk
Sialkot	Madadgar Welfare Society	052-3561689	www.madadgar.org
Islamabad	National Commission on the Status of Women	051-9224875 051-9224877	www.ncsw.gov.pk
	Rozan	051-2890505 051-2890506 051-2890507	ingo@rozan.org
	Sahil	051-2260636 051-2856950	www.sahil.org

APPENDIX C

Medical Eligibility Criteria for Contraceptive Use (Tabulated Version) (3)

Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use

Condition	Sub-Condition	Cu-IUD		LNG-IUD		Implant		DMPA		POP		CHC	
		I	C	I	C	I	C	I	C	I	C	I	C
Age	Menarche to <20 yrs	2	1	2	1	1	1	1	1	1	1	1	1
	Menarche to <20 yrs	2	1	2	1	1	1	1	1	1	1	2	1
	Menarche to <18 yrs	1	1	1	1	1	1	1	1	1	1	2	1
	Menarche to <18 yrs	1	1	1	1	1	1	1	1	1	1	2	1
	Menarche to <40 yrs	1	2									2	1
	>20 yrs	1	2	1	2	1	2	1	2	1	2	2	1
Anatomical abnormalities	a) Distorted uterine cavity	4	4	4	4								
	b) Other abnormalities	2	2	2	2								
Anemias	a) Thalassemia	2	1	1	1	1	1	1	1	1	1	1	1
	b) Sickle cell disease[4]	2	1	1	1	1	1	1	1	1	1	1	1
	c) Iron-deficiency anemia	2	1	1	1	1	1	1	1	1	1	1	1
Benign ovarian tumors	*(including cysts)*	1	1	1	1	1	1	1	1	1	1	1	1
Breast disease	a) Undiagnosed mass	1	1	2*	1	2*	1	2*	1	2*	1	2*	1
	b) Benign breast disease	1	1	1	1	1	1	1	1	1	1	1	1
	c) Family history of cancer	1	1	1	1	1	1	1	1	1	1	1	1
	d) Breast cancer[4]												
	i) Current	1	4	4	4	4	4	4	4	4	4	4	4
	ii) Past and no evidence of current disease for 5 years	1	3	3	3	3	3	3	3	3	3	4*	4*
Breastfeeding	a) <21 days postpartum					2*	2*	2*	2*	2*	2*		
	b) 21 to <30 days postpartum					2*	2*	2*	2*	2*	2*	3*	3*
	i) With other risk factors for VTE					2*	2*	2*	2*	2*	2*	3*	3*
	ii) Without other risk factors for VTE					2*	2*	2*	2*	2*	2*	3*	3*
	c) 30-42 days postpartum												
	i) With other risk factors for VTE					1*	1*	1*	1*	1*	1*	3*	3*
	ii) Without other risk factors for VTE					1*	1*	1*	1*	1*	1*	2*	2*
	d) >42 days postpartum					1*	1*	1*	1*	1*	1*	2*	2*
Cervical cancer	Awaiting treatment	4	2	4	2	2	2	2	2	2	2	4*	4*
Cervical ectropion		1	1	1	1	1	1	1	1	1	1	1	1
Cervical intraepithelial neoplasia		1	2	2	2	2	2	1	2	1	2	2	2
Cirrhosis	a) Mild *(compensated)*	1	1	1	1	1	1	1	1	1	1	1	1
	b) Severe[5] *(decompensated)*	1	3	3	3	3	3	3	3	4	4	1	1
Cystic fibrosis[1]		1*	1	1*	1	2*	1	2*	1	1*	1	1*	1
Deep venous thrombosis (DVT)/Pulmonary embolism (PE)	a) History of DVT/PE, not receiving anticoagulant therapy	1	2	2	2	2	2	2	2	2	2	4	3
	i) Higher risk for recurrent DVT/PE	1	2	2	2	2	2	2	2	2	2	3	
	ii) Lower risk for recurrent DVT/PE	2	2	2	2	2	2	2	2	2	2	4	
	b) Acute DVT/PE												
	c) DVT/PE and established anticoagulant therapy for at least 3 months											4*	
	i) Higher risk for recurrent DVT/PE	2	2	2	2	2	2	2	2	2	2	4*	
	ii) Lower risk for recurrent DVT/PE	2	2	2	2	2	2	2	2	2	2	3*	
	d) Family history *(first-degree relatives)*	1	2	1	2	1	2	1	2	1	2	2	
	e) Major surgery												
	i) With prolonged immobilization	1	2	2	2	2	2	2	2	4			
	ii) Without prolonged immobilization	1	1	1	1	1	1	1	1	2			
	f) Minor surgery without immobilization	1	1	1	1	1	1	1	1	1			
Depressive disorders		1*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*

Condition	Sub-Condition	Cu-IUD		LNG-IUD		Implant		DMPA		POP		CHC	
		I	C	I	C	I	C	I	C	I	C	I	C
Diabetes	a) History of gestational disease	1	1	1	1	1	1	1	1	1	1	1	1
	b) Nonvascular disease												
	i) Non-insulin dependent	1	2	2	2	2	2	2	2	2	2	2	2
	ii) Insulin dependent	1	2	2	2	2	2	2	2	2	2	2	2
	c) Nephropathy/retinopathy/neuropathy[3]	1	2	2	2	3	2	2	2	2	2	3/4*	3/4*
	d) Other vascular disease or diabetes of >20 years' duration[3]	1	2	2	2	3	2	2	2	2	2	3/4*	3/4*
	Severe	4	2	4	2	2	2	2	2	2	2	4	3/4*
Dysmenorrhea		1	1	1	1	1	1	1	1	1	1	1	1
Endometrial cancer[4]		4	2	4	2	2	2	2	2	2	2	4	3
Endometrial hyperplasia		1	1	1	1	1	1	1	1	1	1	1	1
Endometriosis		2	1	1	1	1	1	1	1	1	1	1	1
Epilepsy[1]	*(see also Drug Interactions)*	1	1	1	1	1*	1	1*	1	1*	1	1*	1
Gallbladder disease	a) Symptomatic	1	2	2	2	2	2	2	2	2	2	2	2
	i) Treated by cholecystectomy	1	2	2	2	2	2	2	2	2	2	2	2
	ii) Medically treated	1	2	2	2	2	2	2	2	2	2	3	3
	iii) Current	1	2	2	2	2	2	2	2	2	2	3	3
	b) Asymptomatic	1	2	2	2	2	2	2	2	2	2	2	2
Gestational trophoblastic disease[4]	a) Suspected GTD (immediate postevacuation)												
	i) Uterine size first trimester	2*	1*	2*	1*	1*	1*	1*	1*	1*	1*	1*	1*
	ii) Uterine size second trimester	2*	1*	2*	1*	1*	1*	1*	1*	1*	1*	1*	1*
	b) Confirmed GTD												
	i) Undetectable/non-pregnant β-hCG levels	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*
	ii) Decreasing β-hCG levels	2*	1*	2*	1*	1*	1*	1*	1*	1*	1*	1*	1*
	iii) Persistently elevated β-hCG levels or malignant disease, with no evidence or suspicion of intrauterine disease	2*	1*	2*	1*	1*	1*	1*	1*	1*	1*	1*	1*
	iv) Persistently elevated β-hCG levels or malignant disease, with evidence or suspicion of intrauterine disease	4*	2*	4*	2*	1*	1*	1*	1*	1*	1*	1*	1*
Headaches	a) Nonmigraine (mild or severe)	1	1	1	1	1	1	1	1	1	1	1*	1*
	b) Migraine												
	i) Without aura (includes menstrual migraine)	1	1	1	1	1	1	1	1	1	1	2*	2*
	ii) With aura	1	1	1	1	1	1	1	1	1	1	4*	4*
History of bariatric surgery[3]	a) Restrictive procedures	1	1	1	1	1	1	1	1	3		COCs:3 P/R:1	
	b) Malabsorptive procedures												
History of cholestasis	a) Pregnancy related	1	1	1	1	1	1	1	1	1	1	2	2
	b) Past COC related	1	2	2	2	2	2	2	2	2	2	3	3
History of high blood pressure during pregnancy		1	1	1	1	1	1	1	1	1	1	2	2
History of pelvic surgery		1	1	1	1	1	1	1	1	1	1	1	1
HIV	a) High risk for HIV	2	2	2	2	1*	1	2*	1	1*	1	1*	1*
	b) HIV infection												
	i) Clinically well receiving ARV therapy	1	1	1	1	1*	1	1*	1	1*	1	1*	1*
	ii) Not clinically well or not receiving ARV therapy	2	1	2	1	If on treatment, see Drug Interactions							

Key

1	No restriction (method can be used)	3	Theoretical or proven risks usually outweigh the advantages
2	Advantages generally outweigh theoretical or proven risks	4	Unacceptable health risk (method not to be used)

Abbreviations: C=continuation of contraceptive method; CHC=combined hormonal contraception (pill, patch, and ring); COC=combined oral contraceptive; Cu-IUD=copper-containing intrauterine device; DMPA = depot medroxyprogesterone acetate; I=initiation of contraceptive method; LNG-IUD=levonorgestrel-releasing intrauterine device; N/A=not applicable; P/R=pregnancy prevention/reduction; POP=progestin-only pill; VTE=venous thromboembolism

Source: http://www.cdc.gov/reproductivehealth/unintendedpregnancy/USMEC.htm

Courtesy of CDC. Use of this material does not imply an endorsement by the Centers for Disease Control and Prevention (CDC) or Health and Human Services (HHS) of any particular organization, service, or product, and that any views expressed in the article do not necessarily represent the views of CDC or HHS.

APPENDIX C (CONT'D)

Medical Eligibility Criteria for Contraceptive Use (Tabulated Version) (3)

Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use

Condition	Sub-Condition	Cu-IUD		LNG-IUD		Implant		DMPA		POP		CHC	
		I	C	I	C	I	C	I	C	I	C	I	C
Hypertension	a) Adequately controlled hypertension	1*		1*		1*		2*		1*		3*	
	b) Elevated blood pressure levels (*properly taken measurements*)			1*		1*		2*		1*		3*	
	i) Systolic 140-159 or diastolic 90-99												
	ii) Systolic ≥160 or diastolic ≥100[1]	1*		2*		2*		3*		2*		4*	
	c) Vascular disease	1*		2*		2*		3*		2*		4*	
Inflammatory bowel disease	(*ulcerative colitis, Crohn's disease*)	1		1		2		2		2		2/3*	
Ischemic heart disease[2]	Current and history of	1		2	3	2	3	3		2	3	4	
Known thrombogenic mutations[3]		1*		2*		2*		2*		2*		4*	
Liver tumors	a) Benign												
	i) Focal nodular hyperplasia	1		2		2		2		2		2	
	ii) Hepatocellular adenoma[4]	1		3		3		3		3		4	
	b) Malignant (hepatoma)	1		1		1		1		1		1	
Malaria													
Multiple risk factors for atherosclerotic cardiovascular disease	(e.g., older age, smoking, diabetes, hypertension, low HDL, high LDL or high triglyceride levels)	1		2		2*		3*		2*		3/4*	
Multiple sclerosis	a) With prolonged immobility	1		1		2		2		2		3	
Obesity	b) Without prolonged immobility	1		1		1		1		1		1	
	a) Body mass index (BMI) ≥30 kg/m^2	1		1		1		1		1		2	
	b) Menarche to <18 years and BMI ≥ 30 kg/m^2	1		1		2		1		2		2	
Ovarian cancer[5]		1		1		1		1		1		1	
Parity	a) Nulliparous	2		2		1		1		1		1	
	b) Parous	1		1		1		1		1		1	
Past ectopic pregnancy		1		1		1		1		2		1	
Pelvic inflammatory disease	a) Past	1	1	1	1	1		1		1		1	
	i) With subsequent pregnancy	2	2	2	2	1		1		1		1	
	ii) Without subsequent pregnancy	4	2*	4	2*	1		1		1		1	
Peripartum cardiomyopathy[6]	b) Current												
	a) Normal or mildly impaired cardiac function	2		2		1		1		1		1	
	i) <6 months	2		2		1		1		1		1	
	ii) ≥6 months	2		2		1		1		1		1	
	b) Moderately or severely impaired cardiac function	2		2		2		2		4		4	
Postabortion	a) First trimester	1*		1*		1*		1*		1*		1*	
	b) Second trimester	2*		2*		1*		1*		1*		1*	
	c) Immediate postseptic abortion	4		4		1*		1*		1*		1*	
Postpartum (*nonbreastfeeding women*)	a) <21 days					1*		1*		1*		4	
	b) 21 days to 42 days					1		1		1		4	
	i) With other risk factors for VTE					1		1		3*			
	ii) Without other risk factors for VTE					1		1		2			
	c) >42 days					1		1		1			
Postpartum (*in breastfeeding or non-breastfeeding women, including cesarean delivery*)	a) <10 minutes after delivery of the placenta												
	i) Breastfeeding	2*		2*		1*		1*		1*		1*	
	ii) Nonbreastfeeding	1*		1*		1*		1*		1*		1*	
	b) 10 minutes after delivery of the placenta	2*		2*		1*		1*		1*		1*	
	c) ≥4 weeks	1*		1*		1*		1*		1*		1*	
	d) Postpartum sepsis	4		4		1		1		1		1	

Condition	Sub-Condition	Cu-IUD		LNG-IUD		Implant		DMPA		POP		CHC	
		I	C	I	C	I	C	I	C	I	C	I	C
Pregnancy		4*		4*		NA*		NA*		NA*		NA*	
Rheumatoid arthritis	a) On immunosuppressive therapy	2	1	2	1	1		2/3*		1		2	
	b) Not on immunosuppressive therapy	1		1		1		1		1		2	
Schistosomiasis	a) Uncomplicated	1		1		1		1		1		1	
	b) Fibrosis of the liver[1]	1		1		1		1		1		1	
Sexually transmitted diseases (STDs)	a) Current purulent cervicitis or chlamydial infection or gonococcal infection	4	2*	4	2*	1		1		1		1	
	b) Vaginitis (*including trichomonas vaginalis and bacterial vaginosis*)	2	2	2	2	1		1		1		1	
	c) Other factors relating to STDs	2*	2	2*	2	1		1		1		2	
Smoking	a) Age <35	1		1		1		1		1		3	
	b) Age ≥35, <15 cigarettes/day	1		1		1		1		1		4	
	c) Age ≥35, ≥15 cigarettes/day	3	2	3	2	2		2		2		4	
Solid organ transplantation[7]	a) Complicated	1		1		2		2		2		2*	
	b) Uncomplicated	1		2		2		2		2		4	
Stroke[1]	History of cerebrovascular accident	1		2		2		3		2	3	4	
Superficial venous disorders	a) Varicose veins	1		1		1		1		1		1	
	b) Superficial venous thrombosis (acute or history)	1		1		1		1		1		3*	
Systemic lupus erythematosus[8]	a) Positive (or unknown) antiphospholipid antibodies	1*	1*	3*	3*	3*	3*	3*		3*		4*	
	b) Severe thrombocytopenia	3*	2*	2*	2*	3*	2*	2*		2*		2*	
	c) Immunosuppressive therapy	2*	1*	2*	2*	2*	2*	2*		2*		2*	
	d) None of the above	1*	1*	2*	2*	2*	2*	2*		2*		2*	
Thyroid disorders	Simple goiter/hyperthyroid/hypothyroid	1	1	1	1	1*		1*		1*		1*	
Tuberculosis[9] (*see also Drug Interactions*)	a) Nonpelvic	1	1	1	1	1*		1*		1*		1*	
	b) Pelvic	4	3	4	3	1*		1*		1*		1*	
Unexplained vaginal bleeding	(suspicious for serious condition) before evaluation	4*	2*	4*	2*	3*		3*		2*		2*	
Uterine fibroids		2		2		1		1		1		1	
Valvular heart disease	a) Uncomplicated	1		1		1		1		1		2	
	b) Complicated[1]	1		1		1		1		2		4	
Vaginal bleeding patterns	a) Irregular pattern without heavy bleeding	1		1	1	2		2		2		1*	
	b) Heavy or prolonged bleeding	2*		1*	2*	2*		2*		2*		1*	
Viral hepatitis	a) Acute or flare	1		1		1		1		1		3/4*	2
	b) Carrier/Chronic	1		1		1		1		1		1	1
Drug Interactions													
Antiretroviral therapy	Fosamprenavir (FPV)												
All nonnucleoside reverse transcriptase inhibitors (NNRTIs)													
All protease inhibitors (PIs) except fosamprenavir													
1 or 2 for all methods													
Anticonvulsant therapy	a) Certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine)	1		1	1*	2*		3*		3*		3*	
Antimicrobial therapy	a) Broad spectrum antibiotics	1		1		1		1		1		1	
	b) Antifungals	1		1		1		1		1		1	
	c) Antiparasitics	1		1		1		1		1		1	
	d) Rifampin or rifabutin therapy	1		1		2*		1*		3*		3*	
SSRIs		1		1		1		1		1		1	
St. John's wort		1		1		2		2		2		2	

Updated in 2017. This summary sheet only contains a subset of the recommendations from the U.S. MEC. For complete guidance, see: http://www.cdc.gov/reproductivehealth/unintendedpregnancy/USMEC.htm. Most contraceptive methods do not protect against sexually transmitted diseases (STDs). Consistent and correct use of the male latex condom reduces the risk of STDs and HIV.

CS266088-A

Courtesy of CDC. Use of this material does not imply an endorsement by the Centers for Disease Control and Prevention (CDC) or Health and Human Services (HHS) of any particular organization, service, or product, and that any views expressed in the article do not necessarily represent the views of CDC or HHS.

GLOSSARY

Overview

Family planning – A practice that involves the use of contraceptive methods, and allows women to space their pregnancies, prevent unintended pregnancies, and enables them to limit the size of their families if they wish to do so.

Induced abortion – Termination of pregnancy before a fetus become viable; can be either safe or unsafe.

Maternal morbidity – Any health condition attributed to and/or worsened by pregnancy and childbirth that has a negative impact on a woman's wellbeing.

Maternal mortality – The death of a woman while pregnant or within 42 days of termination of pregnancy…from any causes related to or aggravated by the pregnancy or its management.

Spontaneous abortion – Loss of pregnancy before a fetus becomes viable (sometimes called early pregnancy loss or miscarriage).

Unsafe abortion – A procedure for terminating a pregnancy that is performed by an individual lacking the necessary skills, or in an environment that does not conform to minimal medical standards, or both.

WHO Reproductive Health – Reproductive health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.

WHO Sexual Health – Sexual health is a state of physical, emotional, mental, and social wellbeing in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected, and fulfilled.

Chapter 1

Bartholin glands – Two pea-sized glands located slightly posterior and to the left and right of the opening of the vagina. They secrete mucus to lubricate the vagina.

Cervical mucus – A thick fluid plugging the opening of the cervix. Majority of the time, it is thickened such that it prevents sperm from entering the uterus. However, at the midpoint of the menstrual cycle, it becomes thin and watery, allowing sperm to pass through with greater ease.

Clitoris – a small, sensitive, erectile part of the female genitalia located anteriorly on the vulva.

Fertilization – the fusion of a sperm with the egg within the female reproductive tract, usually in the Fallopian tubes.

Labia – The inner (minora) and outer (majora) lips of the vagina, which protect the internal female organs.

Menstrual cycle – A repeating series of changes in the ovaries and uterine endometrium that includes ovulation and monthly bleeding. Most women have cycles that each last between 24 and 35 days.

Ovulation – The releasing of an egg (ovum) from an ovary each menstrual cycle, usually at day 14.

Chapter 2

Complete health assessment – Information taken by the healthcare provider which includes physical examination of the client, review of the client's medical and surgical history, and laboratory and other diagnostic testing.

Pelvic examination – The physical examination of the external and internal female pelvic organs. It is called "bimanual exam" because two hands are used and "manual uterine palpation" (palpation: an examination by touch).

Chapter 3

Conscientious objection – When a healthcare provider objects to and refuses to perform a procedure or carry out an act of duty due to strong personal, religious or ethical beliefs and values.

Human rights – Any basic right or freedom to which all human beings are entitled and on which a government may not interfere.

Informed decision – A freely made decision based on clear, accurate, and relevant information; a goal of family planning and post-abortion care counseling.

Values clarification – A process through which one can examine their moral reasoning and basic values. This involves three subprocesses: choosing a value, analyzing its pros and cons, and affirming that value, which when acted upon repeatedly, is believed to yield positive outcomes.

Violence against women – Any act of gender-based violence that results in or is likely to result in, physical, sexual or mental harm or suffering to women, whether occurring in public or in private life.

Chapter 4

Artificial family planning methods – Contraceptive methods that are scientifically developed and proven to be sound and effective. These include temporary methods such as condoms, pills, IUDs; or permanent methods such as male and female sterilization.

Contraindication – If a woman has these specific conditions, under no circumstances should she be offered the contraindicated service or method. Alternatives should be considered, or she should be referred to a facility where she can be offered alternate care.

Dual protection – Avoiding both pregnancy and sexually transmitted infection.

Natural family planning methods – Methods of planning or preventing pregnancy based on observation of naturally occurring signs and symptoms of the fertile and infertile phases of the menstrual cycle. The methods include breastfeeding, withdrawal, and fertility awareness.

Chapter 5

Fertility awareness methods – Natural family planning methods that may involve the calendar-based methods, symptoms-based methods (cervical mucus and body temperature) or symptothermal method.

Lactational amenorrhea method – A form of natural family planning. "Lactational" means breastfeeding and "amenorrhea" means a lack of menstrual periods. It is essentially breastfeeding as a form of birth control.

Withdrawal method – The withdrawing, or pulling out, of the erect penis from the woman's vagina right before ejaculation to prevent a pregnancy.

Chapter 6

Ectopic pregnancy – Pregnancy in which the fertilized egg implants in tissue outside the uterus, most commonly in a fallopian tube but sometimes in the cervix or abdominal cavity.

Endometriosis – When endometrial tissue (the uterine lining that is built up and then shed with each menstrual cycle) has begun to grow in areas other than the uterus. Endometriosis occurs in about 10% of women of reproductive age. These areas can include the ovaries, muscles and ligaments in the pelvis, abdominal lining, and uterine smooth muscle.

Pelvic Inflammatory Disease (PID) – An infection of the upper genital tract, caused by various types of bacteria.

Vaginal bleeding – Any bloody vaginal discharge (pink, red, or brown) that requires the use of sanitary protection (pads, cloths, or tampons). Different vaginal bleeding patterns include:

- **Amenorrhea** – No bleeding at all at expected bleeding times.
- **Breakthrough bleeding** – Any bleeding outside of regular monthly bleeding that requires use of sanitary protection.
- **Heavy bleeding (menorrhagia)** – Bleeding that is twice as heavy as a woman's usual bleeding.
- **Infrequent bleeding** – Fewer than 2 bleeding episodes over 3 months.
- **Irregular bleeding** – Spotting and/or breakthrough bleeding that occurs outside of regular monthly bleeding.

- **Menstrual bleeding (monthly bleeding)** – Bleeding that takes place, on average, for 3–7 days about every 28 days.
- **Prolonged bleeding** – Bleeding that lasts longer than 8 days.
- **Spotting** – Any bloody vaginal discharge outside of expected bleeding times that requires no sanitary protection

Chapter 9

Mini-laparotomy – Generally referred to as "mini-lap," is an abdominal surgical approach to the ovarian tubes by means of an incision less than 5 cm in length.

Laparoscopy – A surgical procedure in which a fiber-optic instrument is inserted through the abdominal wall to view the organs in the abdomen or to permit a surgical procedure.

Chapter 10

Family planning counselling – Counselling that supports a woman and her partner in choosing a family planning method that is most appropriate for them, and to support them in resolving any issues that may occur with the selected method.

Chapter 11

Quality care – Health-care services that are safe, confidential, effective, accessible, client-centered, equitable, and observe the accepted local standards, clinical guidelines and practices.

Chapter 12

High-level disinfection – A process that inactivates most disease-causing micro-organisms on non-living objects. High-level disinfection through boiling or the use of chemicals inactivates all microorganisms except some bacterial endospores.

Missed abortion – A spontaneous abortion in which the pregnancy ends, but the tissue remains in the uterus.

Misoprostol – A drug that causes uterine contractions and is used to induce an abortion or assist in evacuating the uterus after an incomplete or missed abortion. It is also used in combination with mifepristone in many countries. Used up to 9-10 weeks of gestation.

Chapter 13

Hematometra (post-abortion syndrome) – Occurs when there is a blockage of the cervical canal usually from a fragment of placenta or a clot, resulting in an accumulation of blood within the uterus.

Sepsis – The presence of various pus-forming and disease-causing organisms, or toxic substances that they produce, in the blood or body tissues.

REFERENCES

Overview

1. Hutton E. Primary Care Midwifery. In: Primary Care Midwifery [Internet]. 2014. p. 1–37. Available from: http://www.euprimarycare.org/sites/default/files/European forum primary care circulate_Hutton.pdf
2. WHO, Human Reproduction Program. Sexual health and its linkages to reproductive health: an operational approach. World Heal Organ [Internet]. 2017; Available from: http://apps.who.int/iris/bitstream/10665/258738/1/9789241512886-eng.pdf?ua=1
3. WHO. Sexual health, human rights and the law. WHO Press. 2015;1–76.
4. World Health Organization. Reproductive health strategy. Dep Reprod Heal Res [Internet]. 2004;36. Available from: http://apps.who.int/iris/bitstream/10665/68754/1/WHO_RHR_04.8.pdf
5. Starrs A, Ezeh A, Barker G, Basu A, Bertrand J, Blum R, et al. Accelerate progress—sexual and reproductive health and rights for all: report of the Guttmacher–Lancet Commission. Lancet (London, England). 2018;391:2642–93.
6. United Nations Population Fund. World Population Dashboard [Internet]. 2018 [cited 2018 Oct 30]. Available from: https://www.unfpa.org/data/world-population-dashboard
7. National Institute of Population Studies (NIPS), ICF. Pakistan Demographic and Health Survey 2017-18. Islamabad, Pakistan & Rockville, MD; 2018.
8. World Health Organization. Family planning/Contraception [Internet]. 2018 [cited 2019 Jul 12]. Available from: https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception
9. Naveed Z, Shaikh BT, Nawaz MA. Induced Abortions in Pakistan: Expositions, Destinations And Repercussions. A Qualitative Descriptive Study in Rawalpindi District. J Biosoc Sci. 2016 Sep;48(5):631–46.
10. Azmat SK, Mustafa G, Hameed W, Asghar J, Ahmed A, Shaikh BT. Social franchising and vouchers to promote long-term methods of family planning in rural Pakistan: a qualitative stocktaking with stakeholders. J Pak Med Assoc. 2013 Apr;63(4 Suppl 3):S46-53.
11. Tsui AO, Casterline J, Singh S, Bankole A, Moore AM, Omideyi AK, et al. Managing unplanned pregnancies in five countries: perspectives on contraception and abortion decisions. Glob Public Health. 2011;6 Suppl 1:S1-24.
12. Tabassum A, Manj YN, Gunjial TR, Nazir S. Perceptions of rural women about contraceptive usage in district Khushab, Punjab. J Pak Med Assoc. 2016 Dec;66(12):1577–81.
13. Ahmed S, Khan A, Khan AA. Policy and programme implications of unmet need for family planning in Pakistan. J Pak Med Assoc. 2013 Apr;63(4 Suppl 3):S16-20.
14. Chahal H, Mumtaz Z. Abortion and fertility control in Pakistan: the role of misoprostol. J Fam Plan Reprod Heal care. 2017 Oct;43(4):274–80.
15. Khan AA, Abbas K, Hamza H Bin, Bilal A, Khan A. From contraceptive prevalence to family planning service users: implications for policy and programmes. J Pak Med Assoc. 2013 Apr;63(4 Suppl 3):S11-5.
16. Zuberi SK, Salman SH, Virji RN, Sana S, Kumari S, Zehra N. A hospital-based comparative study of the knowledge, attitudes and practices of family planning among women belonging to different socio-economic status. J Pak Med Assoc. 2015 May;65(5):579–84.
17. Population Welfare Department. Contraceptive Availability and Price [Internet]. 2016 [cited 2018 Oct 30]. Available from: https://pwd.punjab.gov.pk/price_list
18. Fikree FF. Family planning in Pakistan--moving evidence to programmatic action. Vol. 63, JPMA. The Journal of the Pakistan Medical Association. Pakistan; 2013. p. S1-2.
19. Hameed W, Azmat SK, Ali M, Sheikh MI, Abbas G, Temmerman M, et al. Women's empowerment and contraceptive use: The role of independent versus couples' decision-making, from a lower middle income country perspective. PLoS One. 2014;9(8).
20. Shaikh BT, Azmat SK, Mazhar A. Family planning and contraception in Islamic countries: a critical review of the literature. J Pak Med Assoc. 2013 Apr;63(4 Suppl 3):S67-72.
21. Jones R, Frohwirth L, Blades N. "If I know I am on the pill and I get pregnant, it's an act of God": women's views on fatalism, agency and pregnancy. Contraception. 2016;93(6):551–5.
22. Khan AA, Khan A, Javed W, Hamza H Bin, Orakzai M, Ansari A, et al. Family planning in Pakistan: applying what we have learned. J Pak Med Assoc. 2013 Apr;63(4 Suppl 3):S3-10.
23. Mir AS, Malik R. Emergency contraceptive pills:

Exploring the knowledge and attitudes of community health workers in a developing Muslim country. N Am J Med Sci. 2010 Aug;2(8):359–64.

24. Hashim A. Pakistan bans airing of "undesired" contraceptive advertisements. 2016 [cited 2018 Oct 30]; Available from: https://www.reuters.com/article/us-pakistan-contraception-ban-idUSKCN0YJ0BT

25. Ali K. Pemra withdraws ban on contraceptive ads. 2016 May 29; Available from: https://www.dawn.com/news/1261330/pemra-withdraws-ban-on-contraceptive-ads

26. PTI. The Road To Naya Pakistan-PTI Manifesto [Internet]. 2018. Available from: http://pmo.gov.pk/documents/manifesto-pti.pdf

27. Cunningham FG, Leveno KJ, Bloom SL, Spong CY, Dashe JS, Hoffman BL, et al. Overview of Obstetrics. In: Williams Obstetrics, 24e [Internet]. New York, NY: McGraw-Hill Education; 2013. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1102098665

28. Sathar ZA, Singh S, Fikree FF. Estimating the incidence of abortion in Pakistan. Stud Fam Plann. 2007 Mar;38(1):11–22.

29. Sathar Z, Singh S, Rashida G, Shah Z, Niazi R. Induced abortions and unintended pregnancies in pakistan. Stud Fam Plann. 2014 Dec;45(4):471–91.

30. Azmat SK, Hameed W, Ishaque M, Mustafa G, Ahmed A. Post-abortion care family planning use in Pakistan. Pak J Public Heal. 2012;2(2):4–9.

31. Bhutta Z. Together We Can Report On Maternal, Newborn, & Child Mortality Burden, Challenges, and Solutions [Internet]. 2016. Available from: http://www.midwifepak.org.pk/together-we-can-campaign-launch

32. Erfani A. Abortion in Iran : What Do We Know ? PSC Discuss Pap Ser. 2008;22(1).

Chapter 1

1. Morton DA, Foreman KB, Albertine KH. Female Reproductive System. In: The Big Picture: Gross Anatomy, 2e [Internet]. New York, NY: McGraw-Hill Education; 2019. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1158277313

2. Tortora G, Derrickson B. Principles of Anatomy and Physiology. 14th ed. Hoboken: Wiley; 2013.

3. Canadian Cancer Society. Sex, Intimacy and Cancer. [Internet]. 2018 [cited 14 July 2019]. Available from: http://www.cancer.ca/~/media/cancer.ca/CW/publications/Sex%20intimacy%20and%20cancer/32061-1-NO.pdf

4. Barrett KE, Barman SM, Brooks HL, Yuan JX-J. Reproductive Development & Function of the Female Reproductive System. In: Ganong's Review of Medical Physiology, 26e [Internet]. New York, NY: McGraw-Hill Education; 2019. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1159053525

5. SOGC. Reproduction [Internet]. [cited 2019 Jun 5]. Available from: http://pregnancy.sogc.org/fertility-and-reproduction/reproduction/

6. Isometrik. Diagram of the menstrual cycle. 2009 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:MenstrualCycle2_en.svg

7. Molina PE. Male Reproductive System. In: Endocrine Physiology, 5e [Internet]. New York, NY: McGraw-Hill Education; 2018. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1160650174

Chapter 2

1. Temkin SM, Gregory T, Kohn EC, Duska L. Gynecology. In: Brunicardi FC, Andersen DK, Billiar TR, Dunn DL, Kao LS, Hunter JG, et al., editors. Schwartz's Principles of Surgery, 11e [Internet]. New York, NY: McGraw-Hill Education; 2019. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1163787446

2. Murray-Davis B, McDonald H, McNiven P, Wainman B. Physical Assessment of the Well Woman And Newborn. Hamilton; 2014.

3. LeBlond RF, Brown DD, Suneja M, Szot JF. The Female Genitalia and Reproductive System. In: DeGowin's Diagnostic Examination, 10e [Internet]. New York, NY: McGraw-Hill Education; 2015. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1139369343

4. Kawada C, Hochner-Celnikier D. Gynecologic History, Examination, & Diagnostic Procedures. In: DeCherney AH, Nathan L, Laufer N, Roman AS, editors. CURRENT Diagnosis & Treatment: Obstetrics & Gynecology, 12e [Internet]. New York, NY: McGraw-Hill Education; 2019. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1159957647

5. Hoffman BL, Schorge JO, Bradshaw KD, Halvorson LM, Schaffer JI, Corton MM. Well Woman Care. In: Williams Gynecology, 3e [Internet]. New York, NY: McGraw-Hill Education; 2016. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1125284040

6. National Cancer Institute. Line drawing showing part of pelvic exam procedure. 2001 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:Pelvic_exam_nci-vol-1786-300.jpg

Chapter 3

1. United Nations. Universal Declaration of Human Rights. 1948.
2. Forced Migration Review. Who has signed what ... Forced Migr Rev [Internet]. 2012;12. Available from: https://www.fmreview.org/sites/fmr/files/FMRdownloads/en/FMRpdfs/Human-Rights/signatories.pdf
3. WHO, Human Reproduction Program. Sexual health and its linkages to reproductive health: an operational approach. World Heal Organ [Internet]. 2017; Available from: http://apps.who.int/iris/bitstream/10665/258738/1/9789241512886-eng.pdf?ua=1
4. Starrs A, Ezeh A, Barker G, Basu A, Bertrand J, Blum R, et al. Accelerate progress—sexual and reproductive health and rights for all: report of the Guttmacher–Lancet Commission. Lancet (London, England). 2018;391:2642–93.
5. WHO. Sexual health, human rights and the law. WHO Press. 2015;1–76.
6. WHO. Ensuring human rights in the provision of contraceptive information and services: guidance and recommendations. WHO Press. 2014;1–34.
7. WHO. Safe abortion: technical and policy guidance for health systems. WHO Press. 2012;1–134.
8. WHO. WHO | Safe abortion: technical and policy guidance for health systems. Who [Internet]. 2015;5th editio:1–67. Available from: http://www.who.int/reproductivehealth/publications/unsafe_abortion/9789241548434/en/
9. United Nations. Convention on the Elimination of All Forms of Discrimination against Women [Internet]. 2009 [cited 2018 Dec 2]. Available from: http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm#article5
10. Shaw D. Abortion and human rights. Best Pract Res Clin Obstet Gynaecol [Internet]. 2010;24(5):633–46. Available from: http://dx.doi.org/10.1016/j.bpobgyn.2010.02.009
11. Adinma ED. Unsafe Abortion and its Ethical, Sexual and Reproductive Rights Implications. West African J Med. 2011;30(4):245–9.
12. Morrell KM, Chavkin W. Conscientious objection to abortion and reproductive healthcare: A review of recent literature and implications for adolescents. Curr Opin Obstet Gynecol. 2015;27(5):333–8.
13. Turner KL, Page KC. Abortion attitude transformation: A values clarification toolkit for global audiences. Health (San Francisco). 2008.
14. Harrison ME, Clarkin C, Rohde K, Worth K, Fleming N. Treat Me But Don't Judge Me: A Qualitative Examination of Health Care Experiences of Pregnant and Parenting Youth. J Pediatr Adolesc Gynecol [Internet]. 2017;30(2):209–14. Available from: http://dx.doi.org/10.1016/j.jpag.2016.10.001
15. Turner KL, Hyman AG, Gabriel MC. Clarifying Values and Transforming Attitudes to Improve Access to Second Trimester Abortion. Reprod Health Matters. 2008;16(31 SUPPL.):108–16.
16. Turner KL, Pearson E, George A, Andersen KL. Values clarification workshops to improve abortion knowledge, attitudes and intentions: A pre-post assessment in 12 countries. Reprod Health. 2018;15(1):1–11.
17. WHO. Newborn and child health and human rights: A toolbox for examining laws, regulations and policies. 2014;
18. Hornberger LL. Options Counseling for the Pregnant Adolescent Patient. Pediatrics [Internet]. 2017;140(3):e20172274. Available from: http://pediatrics.aappublications.org/lookup/doi/10.1542/peds.2017-2274
19. WHO Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, Knowledge for Health Project. Family Planning: A Global Handbook for Providers. 3rd ed. Baltimore and Geneva: World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs; 2018. 1–460 p.
20. Kjelsvik M, Tveit Sekse RJ, Moi AL, Aasen EM, Gjengedal E. Walking on a tightrope—Caring for ambivalent women considering abortions in the first trimester. J Clin Nurs. 2018;(July):4192–202.
21. Blumenthal PD, Voedisch A, Gemzell-Danielsson K. Strategies to prevent unintended pregnancy: Increasing use of longacting reversible contraception. Hum Reprod Update. 2011;17(1):121–37.
22. Weisman CS, Maccannon DS, Henderson JT, Shortridge E, Orso CL. Contraceptive counseling in managed care: Preventing unintended pregnancy in adults. Women's Heal Issues. 2002;12(2):79–95.
23. Cook RJ, Cusack S, Dickens BM. Unethical female stereotyping in reproductive health. Int J Gynecol Obstet [Internet]. 2010;109(3):255–8. Available from: http://dx.doi.org/10.1016/j.ijgo.2010.02.002
24. Rinehart, W., Rudy, S., and Drennan M. GATHER Guide to Counseling. Popul Reports. 1998;J(48).

Chapter 4

1. WHO. Packages of Interventions for Family Planning, Safe Abortion care, Maternal, Newborn and Child Health. WHO Press. 2010;1–20.
2. WHO. Ensuring human rights in the provision of contraceptive information and services: guidance and recommendations. WHO Press. 2014;1–34.
3. Burkman RT, Brzezinski A. Contraception & Family Planning. In: DeCherney AH, Nathan L, Laufer N, Roman AS, editors. CURRENT Diagnosis & Treatment: Obstetrics & Gynecology, 12e [Internet]. New York, NY: McGraw-Hill Education; 2019. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1159962476
4. WHO Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, Knowledge for Health Project. Family Planning: A Global Handbook for Providers. 3rd ed. Baltimore and Geneva: World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs; 2018. 1–460 p.
5. Cunningham FG, Leveno KJ, Bloom SL, Dashe JS, Hoffman BL, Casey BM, et al. Contraception. In: Williams Obstetrics, 25e [Internet]. New York, NY: McGraw-Hill Education; 2018. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1160783155
6. World Health Organization. Medical eligibility criteria for contraceptive use [Internet]. 5th ed. World Health Organisation. 2015. Available from: http://apps.who.int/iris/bitstream/10665/181468/1/9789241549158_eng.pdf%0Ahttp://icmer.org/documentos/anticoncepcion_de_emergencia/WHO 2015 Medical eligibility criteria for contraceptive use.pdf
7. World Health Organization. WHO Medical Eligibility Criteria Wheel for contraceptive use, 2015 [Internet]. 2016 [cited 2019 Jun 8]. Available from: http://srhr.org/mecwheel/
8. World Health Organization. New App for WHO's Medical eligibility criteria for contraceptive use [Internet]. 2018 [cited 2019 Jun 8]. Available from: https://www.who.int/reproductivehealth/mec-app/en/
9. FHI360. Facts for Family Planning [Internet]. Durham, NC; 2013. Available from: https://www.fphandbook.org/sites/default/files/factsforfamilyplanning_0.pdf

Chapter 5

1. World Health Organization. Natural family planning: A guide to provision of services. 1988.
2. WHO Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, Knowledge for Health Project. Family Planning: A Global Handbook for Providers. 3rd ed. Baltimore and Geneva: World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs; 2018. 1–460 p.
3. Planned Parenthood. Breastfeeding [Internet]. 2019 [cited 2019 Jun 8]. Available from: https://www.plannedparenthood.org/learn/birth-control/breastfeeding
4. Society of Obstetricians and Gynecologists of Canada. Contraception Methods Booklet. 2017.
5. World Health Organization. Medical eligibility criteria for contraceptive use [Internet]. 5th ed. World Health Organisation. 2015. Available from: http://apps.who.int/iris/bitstream/10665/181468/1/9789241549158_eng.pdf%0Ahttp://icmer.org/documentos/anticoncepcion_de_emergencia/WHO 2015 Medical eligibility criteria for contraceptive use.pdf
6. FHI360. Facts for Family Planning [Internet]. Durham, NC; 2013. Available from: https://www.fphandbook.org/sites/default/files/factsforfamilyplanning_0.pdf
7. Planned Parenthood. Fertility Awareness [Internet]. 2019 [cited 2019 Jun 8]. Available from: https://www.plannedparenthood.org/learn/birth-control/fertility-awareness
8. Dellex. Birth control chain. 2008 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/w/index.php?curid=5608730
9. Institute Institute for Reproductive Health - Georgetown University. Cyclebeads [Internet]. 2019. Available from: http://irh.org/wp-content/uploads/2013/06/Eng-Fre-Swah-with_crops.pdf
10. Planned Parenthood. Withdrawal (Pull out Method) [Internet]. 2019 [cited 2019 Jun 8]. Available from: https://www.plannedparenthood.org/learn/birth-control/withdrawal-pull-out-method
11. Family Planning Victoria. Withdrawal method (pulling out) [Internet]. 2019. Available from: https://www.fpv.org.au/for-you/i-dont-want-to-get-pregnant/contraception-without-hormones/withdrawal-method-pulling-out

Chapter 6

1. WHO Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, Knowledge for Health Project. Family Planning: A Global Handbook for Providers. 3rd ed. Baltimore and Geneva: World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs; 2018. 1–460 p.
2. HealthLink BC. Intrauterine Device (IUD) for Birth Control [Internet]. 2019 [cited 2019 Jun 8]. Available from: https://www.healthlinkbc.ca/health-topics/tw9516
3. Planned Parenthood. IUD [Internet]. [cited 2019 Jun 8]. Available from: https://www.plannedparenthood.org/learn/birth-control/iud
4. Society of Obstetricians and Gynecologists of Canada. Contraception Methods Booklet. 2017.
5. World Health Organization. Medical eligibility criteria for contraceptive use [Internet]. 5th ed. World Health Organisation. 2015. Available from: http://apps.who.int/iris/bitstream/10665/181468/1/9789241549158_eng.pdf%0Ahttp://icmer.org/documentos/anticoncepcion_de_emergencia/WHO 2015 Medical eligibility criteria for contraceptive use.pdf
6. FHI360. Facts for Family Planning [Internet]. Durham, NC; 2013. Available from: https://www.fphandbook.org/sites/default/files/factsforfamilyplanning_0.pdf
7. LeiaWonder. A common copper IUD (Paragard) with scale markings. 2012 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:IUD_with_scale.jpg
8. Aung [Public domain]. Multiload CU-250 Standard. 2008 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:Multiload_CU-250.jpg
9. Sarahmirk.Mirena IUD with hand. 2016 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:Mirena_IUD_with_hand.jpg

Chapter 7

1. WHO Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, Knowledge for Health Project. Family Planning: A Global Handbook for Providers. 3rd ed. Baltimore and Geneva: World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs; 2018. 1–460 p.
2. Society of Obstetricians and Gynecologists of Canada. Contraception Methods Booklet. 2017.
3. Cunningham FG, Leveno KJ, Bloom SL, Dashe JS, Hoffman BL, Casey BM, et al. Contraception. In: Williams Obstetrics, 25e [Internet]. New York, NY: McGraw-Hill Education; 2018. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1160783155
4. Burkman RT, Brzezinski A. Contraception & Family Planning. In: DeCherney AH, Nathan L, Laufer N, Roman AS, editors. CURRENT Diagnosis & Treatment: Obstetrics & Gynecology, 12e [Internet]. New York, NY: McGraw-Hill Education; 2019. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1159962476
5. World Health Organization. Medical eligibility criteria for contraceptive use [Internet]. 5th ed. World Health Organisation. 2015. Available from: http://apps.who.int/iris/bitstream/10665/181468/1/9789241549158_eng.pdf%0Ahttp://icmer.org/documentos/anticoncepcion_de_emergencia/WHO 2015 Medical eligibility criteria for contraceptive use.pdf
6. Planned Parenthood. Birth control pills [Internet]. 2019 [cited 2019 Jun 9]. Available from: https://www.plannedparenthood.org/learn/birth-control/birth-control-pill
7. New Zealand Family Planning. Progestin-only contraceptive pill [Internet]. 2019 [cited 2019 Jun 9]. Available from: https://www.familyplanning.org.nz/advice/contraception/progestogen-only-contraceptive-pill
8. New Zealand Family Planning. The Pill [Internet]. 2019 [cited 2019 Jun 9]. Available from: https://www.familyplanning.org.nz/advice/contraception/combined-oral-contraceptive-pill
9. Levin ER, Vitek WS, Hammes SR. Estrogens, Progestins, and the Female Reproductive Tract. In: Brunton LL, Hilal-Dandan R, Knollmann BC, editors. Goodman & Gilman's: The Pharmacological Basis of Therapeutics, 13e [Internet]. New York, NY: McGraw-Hill Education; 2017. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1162541991
10. FHI360. Facts for Family Planning [Internet]. Durham, NC; 2013. Available from: https://www.fphandbook.org/sites/default/files/factsforfamilyplanning_0.pdf
11. Irma2403.Pill plate usually used in France. 2018 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:Pills_3.jpg

12. Planned Parenthood. Birth control shot [Internet]. 2019 [cited 2019 Jun 9]. Available from: https://www.plannedparenthood.org/learn/birth-control/birth-control-shot

13. New Zealand Family Planning. Depo-provera Injection [Internet]. 2019 [cited 2019 Jun 9]. Available from: https://www.familyplanning.org.nz/advice/contraception/depo-provera-injection

14. Greenstar Pakistan. Injectables [Internet]. 2016 [cited 2019 Jun 9]. Available from: https://www.greenstar.org.pk/Injectables

15. Ciell. Injection for birth control (Depo Provera). 2007 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:Prikpil.JPG

16. Planned Parenthood. Birth control implant [Internet]. 2019 [cited 2019 Jun 9]. Available from: https://www.plannedparenthood.org/learn/birth-control/birth-control-implant-implanon

17. Vera de Kok. Extracted Implanon. 2015 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:Implanon_04.jpg

18. Planned Parenthood. Emergency Contraception [Internet]. 2019 [cited 2019 Jun 9]. Available from: https://www.plannedparenthood.org/learn/morning-after-pill-emergency-contraception

19. Greenstar Pakistan. Emergency Contraceptive Pill [Internet]. 2016 [cited 2019 Jun 9]. Available from: https://www.greenstar.org.pk/Emergency_Contraceptive_Pill

Chapter 8

1. NICHD. What are the different types of contraception? [Internet]. 2017 [cited 2019 Jun 9]. Available from: https://www.nichd.nih.gov/health/topics/contraception/conditioninfo/types

2. WHO Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, Knowledge for Health Project. Family Planning: A Global Handbook for Providers. 3rd ed. Baltimore and Geneva: World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs; 2018. 1–460 p.

3. Planned Parenthood. Condom [Internet]. 2019 [cited 2019 Jun 9]. Available from: https://www.plannedparenthood.org/learn/birth-control/condom

4. Society of Obstetricians and Gynecologists of Canada. Contraception Methods Booklet. 2017.

5. Burkman RT, Brzezinski A. Contraception & Family Planning. In: DeCherney AH, Nathan L, Laufer N, Roman AS, editors. CURRENT Diagnosis & Treatment: Obstetrics & Gynecology, 12e [Internet]. New York, NY: McGraw-Hill Education; 2019. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1159962476

6. Cunningham FG, Leveno KJ, Bloom SL, Dashe JS, Hoffman BL, Casey BM, et al. Contraception. In: Williams Obstetrics, 25e [Internet]. New York, NY: McGraw-Hill Education; 2018. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1160783155

7. World Health Organization. Medical eligibility criteria for contraceptive use [Internet]. 5th ed. World Health Organisation. 2015. Available from: http://apps.who.int/iris/bitstream/10665/181468/1/9789241549158_eng.pdf%0Ahttp://icmer.org/documentos/anticoncepcion_de_emergencia/WHO 2015 Medical eligibility criteria for contraceptive use.pdf

8. FHI360. Facts for Family Planning [Internet]. Durham, NC; 2013. Available from: https://www.fphandbook.org/sites/default/files/factsforfamilyplanning_0.pdf

9. User Flegmus on pl.wikipedia. Prezerwatywa, z angielskiej wiki. Cited 14 July 2019. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:Kondom.jpg

10. CDC. Male Condom Use [Internet]. 2016 [cited 2019 Jun 9]. Available from: https://www.cdc.gov/condomeffectiveness/male-condom-use.html

11. BruceBlaus. Illustration demonstrating a female condom.. 2016 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:Female_Condom.png

12. CDC. Female condom use [Internet]. 2016 [cited 2019 Jun 9]. Available from: https://www.cdc.gov/condomeffectiveness/Female-condom-use.html

Chapter 9

1. WHO Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, Knowledge for Health Project. Family Planning: A Global Handbook for Providers. 3rd ed. Baltimore and Geneva: World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs; 2018. 1–460 p.

2. Society of Obstetricians and Gynecologists of Canada. Contraception Methods Booklet. 2017.

3. Timdwilliamson. Illustration of an open vasectomy with structures labeled. 2019 [cited 14 July 2019]. In: commons.wikimedia.org [Internet]. Available from: https://commons.wikimedia.org/wiki/File:Open_Vasectomy_.jpeg

4. Cunningham FG, Leveno KJ, Bloom SL, Dashe JS, Hoffman BL, Casey BM, et al. Sterilization. In: Williams Obstetrics, 25e [Internet]. New York, NY: McGraw-Hill Education; 2018. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1160783208

5. World Health Organization. Medical eligibility criteria for contraceptive use [Internet]. 5th ed. World Health Organisation. 2015. Available from: http://apps.who.int/iris/bitstream/10665/181468/1/9789241549158_eng.pdf%0Ahttp://icmer.org/documentos/anticoncepcion_de_emergencia/WHO 2015 Medical eligibility criteria for contraceptive use.pdf

6. FHI360. Facts for Family Planning [Internet]. Durham, NC; 2013. Available from: https://www.fphandbook.org/sites/default/files/factsforfamilyplanning_0.pdf

7. Planned Parenthood. Sterilization [Internet]. 2019 [cited 2019 Jun 9]. Available from: https://www.plannedparenthood.org/learn/birth-control/sterilization

8. Hoffman BL, Schorge JO, Bradshaw KD, Halvorson LM, Schaffer JI, Corton MM. Contraception and Sterilization. In: Williams Gynecology, 3e [Internet]. New York, NY: McGraw-Hill Education; 2016. Available from: http://accessmedicine.mhmedical.com/content.aspx?aid=1125285145

9. Cancer Care of Western New York. Tubal ligation - laparoscopic surgery [Internet]. 2018 [cited 2019 Jun 9]. Available from: https://www.cancercarewny.com/content.aspx?chunkiid=14875

Chapter 10

1. WHO Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, Knowledge for Health Project. Family Planning: A Global Handbook for Providers. 3rd ed. Baltimore and Geneva: World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs; 2018. 1–460 p.

2. Rinehart W, Rudy S, Drennan M. GATHER Guide to Counseling. Popul Reports [Internet]. 1998;J(48). Available from: https://www.k4health.org/sites/default/files/j48.pdf

3. World Health Organization. Counselling for maternal and newborn health care: A handbook for building skills [Internet]. Geneva; 2013. 233 p. Available from: https://www.ncbi.nlm.nih.gov/books/NBK304190/pdf/Bookshelf_NBK304190.pdf

Chapter 11

1. Temmerman M. Missed opportunities in womens health: post-abortion care. The Lancet Global Health. 2019;7(1). Available from: doi:10.1016/s2214-109x(18)30542-4

2. Ipas. Woman-centered, comprehensive postabortion care: Reference manual. 2nd ed. Chapel Hill, NC; 2013.

3. Baig M, Jan R, Lakhani A, Abbas S, Mubeen K, Shahid S, et al. Knowledge, Attitude, and Practices of Mid-Level Providers regarding Post Abortion Care in Sindh, Pakistan. J Asian Midwives [Internet]. 2017;4(1):21–34. Available from: https://ecommons.aku.edu/cgi/viewcontent.cgi?article=1047&context=jam

4. Ipas. Pakistan woman-centered post abortion care: a reference manual. 2015. 1–227 p.

5. Ipas. Woman-centered, comprehensive abortion care: Trainer's manual [Internet]. 2nd ed. Chapel Hill, NC: Ipas; 2014. 188 p. Available from: https://ipas.azureedge.net/files/CACTRNE14-WomenCenteredCACTrainerManual.pdf

Chapter 12

1. Inter-Agency Working Group on Reproductive Health in Crises (IAWG). Comprehensive Abortion Care. In: Inter-Agency Working Group on Reproductive Health in Crises (IAWG). 2018. p. 145–63.

2. World Health Organization. Clinical practice handbook for safe abortion. Geneva; 2014.

3. Ipas. Protocols for Medical Abortion [Internet]. 2018. Available from: https://ipas.azureedge.net/files/MADOSCARDE18-ProtocolsforMedicalAbortionCard.pdf

4. Costescu D, Guilbert E, Bernardin J, Black A, Dunn S, Fitzsimmons B, et al. Medical Abortion. J Obstet Gynaecol Canada [Internet]. 2016 Apr 1;38(4):366–89. Available from: https://doi.org/10.1016/j.jogc.2016.01.002

5. Pilaborsiasli. Jual Obat Cytotec Murah [under CC BY 2.0]. 2014 [cited 14 July 2019]. In: flickr.com [Internet]. Available from: https://www.flickr.com/photos/159411500@N04/43221335002

6. Kraan H, Vrieling H, Czerkinsky C, Jiskoot W, Kersten G, Amorij J. Buccal and sublingual vaccine delivery. Journal of Controlled Release. 2014;190:580-592.

7. British Columbia Institute of Technology (BCIT). Administering medication vaginally without an applicator. 2017 [cited 14 July 2019]. In: opentextbc.ca [Internet]. Available from: https://opentextbc.ca/clinicalskills/chapter/6-4-rectal-and-vaginal-medications/

8. Ipas. Woman-centered, comprehensive abortion care: Trainer's manual [Internet]. 2nd ed. Chapel Hill, NC: Ipas; 2014. 188 p. Available from: https://ipas.azureedge.net/files/CACTRNE14-WomenCenteredCACTrainerManual.pdf

9. Frankel, Nina and Marian Abernathy, eds. 2004. Performing uterine evacuation with the Ipas MVA Plus® aspirator and Ipas EasyGrip® cannulae: Instructional booklet. Chapel Hill, NC, Ipas.

10. Costescu D, Guilbert É. No. 360-Induced Abortion: Surgical Abortion and Second Trimester Medical Methods. J Obstet Gynaecol Canada [Internet]. 2018 Jun 1;40(6):750–83. Available from: https://doi.org/10.1016/j.jogc.2017.12.010

11. Guttmacher Institute. Unsafe Abortion and Postabortion Care In Pakistan [Internet]. 2013 [cited 2019 Jun 9]. Available from: https://www.guttmacher.org/fact-sheet/unsafe-abortion-and-postabortion-care-pakistan

Chapter 13

1. Society of Obstetricians and Gynaecologists of Canada. Post-abortal care. In: ALARM International Program. 2018. p. 1–22.

2. Ipas. Woman-centered, comprehensive postabortion care: Reference manual. 2nd ed. Chapel Hill, NC; 2013.

3. World Health Organization. Clinical practice handbook for safe abortion. Geneva; 2014.

4. Klingberg-Allvin M, Cleeve A, Atuhairwe S, Mbona Tumwesigye N, Faxelid E, Byamugisha J, Gemzell-Danielsson K. Comparison of treatment of incomplete abortion with misoprostol by physicians and midwives at district level in Uganda: a randomised controlled equivalence trial. Lancet 2015; 385: 2392–98. Published Online March 27, 2015 http://dx.doi.org/10.1016/S0140-6736(14)61935-8.

5. Raymond EG, Harrison MS, Weaver MA. Efficacy of Misoprostol Alone for First-Trimester Medical Abortion: A Systematic Review. Obstetrics & Gynecology: January 2019 - Volume 133 - Issue 1 - p 137-147. doi: 10.1097/AOG.0000000000003017

Chapter 14

1. Ipas. Pakistan woman-centered post abortion care: a reference manual. 2015. 1–227 p.

2. Rinehart W, Rudy S, Drennan M. GATHER Guide to Counseling. Popul Reports [Internet]. 1998;J(48). Available from: https://www.k4health.org/sites/default/files/j48.pdf

3. World Health Organization. Counselling for maternal and newborn health care: A handbook for building skills [Internet]. Geneva; 2013. 233 p. Available from: https://www.ncbi.nlm.nih.gov/books/NBK304190/pdf/Bookshelf_NBK304190.pdf

Appendix

1. Center for Reproductive Rights. Pakistan's Abortion Provisions [Internet]. 2019 [cited 2019 Jun 25]. Available from: https://reproductiverights.org/world-abortion-laws/pakistans-abortion-provisions

2. Ipas. Pakistan woman-centered post abortion care: a reference manual. 2015. 1–227 p.

3. CDC. Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use [Internet]. 2017 [cited 2019 Jun 25]. Available from: https://www.cdc.gov/reproductivehealth/contraception/pdf/summary-chart-us-medical-eligibility-criteria_508tagged.pdf