

Reproductive Health Notes

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REPRODUCTIVE HEALTH NOTES

TOPICS

- 1. CONCEPTS OF REPRODUCTIVE HEALTH, FAMILY PLANNING AND PILLARS
- 2. COMPONENT OF REPRODUCTIVE HEALTH
- 3. PROVISION OF FAMILY PLANNING COMODITIES

1.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.

Implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so."

The definition of **Reproductive** rights recognizes the basic right of couples and individuals to decide freely and responsibly.

It also includes access to information and services on safe, effective, affordable and acceptable contraceptive methods.

The establishment of a reproductive health system provides not only a solution measure to the population problem, but also contributes to the improvement of individual health, and it is based on the definition of "health as provided by the World Health Organization (WHO) in its Constitution. However, the range of reproductive health is wide and the definition and interpretation of its concept remain varied.

2.REPRODUCTIVE HEALTH CARE

Reproductive health care is defined as "the entire set of methods, techniques and services that contribute to reproductive health and its well being through prevention and solution of various problems related to reproductive health." Reproductive health includes health related to sex for the purpose of individual sex and the enhancement of human relationships (sexual health), and is not simply limited to counseling and care related to reproduction and sexually transmitted infections.

3.REPRODUCTIVE HEALTH RIGHTS

Reproductive rights are part of human rights which are already acknowledged in domestic laws, international documents on human rights, and other related documents agreed in the United Nations. These rights are basic right of all couples and individuals to decide freely and responsibly the number, spacing and timing of their children and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health.



In addition, it also includes their right to make decisions concerning reproduction free of discrimination, coercion and violence, as expressed in human rights documents. The rights to use appropriate health care services so that women can enjoy safe pregnancy and delivery and couples can have the best opportunities to have healthy children are also included.

FAMILY PLANNING

Family planning services are "the ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births.

It is achieved through use of contraceptive methods and the treatment of involuntary infertility."

Family planning may involve consideration of the number of children a woman wishes to have, including the choice to have no children and the age at which she wishes to have them.

These matters are influenced by external factors such as: -

- 1. marital situation,
- 2.career considerations
- 3. financial position,
- 4.any disabilities that may affect their ability to have children and raise them.

If sexually active, family planning may involve the use of contraceptive and other techniques to control the timing of reproduction

Why use family planning?

You have the right to choose how many children to have and when

Family planning can save your life

Benefits –

- 1. Mothers and babies are healthier when risky pregnancies are avoided
- 2. Smaller families mean mo re money and food for each child.
- 3. Parents have more time to work and to be with family.
- 4. Delaying first or second pregnancy lets young people stay in school.

Things to Consider

- 1. Many young people need contraceptives to delay pregnancy. Ideally, young women and men should wait until at least 18 years or have finished studies, and are ready before having children.
- 2. After having a child, it is healthier to wait at least 2 years to try to become pregnant again.
- 3. Having more than 4 children makes childbirth riskier.

Importance of family planning

- Healthier mothers and children
- Fewer children means more time and money for each one
- Delaying pregnancy lets young people stay in school

COMPONENT OF REPRODUCTIVE HEALTH

CONTENTS

- Reproductive health.
- Adolescent health.
- Maternal **health**.
- Contraception.
- Sexually transmitted infection.
- Abortion.
- Female genital mutilation.
- Child and forced marriage

The five core aspects of reproductive and sexual health

- 1. Improving ante- natal,
- 2. Improving perinatal
- 3. Improving postpartum and newborn care
- 4. providing high-quality services for family planning, including infertility services;
- 5. eliminating unsafe abortion;
- 6. Combating sexually transmitted infections including HIV, reproductive tract.

HORMONAL CONTRACEPTIVE METHODS

Hormonal contraceptives are amongst the most widely used FP methods worldwide.

According to KDHS nealy 44% of women using modern contraceptives choose hormonal method with 26% choosing injectable contraceptives



Hormonal contraceptives contain synthetic hormones that is combination of estrogen and progestin. Which work primarily by preventing ovulation and making the cervical mucus too thick for sperm movement.

They can be taken inform of

- 1. Oral pills
- 2. Injectables (intramuscular or subcutaneous)
- 3. Implants
- 4. Skin patches
- 5. Hormone releasing intrauterine systems or vaginal rings

Examples of hormonal methods are commonly available in Kenya

- 1. Combined oral contraceptives (COCs)
- 2. Progestin only contraceptive pills (POPs)
- 3. Progestin only injectables contraceptives
- 4. Progestine only contraceptive implants e.g jadelle, implanon, zarin
- 5. Hormone-releasing intrauterine system (LNG-IUS)
- 6. Dedicated products for emergency contraception
- 7. Vaginal contraceptive rings included combined hormonal e.g nuvaring
- 1. COMBINED ORAL CONTRACEPTIVE PILLS

Combined oral contraceptive are pills that contain synthetic estrogen and progesterone (progestin) which are similar to the natural hormones produced iin a woman body.

Key messages

. take one pill everyday

Take any missed pill as soon as possible

Use COCs helps protect from ovarian and endometrical cancers

NB: effectiveness depends on the user. its 97% effective in preventing pregnancy if correctly and consistently.

Advantages

Contraceptive benefits

- Highly effective if used correctly and consistently
- Are effective immediately if given within the first 5 days of the cycle
- Easy to use'easy to obtain can be provided by trained non clinical service providers
- COCs are safe for the majority of women
- Reduction of menstrual flow (lighter, shorter periods)
- Decrease in dysmenorrhea (painful periods)

- Reduction of symptoms of endometriosis and polycycstic ovarian syndrome (PCOS)
- Improvement and prevention of iron deficiency anemia
- Protection against ovarian and endometrical cancer
- Treatment for acne and hirsutism

Limitations of COCs

- **1.COC**s must be taken daily to be effective, preferably at the same time each day
- 2. Effectiveness may be lowered if client is on TB drugs, anti epilepsy treatment
- 3. Contraceptive effectiveness ,could also be lowered in the presence of gastroenteritis ,severe vomiting and diarrhea
- 4.COCS do not offer protection against STI including Hepatitis Band HIV . therefore, at risk individual should use condoms to ensure protection against STI
- 5. Reduce milk production in breastfeeding women

SIDE EFFECTS OF COCS

MINOR SIDE EFFECTS

- 1. Nausea
- 2. Spotting or bleed
- 3. Mild headaches
- 4. Breast tenderness
- 5. Mood change
 - Major side effects
 - Major side effects or complications are rare but possible include
- 1. Stroke
- 2. Venous thrombosis

Progestin only pills (pops)

The progestin only pills (POPS) also called the mini pil are oral hormonal contraceptive that contain progesterone only in smaller doses

Effectiveness

Pops are 99.5% effective if used correctly and consistenatly during exclusive breastfeeding.

They are most effective when taken at the same time everyday

Advantages of POPs.

Effective and safe

Does not affect breast milk production and can be used during breastffeding starting 6 weeks after child birth

Pelvic exam is not required to irritate use

Suitable women with risk factors such heart attack, stroke and thrombosis

Return to fertility is immediate upon discontinuation

Limitation

- 1. They provide a slightly lower level of contraceptive protection than COCs
- 2. They require strict daily pill taking, preferably at the same time
- 3. They do not protect against STI, including hepatitis B and HIV/AIDS. Therefore at risk individual should use barrier method to ensure protection against sti and HIV/AID
- 4. effectivenesss may decrease if the client are also taking some other medications such as anti TB drugs, anti convulsant and antiretroviral

SIDE EFFECTS

IRREGULAR SPOTting or bleeding ,frequent or infrequent bleeding , prolonged bleeding ,bleeding changes are common but not harmful

Headache, dizziness, nausea' mood changes

Breast tenderness

Eligibility criteria

Who can use POPs

It is suitable for all ages

Women of any parity

Postpartum

- 1. Non breastfeeding mothers immediately postpartum and thereafter
- 2. Breastfeeding women at 6 weeks and thereafter

Post abortion, miscarriage or ectopic pregnancy

Previous pelvic surgery

Smoking

Obesity

Emergency hormonal contraceptive pills (EC)

Emergency contraception (EC) refers to the use of certain contraceptive methods by women to prevent pregnancy after unprotected sexual intercourse.

EC provides emergency protection (prevents pregnancy) for about 75-95% of those at risk.ec can reduce unwanted pregnancies that might lead to child neglect, abandonment, unsafe abortion and maternal deaths.

EC is an important element in post rape and in the PMTCT in HIV and it is an essential component of FP services provision

Mode of action for the EC

Prevention or delaying ovulation

Inhibiting or slowing down transportation of the egg and sperm through the fallopian tubes, which prevents fertilization and implantation

Nb:/ EC do not work once a woman is pregnant –women and girls who are already pregnant should not take ECS

Effectiveness

EC are 98% effective if used correctly i.e. if taking ECS within 120 hours. The earlier the ECS is used after unprotected sexual intercourse the more effective they are

It should be emphasized that ECPs should not be used on a regular basis from month to month because it is less effective than other methods

Advantages of ECS

- 1. Safe, effective and easy to use
- 2. Runs protection after unprotected sexual intercourse
- 3. Can be used in emergency situations without having to sees a clinician
- 4. Accessible and has less serious side effects
- 5. Can be used as a backup method' can be used anytime in the menstrual cycle

Limitation and side effects of ECs

- 1. They are only effective if used within 120hours of unprotected intercourse
- 2.
- 3. They are not used as regular method of contraception
- 4. Do not protect against STIs, HIV or AIDS



- 5. EC pills do not continue to prevent pregnancy during the rest of the cycle
- 6. EC has the potential for misuse through self prescription and sharing of pills
- 7. Efficascy depends on the client action
 - a. hey can cause nausea

Injectable contraceptives

Injectable contraceptives contain one or two contraceptive hormones and provide protectiin from pregnancy fpr one, two or three months depending on the type following an injections.

The most widely used injectable method contain only progestin

Depot –medroxyprogesterone acetate intramuscular injection given at three monthly intervals (13 weeks)

Mode of action

Progestine only injectables prevent pregnancy by preventing the release of eggs from the ovaries (suppressing ovularion)

Effectiveness

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Effectiveness depend on receiving injections on time

Its 99% effective if used correctly and consistently as per recommendation

Advantages of POIS (progestin only injection

1. Highly effective and safe

pelvic exam is not required to initiate use

They do not contain estrogen thus do not have cardiac and blood clotting side effects associated with estrogen containing pills and injectables

2. Convenient as it doesn't require daily action

Do not affect breastmilk production hence can be used during breastfeeding

- 3. Return of fertility may be delayed four months or longer after discontinuation
- 4. They offer no [progestion against ST including hepatitis B and HIV Side effects/ disadvantages
 - Changes in menstrual bleeding patterns such as irregular bleeding, heavy prolonged bleeding, light spotting or bleeding
 - Weight changes

- Headaches
- Dizziness
- Mood swings
- Abdominal bloating
- Acne
- Breast tenderness

Contraceptive implants

Contraceptive implants also sub dermal implants are small hormone progesterone bearing capsules or rods which when inserted under the skin of woman upper arm, release the hormone slowly over a period of time to prevent pregnancy.

Implants do not contain oestrogen therefore they are free from the side effects associated with that hormone

Mode of action

Contraceptive implants prevents pregnancy primarily by making cervical mucus too thick for sperm to penetrate

They also suppress ovulation in many cycles

Effectiveness of implants

Implants provide 99.9% effective protection against pregnancy

They are effective 24 hrs post insertion

Types of contraception implants

- 1 jadelle 2 rods 5 years
- 2.Implanon and implanon nxt 1 rod -3 years
- 3. Sino implant (zarin) 2 rods 4 years
- 4.Indoplant -2 rods -4 years

Advantages of implants

- i. Highly effective and offers long term protection against pregnancy
- ii. Does not interfere with act of sexualintercourse
- iii. Effective within 24 hrs after insertion
- iv. No frequent clinic visit required
- v. Fertility returns immediately after implants are removed



- vi. May reduce menstrual flow (thinning of endometrium
- vii. They protect against iron deficiency anemia
- viii. They help protect against endometrial cancer Side effects of using implants
- Change in menstrual patterns
- Headache
- Dizziness
- Nausea
- Breast tenderness
- Mood changes
- Weight changes
- Mild abdominal pain

Intrauterine contraceptive devices (iucd)

Intra uterine device is a small flexible plastic device inserted into the uterine cavity to prevent pregnancy

It provides long term protection against pregnancy

TYPES OF IUCD

Copper based devices

Hormone releasing devices

Copper based devices

Copper based devices release copper and work mainly by preventing fertilization. dtudies have shown that copper IUCD reduces the number of viable sperms that reach the fallopian tube where fertilization normally takes place

Hormone releasing iucds

Hormone releasing iucds are less widely available in Kenya . they are devices made of plastic and work by releasing a progestin during a period of five years

Mode of action

- Prevent fertization by interfering with sperm mobility
- Copper IUCD –COPPER IONS DEcreace sperm mobility and function by altering the uterine and tubal fluid environment
- Hormonal IUCD –the progesterone released thickens cervical mucus ,suppress ovulation in some cycles and thins endometrial lining

Effectiveness

IUCD is 99% effective if used correctly and consistently

Advantages of IUCDS

- High effectiveness and safety
- Provides immediate protection after insertion
- Long acting protection (copper based 12 years, hormone releasing 5 years)
- Can be used immediately after delibery (copper based)
- Immediate return to fertility upon removal of the device
- Copper IUCD is effective as an emergency contraceptive if inserted within 5 days after unprotected sex.
- Do not interfere with with breastfeeing hence can be used with women who are breastfeeding
 - Limitation and side effects
- Do not offer protection against STI / HIV transmission
- Require trained service provider for insertion and removal
- May be expelled or translocated if not properly inserted
- Perforation of uterus may occur though rare
- Copper iucds might increase menstrual bleeding and cause cramping more commonly duing the first few months,

VOULUNTARY SURGICAL CONTRACEPTION

Voluntary surgical contraception (VSC) includes surgical procedure that are intended to provide permanent contraception these include

- Bilateral tubal ligation (female)
- Vasectomy (male)

Key messages

Permanent and irreversible method very effective protection against pregnancy

Has no effect on sex drive

After vasectomy the couple must use a backup method for at least 3 months

FEMALE VOLUNTARY SURGICAL CONTRACEPTION (BILATERAL TUBAL LIGATION)

This is a minor surgical operation that involves cutting and tying the fallopian tubes in order to prevent the sperm from fertilizing the ovum that was released fro the ovary and reaching the uterine cavity.



BTL is a permanent contraception method for women not wanting any more children.hence, a client needs thorough and careful counseling before she decides to have this procedure.

A consent form must be signed by the client in all cases before the procedure is undertaken

Advantages of BTL

- Highly effective and safe
- Efficacy does not dep end on the client action
- It is permanent
- Has no effect on breastfeeding
- TL does not affect a woman sexual desire, ability and performance
- It is cost effective after the initial procedures
- No significant long term side effects

PILLARS OF SAFE MOTHERHOOD

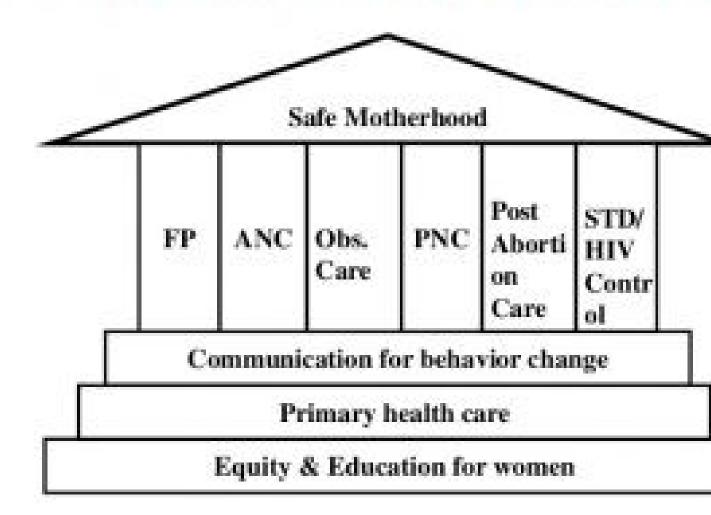
What do we understand by Safe motherhood?

- Safe motherhood is the concept or initiatives to ensure that women receive high quality care in order to achieve the optimum level of health of mother and infant.
- Safe motherhood is designed in a way that the women is ensured of high-quality gynecological, family planning, prenatal, delivery and postpartum care.
- Safe motherhood aims at improving maternal and child health and eliminating the probable risk that can occur.
- Safe motherhood is required for obtaining the desired outcome of pregnancy.
- The goal of the Safe Motherhood Program is to reduce maternal and neonatal morbidity and mortality and to improve the maternal and neonatal health through preventive and promotive activities as well as by addressing avoidable of safe motherhood. These components are achieved through the principles of safe motherhood.
- Safe motherhood also ensures the safety of overall pregnancy and health of mother and child
- factors that cause death during pregnancy, childbirth and postpartum period Safe pregnancy, safe delivery and safe birth of new born are the major components

Pillars of safe motherhood can also be considered as the principles of safe motherhood

The basic pillars/principles of safe motherhood are:

"SIX PILLARS" OF SAFE MOTHERHO



1. Family Planning:

- FP is an important component of safe motherhood
- It is necessary to ensure that individuals and couples have adequate information and services regarding FP
- FP is also necessary to plan the timing, number of children, spacing between pregnancies, delay pregnancy, etc.

2. Antenatal Care (ANC)

- ANC checkup is necessary to detect complications early and treat them as soon as possible
- It is also essential to provide pregnant women with vitamin supplements, iron tablets and vaccinations so that they can have a healthy and strong pregnancy.

3. Obstetric and Newborn Care

- Obstetric and newborn care refers to all the care and health care level initiatives provided to the mother and newborn to reduce maternal and newborn mortality and morbidity.
- Birth attendants should have the knowledge, skills, and equipment to perform a clean and safe delivery.
- Moreover, emergency care for high-risk pregnancies and complications are made available to all women and newborn who need it

4. Postnatal Care (PNC)

- It is necessary to ensure that postpartum care is provided to the mother and baby.
- It includes counselling mothers about child handling, exclusive breast feeding, etc.
- Moreover, PNC also comprises of providing awareness regarding the FP, and managing the danger signs and symptoms seen in both mother and child.

5. Post abortion Care

- It is necessary to prevent complications of abortion.
- Post abortion care helps to identify/detect if there are any complications of abortion.
- Useful to refer other reproductive health problems when necessary.

An essential element of post abortion care services is providing the woman with a family planning method before she leaves the facility. Essential Elements of Post Abortion Care (PAC) services are:

- Emergency treatment of incomplete abortion and potentially life-threatening complications .
- Post abortion family planning counseling and services.
- Links between emergency PAC services and other reproductive health care.

6. STD/HIV/AIDS Control

- HIV screening is done to prevent, and manage HIV and AIDS transmission to the baby
- To assess risk for future infection
- To provide voluntary counseling and testing
- To expand services to address mother to child transmission.

Major factors contributing to morbidity and mortality

Direct cause for the majority of maternal deaths are:

1. Severe bleeding

- Mostly bleeding after childbirth
- Includes antepartum, postpartum, abortion, and ectopic pregnancy.

2. Infections

- Usually after childbirth
- Includes infection of the uterus, tubes, urinary system and fetal infection.
- Also caused due to unhygienic delivery site and practice

3. High blood pressure during pregnancy

Includes pre-eclampsia and eclampsia

4. Complications from delivery

- Several complications can arise during the pregnancy
- Teenage pregnancy, advanced maternal age, parity, etc and many other factors can cause complications

Unsafe abortions)

3 delays

Three delays usually refer to:

- Delay in the decision to seek care (seeking care)
- Delay arrival at a health facility (reaching care) and
- Delay in obtaining the adequate treatment (receiving care)



These delays contribute to increase the complication in pregnancy. However, these delays are determined by the educational status, financial status, accessibility of health care and services, etc.

b) Accessibility

- Health services and facilities are still not available in every knock and corner of many countries
- Reaching health facility is often riskier in some places
- Lack of accessibility promotes the delay

c) Poverty

- Poverty is the other important factor contributing to maternal deaths
- People of rural areas do not fancy health services
- Seeking health services often is not the priority to those people who have to worry about hands to mouth

d) Cultural practices

- Traditional practices often prevent individual from seeking health care
- Cultural practices also determine the care given to pregnant women, food practices, etc.,

Unsafe abortion is also an example of cultural practices.

Counselling for Family Planning

Introduction

The primary objective of counselling in the context of family planning is to help people in your village decide on the number of children they wish to have, and when to have them. You can help them to choose a contraceptive method that is personally and medically appropriate. Through your counselling sessions with them, you will make sure that they understand how to use their chosen method correctly, to ensure safe and effective contraceptive protection.

Concepts of counselling

Family planning counselling is defined as a continuous process that you as the counsellor provide to help clients and people in your village make and arrive at informed choices about the size of their family (i.e. the number of children they wish to have).

Informed choice is defined as a voluntary choice or decision, based on the knowledge of all available information relevant to the choice or decision. In order to allow people to make an informed choice about family planning, you must make them aware of all the available methods, and the advantages and disadvantages of each. They should know how to use the chosen method safely and effectively, as well as understanding possible side-effects.

Always remember that family planning counselling is not a type of lecture from you to those who have come to you for help. In the process of family planning counselling there should be mutual un derstanding. You should show respect to the client who has come to see you, and deal with their problems and concerns about contraception in a straightforward way. There are a variety of approaches for different types of family planning counselling. For example, the way you would approach a session with a group would be different from the way you would work with an individual.

.1 Individual counselling

You will find that in most cases individuals prefer privacy and confidentiality during communication or counselling with you. It is important to respect the needs and interests of a client by finding a private room or place where you can talk with th

2. Couple counselling

Couple counselling is when you give a counselling service to a couple or partners together This is particularly common when they are thinking of using irreversible family planning measures, such as voluntary surgical methods.

3. Group information sharing

Group information sharing is used when individual counselling is not possible, or if there are people in your village who are more comfortable in a group. In this situation, after greeting everyone in a friendly manner, you would explain to them the benefits of family planning, discuss briefly common myths and mistaken beliefs about family planning, and then inform the group about how to obtain appropriate contraception. It is a cost-effective way of information sharing and answering general questions, but people are not likely to share their more personal concerns with you in this setting.

General principles of counselling and characteristic

Skills and characteristics of a counsellor

Once again, remind yourself of the general skills and characteristics you need to be a successful counsellor.

• What are the most important characteristics you should bring to your counselling role?



The special nature of counselling for family planning

Many people have strong ideas about family planning, but some of the ideas they have may be based on myth or mis-information. You need to be respectful and welcoming when sharing ideas, and demonstrate commitment to the necessary values and principles of family planning.

Try to find out your clients' views by encouraging them to talk. Do not ask them direct and judgmental questions such as: 'Are you one of those people who believe that modern family planning is forbidden for religious people?' Such questions sound critical and can make people feel inferior, or may make them mistrust you because they may ask themselves, 'Why should I believe this person when all my relatives share my belief?'

Always try to understand, and be sensitive to, cultural and psychological factors that may affect clients in your village adopting and using family planning methods. For example, there may be opposition to the idea of controlling the size of the family from some cultures and religions. Some methods may be unpopular with clients, for example a woman might not like the idea of having to insert a contraceptive into her body before having sex, or a man may think that a condom will take away the pleasure of sex.

• Can you give clients contraceptives if they do not want to use them?

This means that you should have good scientific knowledge of all the contraceptive methods, and understand the practical part of family planning methods. Also, you should be prepared to answer questions comfortably and without embarrassment in relation to contraceptive myths, rumours, sexuality, sexually transmitted infections (STIs), reproductive

Overview of the stages of counselling for family planning

1. General counselling

The first contact usually involves counselling on general issues to address the client's needs and concerns. You will also give general information about methods, and clear up any mistaken beliefs or myths about specific family planning methods. All this will help the client in your village arrive at an informed decision on the best contraceptive method to use. During this session you would also give information on other sexual and reproductive health issues, like sexually transmitted infections (STIs), human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS) and infertility.

3.4.2 Method-specific counselling

In **method-specific counselling**, you give more information about the chosen method. In this case, you can explain the examination for fitness (screening), and instruct on how and when to use the given method (see Box 3.1). You will also tell the client when to return for follow-up, and ask them to repeat what you have said on key information.

Box 3.1 Family planning counselling — the BRAIDED approach The acronym BRAIDED can help you remember what to talk about when you counsel clients on specific methods. It stands for:

- B Benefits of the method
- R Risks of the method, including consequences of method failure
- A Alternatives to the method (including abstinence and no method)
- I Inquiries about the method (individual's right and responsibility to ask)
- D Decision to withdraw from using the method, without penalty
- E Explanation of the method chosen
- D Documentation of the session for your own records.
- 3.4.3 Return/follow-up counselling

Follow-up counselling should always be arranged. The main aim of **follow-up counselling** is to discuss and manage any problems and side effects related to the given contraceptive method. This also gives you the opportunity to encourage the continued use of the chosen method, unless problems exist. Also use this opportunity to find out whether the client has other concerns and questions.

3.5 Steps in family planning counselling:

The GATHER approach

When you counsel a new client in your village about family planning, you should follow a step-by-step process. **GATHER** is an acronym that will help you remember the 6 basic steps for family planning counselling

It is important to know that not every new client in your village needs all the steps — you need to use the GATHER approach sensitively so that it is appropriate to each client's need. Within your community you may need to give more attention to one step than another.

Family planning counselling — the GATHER approach

G Greet the client respectfully.

A Ask them about their family planning needs.

T Tell them about different contraceptive options and methods.

H Help them to make decisions about choices of methods.

E Explain and demonstrate how to use the methods.

R Return/refer; schedule and carry out a return visit and follow up.

It is important to give more emphasis to the points under each counselling step.

G — Gree t the client

- In the first case, give your full attention to your clients.
- Greet them in a respectful manner and introduce yourself after offering seats.
- Ask them how you can help them.
- Tell them that you will not tell others what they say.
- If the counselling is in a health institution, you have to explain what will happen during the visit, describing physical examinations and laboratory tests if necessary.
- Conduct counselling in a place where no-one can overhear your conversation.

A — Ask the clients about themselves

- Help them to talk about their needs, doubts, concerns and any questions they might have.
- If they are new, use a standard checklist or form from your Health Management Information system to write down their name and age, marital status, number of pregnancies, number of births, number of living children, current and past family planning use, and basic medical history.
- Explain that you are asking for this information in order to help you to provide appropriate information, so that they can choose the family planning method which is the best for them.
- Keep questions simple and brief, and look at her/them as you speak.
- Many people do not know the names of diseases or medical conditions. Ask them specific questions. Say, 'Have you had any headaches in the past two weeks?', or 'Have you had any genital itching?', or 'Do you experience any pain when urinating?' Do not say, 'Have you had any diseases in the recent past'.
- If you have seen the client(s) previously, ask if anything has changed since the last visit.

T — Tell them all about family planning methods

- Tell them which methods are available
- Ask which methods interest them and what they know about the methods.

• Briefly describe each method of interest and explain how it works, its advantages and disadvantages, and possible side-effects.

H — Help them to choose a method

- To help them choose a method of contraception, ask them about their plans and family situation. If they are uncertain about the future, begin with the present situation.
- Ask what the spouse/partner likes and wants to use.
- Ask if there is anything they cannot understand, and repeat information when necessary.
- When the chosen method is not safe for them, explain clearly why the method may not be appropriate and help them choose another method.
- Check whether they have made a clear decision and specifically ask, 'Wh

E — Explain how to use a method

After a method has been chosen:

- Give supplies if appropriate.
- If the method cannot be given immediately, explain how, when and where it will be provided.
- For methods like voluntary sterilisation the client will have to sign a consent form. The form says that they want the method, have been informed about it, and understand this information. You must help the individual understand the consent form
- Explain how to use the method.
- Ask the client to repeat the instructions.
- Describe any possible side-effects and warning signs, and tell them what to do if they occur.
- Ask them to repeat this information back to you.
- Give them printed material about the method to take home if it is available.
- Tell them when to come back for a follow-up visit and to come back sooner if they wish, or if side-effects or warning signs occur.

3.5.6 R — Appoint a return visit for follow-up

At the follow-up visit:

• ask the client if she is, or they are, still using the method, and whether there have been any problems.

- ask if there have been any side-effects.
- reassure the client/s concerning minor side-effects. Explain that the side effects are not dangerous and suggest what can be done to relieve them.
- refer for treatment in the case of severe side-effects.
- ask the client if they have any questions.

If the clients want to use a different method, tell them about other methods and help in this choice. It is important to remember that changing methods is not bad. The main thing is that they can choose a method which is acceptable and appropriate. If the clients now want to have a child, help them to discontinue the use of their current method of family planning. Make sure the clients know when and where to go for prenatal care when the spouse becomes pregnant.

3.6 Factors influencing family planning counselling outcomes

There are different factors that affect the quality and effectiveness of communication in counselling. You should identify and address these factors in order to have successful family planning counselling sessions. These factors are divided into three broad categories.

Factors related to you

- 1. As a provider of family planning services
- 2.your ability to engage in effective communication
- 3. your technical knowledge skills
- 4.attitudes and behaviours
- 5. Social status
- 6. gender
- 7. level of education

Respecting the rights of the client is ess

of the rights of the client

Every client has the right to:

- 1. **Information** to learn about their reproductive health, contraception and abortion options.
- 2. **Access** to obtain services regardless of religion, ethnicity, age, and marital or economic status

- 3. Choice to decide freely whether to use contraception and, if so, which method.
- 4. **Safety** to have a safe abortion and to practise safe, effective contraception.
- 5. **Privacy** to have a private environment during counselling and services.
- 6. **Confidentiality** to be assured that any personal information will remain confidential.
- 7. **Dignity** to be treated with courtesy, consideration and attentiveness.
- 8. **Comfort** to feel comfortable when receiving services.
- 9. **Continuity** to receive follow-up care and contraceptive services and supplies for as long as needed.
- 10. **Opinion** to express views on the services offered

sexual dysfunction?

Sexual dysfunction is a problem that can happen during any phase of the sexual response cycle.

It prevents you from experiencing satisfaction from sexual activity.

The sexual response cycle traditionally includes excitement, plateau, orgasm and resolution. Desire and arousal are both part of the excitement phase of the sexual response. It's important to know women don't always go through these phases in order.

Types of sexual dysfunction?

Sexual dysfunction generally is classified into four categories:

- **Desire disorders:** lack of sexual desire or interest in sex.
- **Arousal disorders:** inability to become physically aroused or excited during sexual activity.
- **Orgasm disorders:** delay or absence of orgasm (climax).
- **Pain disorders:** pain during intercourse.

Who is affected by sexual dysfunction?

Sexual dysfunction can affect any age, although it is more common in those over 40 because it's often related to a decline in health associated with aging.

What are the symptoms of sexual dysfunction?

In men:

• Inability to achieve or maintain an erection (hard penis) suitable for intercourse (erectile dysfunction).



- Absent or delayed ejaculation despite enough sexual stimulation (retarded ejaculation).
- Inability to control the timing of ejaculation (early, or premature, ejaculation).

In women:

- Inability to achieve orgasm.
- Inadequate vaginal lubrication before and during intercourse.
- Inability to relax the vaginal muscles enough to allow intercourse.

In men and women:

- Lack of interest in or desire for sex.
- Inability to become aroused.
- Pain with intercourse.

causes sexual dysfunction?

Physical causes: Many physical and/or medical conditions can cause problems with sexual function. These conditions include

1.diabetes,

2.heart and vascular (blood vessel) disease

- 4. neurological disorders
- **5.** hormonal imbalances,
- **6.** chronic diseases such as kidney or liver failure
- 7. alcoholism and drug abuse.
- **8.** In addition, the side effects of some medications, including some antidepressant drugs, can affect sexual function

Psychological causes: These include work-related stress and anxiety, concern about sexual performance, marital or relationship problems, depression, feelings of guilt

INFERTILITY

Infertility happens when a couple cannot conceive after having regular unprotected sex.

It may be that one partner cannot contribute to conception, or that a woman is unable to carry a pregnancy to full term. It is often defined as not conceiving after 12 months of regular sexual intercourse without the use of birth control.

Causes of infertility

The following are common causes of infertility in men.

Semen and sperm

Share on Pinterest Sometimes the sperm cannot travel effectively to meet the egg.

Semen is the milky fluid that a man's penis releases during orgasm. Semen consists of fluid and sperm. The fluid comes from the prostate gland, the seminal vesicle, and other sex glands.

The sperm is produced in the testicles.

When a man ejaculates and releases semen through the penis, the seminal fluid, or semen, helps transport the sperm toward the egg.

The following problems are possible:

• Low sperm count: The man ejaculates a low number of sperm. A sperm count of under 15 million is considered low. Around one third of couples have difficulty conceiving due to a low sperm count.

• Low sperm mobility (motility): The sperm cannot "swim" as well as they should to reach the egg.

• Abnormal sperm: The sperm may have an unusual shape, making it harder to move and fertilize an egg.

If the sperm do not have the right shape, or they cannot travel rapidly and accurately towards the egg, conception may be difficult. Up to 2 percent of men are thought to have suboptimal sperm.

Abnormal semen may not be able to carry the sperm effectively.

This can result from:

• A medical condition: This could be a testicular infection, cancer, or surgery.

- Overheated testicles: Causes include an undescended testicle, a varicocele, or varicose
 vein in the scrotum, the use of saunas or hot tubs, wearing tight clothes, and working in
 hot environments.
- Ejaculation disorders: If the ejaculatory ducts are blocked, semen may be ejaculated into the bladder
- Hormonal imbalance: Hypogonadism, for example, can lead to a testosterone deficiency.

Other causes may include:

- Genetic factors: A man should have an X and Y chromosome. If he has two X
 chromosomes and one Y chromosome, as in Klinefelter's syndrome, the testicles will
 develop abnormally and there will be low testosterone and a low sperm count or no
 sperm.
- Mumps: If this occurs after puberty, inflammation of the testicles may affect sperm production.
- Hypospadias: The urethral opening is under the penis, instead of its tip. This abnormality
 is usually surgically corrected in infancy. If the correction is not done, it may be harder
 for the sperm to get to the female's cervix. Hypospadias affects about 1 in every 500
 newborn boys.
- Cystic fibrosis: This is a chronic disease that results in the creation of a sticky mucus.
 This mucus mainly affects the lungs, but males may also have a missing or obstructed vas deferens. The vas deferens carries sperm from the epididymis to the ejaculatory duct and the urethra.
- Radiation therapy: This can impair sperm production. The severity usually depends on how near to the testicles the radiation was aimed.
- Some diseases: Conditions that are sometimes linked to lower fertility in males are anemia, Cushing's syndrome, diabetes, and thyroid disease.

Some medications increase the risk of fertility problems in men.

- Sulfasalazine: This anti-inflammatory drug can significantly lower a man's sperm count. It is often prescribed for Crohn's disease or rheumatoid arthritis. Sperm count often returns to normal after stopping the medication.
- Anabolic steroids: Popular with bodybuilders and athletes, long-term use can seriously reduce sperm count and mobility.
- Chemotherapy: Some types may significantly reduce sperm count.
- Illegal drugs: Consumption of marijuana and cocaine can lower the sperm count.
- Age: Male fertility starts to fall after 40 years.
- Exposure to chemicals: Pesticides, for example, may increase the risk.
- Excess alcohol consumption: This may lower male fertility. Moderate alcohol
 consumption has not been shown to lower fertility in most men, but it may affect those
 who already have a low sperm count.
- Overweight or obesity: This may reduce the chance of conceiving.
- Mental stress: Stress can be a factor, especially if it leads to reduced sexual activity.

Laboratory studies have suggested that long-term acetaminophen use during pregnancy may affect fertility in males by lowering testosterone production. Women are advised not to use the drug for more than one day.

Causes in women

Infertility in women can also have a range of causes.

Risk factors

Risk factors that increase the risk include:

- Smoking significantly increases your risk of infertility
- Age: The ability to conceive starts to fall around the age of 32 years.



- Smoking: Smoking significantly increases the risk of infertility in both men and women, and it may undermine the effects of fertility treatment. Smoking during pregnancy increases the chance of pregnancy loss. Passive smoking has also been linked to lower fertility.
- Alcohol: Any amount of alcohol consumption can affect the chances of conceiving.
- Being obese or overweight: This can increase the risk of infertility in women as well as men.
- Eating disorders: If an eating disorder leads to serious weight loss, fertility problems may arise.
- Diet: A lack of folic acid, iron, zinc, and vitamin B-12 can affect fertility. Women who are at risk, including those on a vegan diet, should ask the doctor about supplements.
- Exercise: Both too much and too little exercise can lead to fertility problems.
- Sexually transmitted infections (STIs): Chlamydia can damage the fallopian tubes in a
 woman and cause inflammation in a man's scrotum. Some other STIs may also cause
 infertility.
- Exposure to some chemicals: Some pesticides, herbicides, metals, such as lead, and solvents have been linked to fertility problems in both men and women. A mouse study has suggested that ingredients in some household detergents may reduce fertility.
- Mental stress: This may affect female ovulation and male sperm production and can lead to reduced sexual activity.

Medical conditions

Some medical conditions can affect fertility.

Ovulation disorders appear to be the most common cause of infertility in women.

Ovulation is the monthly release of an egg. The eggs may never be released or they may only be released in some cycles.

Problems in the uterus or fallopian tubes can prevent the egg from traveling from the ovary to the uterus, or womb.

If the egg does not travel, it can be harder to conceive naturally.

 Previous sterilization treatment: In women who have chosen to have their fallopian tubes blocked, the process can be reversed, but the chances of becoming fertile again are not high.

Medications, treatments, and drugs

Some drugs can affect fertility in a woman. Such as

- Non-steroidal anti-inflammatory drugs (NSAIDs): Long-term use of aspirin or ibuprofen may make it harder to conceive.
- Chemotherapy: Some chemotherapy drugs can result in ovarian failure. In some cases, this may be permanent.
- Radiation therapy: If this is aimed near the reproductive organs, it can increase the risk of fertility problems.
- Illegal drugs: Some women who use marijuana or cocaine may have fertility

TYPES

- 1. primary
- 2. secondary.

Primary infertility is when a couple has not conceived after trying for at least 12 months without using birth control

Secondary infertility is when they have previously conceived but are no longer able to conceive

ANATOMY AND PHYSIOLOGY OF MALE AND FEMALE ORGANS

FEMALE REPRODUCTIVE ORGANS

- A female's internal reproductive organs are the vagina, uterus, fallopian tubes, cervix, and ovary.
- External structures include the mons pubis, pudendal cleft, labia majora and minora, vulva, Bartholin's gland, and the clitoris.
- The female reproductive system contains two main parts: the uterus, which hosts the developing fetus, produces vaginal and uterine secretions, and passes the anatomically male sperm through to the fallopian tubes; and the ovaries, which produce the anatomically female egg cell

KEY TERMS

- **ovary**: A female reproductive organ, often paired, that produces ova and in mammals secretes the hormones estrogen and progesterone.
- **oviduct**: A duct through which an ovum passes from an ovary to the uterus or to the exterior (called fallopian tubes in humans).
- vulva: The consists of the female external genital organs.
- **oogenesis**: The formation and development of an ovum.

The human female reproductive system (or female genital system) contains two main parts:

1 Uterus

- Hosts the developing fetus
- Produces vaginal and uterine secretions
- Passes the anatomically male sperm through to the fallopian tubes

2. Ovaries

- Produce the anatomically female egg cells.
- Produce and secrete estrogen and progesterone

These parts are internal; the vagina meets the external organs at the vulva, which includes the labia, clitoris, and urethra. The vagina is attached to the uterus through the cervix, while the uterus is attached to the ovaries via the fallopian tubes. At certain intervals, the ovaries release an ovum, which passes through the fallopian tube into the uterus.

If, in this transit, it meets with sperm, the sperm penetrates and merges with the egg, fertilizing it. The fertilization usually occurs in the oviducts.

The zygote then implants itself in the wall of the uterus, where it begins the process of embryogenesis and morphogenesis.

When developed enough to survive outside the womb, the cervix dilates and contractions of the uterus propel the fetus through the birth canal (vagina).

The ova are larger than sperm and have formed by the time an anatomically female infant is born

An anatomically female's internal reproductive organs are the vagina, uterus, fallopian tubes, cervix, and ovary.

The external components include the mons pubis, pudendal cleft, labia majora, labia minora, Bartholin's glands, and clitoris.

Ovaries

The ovaries are the ovum-producing organs of the internal female reproductive system.

The ovary is an ovum-producing reproductive organ, typically found in pairs as part of the vertebrate female reproductive system.

Ovaries secrete both estrogen and progesterone.

Estrogen is responsible for the appearance of secondary sex characteristics of females at puberty and for the maturation and maintenance of the reproductive organs in their mature functional state.

Progesterone functions with estrogen by promoting menstrual cycle changes in the endometrium.

Physiology and Function

The ovaries are the site of egg cell production and also have specific endocrine function.

Oogenesis

The ovaries are the site of gamete (egg cell, oocyte) production. The developing egg cell (or oocyte) grows within the environment provided by ovarian follicles. Follicles are composed of different types and number of cells according to their maturation stage, which can be determined by their size. When oocyte maturation is completed, a luteinizing hormone (LH) surge secreted by the pituitary gland stimulates follicle rupture and oocyte release.

This oocyte development and release process is referred to as ovulation. The follicle remains functional and transforms into a corpus luteum, which secretes progesterone to prepare the uterus for possible embryo implantation.



Endocrine Function

Ovaries secrete estrogen, progesterone, and testosterone. Estrogen is responsible for the secondary sex characteristics of females at puberty. It is also crucial for the maturation and maintenance of the mature and functional reproductive organs. Progesterone prepares the uterus for pregnancy and the mammary glands for lactation. The co-actions of progesterone and estrogen promote menstrual cycle changes in the endometrium. In women, testosterone is important for the development of muscle mass, muscle and bone strength, and for optimal energy level. It also has a role in libido in women.

Uterus

The uterus is the largest and major organ of the female reproductive tract that is the site of fetal growth and is hormonally responsive.

The uterus or womb is a major female hormone -responsive reproductive sex organ of most mammals including humans.

One end, the cervix, opens into the vagina, while the other is connected to one or both fallopian tubes, depending on the species.

It is within the uterus that the fetus develops during gestation, usually developing completely in placental mammals such as humans.

Two Müllerian ducts usually form initially in a female fetus and, in humans, they completely fuse into a single uterus depending on the species. The uterus consists of a body and a cervix. The cervix protrudes into the vagina. The uterus is held in position within the pelvis by condensations of endopelvic fascia, which are called ligaments. These ligaments include the pubocervical, transverse, cervical, cardinal, and uterosacral ligaments. It is covered by a sheet-like fold of peritoneum, the broad ligament.

The uterus is essential in sexual response by directing blood flow to the pelvis and to the external genitalia, including the ovaries, vagina, labia, and clitoris.

The reproductive function of the uterus is to accept a fertilized ovum which passes through the utero-tubal junction from the fallopian tube.

It implants into the endometrium, and derives nourishment from blood vessels which develop exclusively for this purpose.

The fertilized ovum becomes an embryo, attaches to a wall of the uterus, creates a placenta, and develops into a fetus (gestates) until childbirth. Due to anatomical barriers such as the pelvis, the

uterus is pushed partially into the abdomen due to its expansion during pregnancy. Even during pregnancy, the mass of a human uterus amounts to only about a kilogram (2.2 pounds).

The uterus is located inside the pelvis immediately dorsal (and usually somewhat rostral) to the urinary bladder and ventral to the rectum. The human uterus is pear-shaped and about three inches (7.6 cm) long. The uterus can be divided anatomically into four segments: The fundus, corpus, cervix and the internal.

Female Duct System

The Fallopian tubes, or oviducts, connect the ovaries to the uterus

- The Fallopian tube allows passage of the egg from the ovary to the uterus.
- The lining of the Fallopian tubes are ciliated and have several segments, including the infundibulum, ampullary, isthmus, and interstitial regions.
- Interspersed between the ciliated cells are peg cells, which contain apical granules and produce the tubular fluid that contains nutrients for spermatozoa, oocytes, and zygotes.
- Occasionally, the embryo implants into the Fallopian tube instead of the uterus, creating an ectopic pregnancy.

Key Terms

- **oviduct**: A duct through which an ovum passes from an ovary to the uterus or to the exterior
- **fallopian tubes**: Also known as oviducts, uterine tubes, and salpinges (singular salpinx), two very fine tubes lined with ciliated epithelia, leading from the ovaries of female mammals into the uterus via the uterotubal junction.
- **ovarian follicle**: The basic units of female reproductive biology, each composed of roughly spherical aggregations of cells found in the ovary.

Vagina

- The vagina is the female reproductive tract and has two primary functions: sexual intercourse and childbirth. The vagina is situated between the cervix of the uterus and the external genitalia, primarily the vulva.
- Although there is wide anatomical variation, the length of the unaroused vagina of a woman of child-bearing age is approximately 6 to 7.5 cm (2.5 to 3 in) across the anterior wall (front), and 9 cm (3.5 in) long across the posterior wall (rear).
- During sexual arousal the vagina expands in both length and width.



- A series of ridges produced by the folding of the wall of the outer third of the vagina is called the vaginal rugae.
- Vaginal lubrication is provided by the Bartholin's glands near the vaginal opening and the cervix.
- The hymen is a membrane of tissue that surrounds or partially covers the external vaginal opening.

Key Terms

- **vulva**: The vaginal opening to the uterus.
- **clitoris**: A small, sensitive, and elongated erectile organ at the anterior part of the vulva in female mammals, homologous with the penis.
- **Skene's glands**: Glands located on the anterior wall of the vagina, around the lower end of the urethra, that drain into the urethra and near the urethral opening. These may be near or part of the G-spot.
- **vagina**: A fibromuscular tubular tract which is the female sex organ and has two main functions, sexual intercourse and childbirth.

Vulva

The vulva is the external genitalia of the female reproductive tract, situated immediately external to the genital orifice

Key Points

- Major structures of the vulva include the labia major and minora, mons pubis, clitoris, bulb of vestibule, vulva vestibule, vestibular glands, and the genital orifice (or opening of the vagina).
- The vulva is rich in nerves that are stimulated during sexual activity and arousal.
- The vulva also contains the opening of the female urethra and thus serves the vital function of passing urine.

Key Terms

• **mons pubis**: A fleshy protuberance over the pubic bones that becomes covered with hair during puberty.

The vulva consists of the external genital organs of the female mammal. Its development occurs during several phases, chiefly during the fetal and pubertal periods.

As the outer portal of the human uterus or womb, the vulva protects its opening with a "double door": the labia majora (large lips) and the labia minora (small lips). The vulva also contains the opening of the female urethra, and thus serves the vital function of passing urine.

In human beings, major structures of the vulva are:

- The mons pubis
- The labia majora and the labia minora
- The external portion of the clitoris and the clitoral hood
- The vulval vestibule
- The pudendal cleft
- The frenulum labiorum pudendi or fourchette
- The opening (or urinary meatus) of the urethra
- The opening (or introitus) of the vagina
- The hymen

Other notable structures include:

- The perineum
- The sebaceous glands on labia majora

The vaginal glands (Bartholin's glands and paraurethral or Skene's, glands) The clitoris is located at the front of the vulva where the labia minora meet. The visible portion of the clitoris is the clitoral glans, roughly the size and shape of a pea. The clitoral glans is highly sensitive, containing as many nerve endings as the analogous organ in males, the glans penis. The point where the labia minora attach to the clitoris is called the frenulum clitoridis. A prepuce, the clitoral hood, normally covers and protects the clitoris; however, in women with particularly large clitorises or small prepuces, the clitoris may be partially or wholly exposed. The clitoral hood is the female equivalent.

Perineum

The perineum is the region between the genitals and the anus, including the perineal body and surrounding structures.

Describe the perineum and its functions

Key Points

• The perineum refers to both external and deep structures.

- Perineal tears and episiotomy often occur in childbirth with first-time deliveries, but the risk of these injuries can be reduced by preparing the perineum through massage.
- The perineum is an erogenous zone for both males and females.

Key Terms

- **perineum**: The region of the body inferior to the pelvic diaphragm and between the legs. It is a diamond-shaped area on the inferior surface of the trunk which includes the anus and, in females, the vagina.
- **episiotomy**: A surgical incision through the perineum made to enlarge the vagina and assist childbirth.
- **perineal body**: A pyramid-shaped fibromuscular mass in the middle line of the perineum at the junction between the urogenital triangle and the anal triangle.
- In human anatomy, the perineum is the surface region between the pubic symphysis and coccyx in both males and females, including the perineal body and surrounding structures. The boundaries vary in classification but generally include the genitals and anus. It is an erogenous zone for both males and females the male foreskin and may be partially hidden inside of the pudendal cleft.
- Labia majora: The labia majora enclose and protect the other external reproductive organs. Literally translated as "large lips," the labia majora are relatively large and fleshy, and are comparable to the scrotum in males. The labia majora contain sweat and oil-secreting glands. After puberty, the labia majora are covered with hair.
- **Labia minora:** Literally translated as "small lips," the labia minora can be very small or up to 2 inches wide. They lie just inside the labia majora, and surround the openings to the vagina (the canal that joins the lower part of the uterus to the outside of the body) and urethra (the tube that carries urine from the bladder to the outside of the body).
- **Bartholin's glands:** These glands are located beside the vaginal opening and produce a fluid (mucus) secretion.
- Clitoris: The two labia minora meet at the clitoris, a small, sensitive protrusion that is comparable to the penis in males. The clitoris is covered by a fold of skin, called the prepuce, which is similar to the foreskin at the end of the penis. Like the penis, the clitoris is very sensitive to stimulation and can become erect

Mammary Glands

A mammary gland is an organ in female mammals that produces milk to feed young offspring

Key Points

• Mammary glands are not associated with the female reproductive tract, but develop as secondary sex characteristics in reproductive-age females.

- The basic components of a mature mammary gland are the alveoli, hollow cavities, a few millimeters large lined with milk-secreting cuboidal cells and surrounded by myoepithelial cells.
- Alveoli join up to form groups known as lobules, and each of which has a lactiferous duct that drains into openings in the nipple.
- Secretory alveoli develop mainly in pregnancy, when rising levels of prolactin, estrogen, and progesterone cause further branching, together with an increase in adipose tissue and a richer blood flow.

Key Terms

- **beta-1 integrin**: One of the regulators of mammary epithelial cell growth and differentiation.
- mammary gland: A gland that secretes milk for suckling an infant or offspring.
- **lactiferous duct**: The components that form a branched system connecting the lobules of the mammary gland to the tip of the nipple.

A mammary gland is an organ in female mammals that produces milk to feed young offspring.

MENSTRUAL CYCLE

During each menstrual cycle, an egg develops and is released from the ovaries. The lining of the uterus builds up. If a pregnancy doesn't happen, the uterine lining sheds during a menstrual period. Then the cycle starts again.

A woman's menstrual cycle is divided into four phases:

- menstrual phase
- follicular phase
- ovulation phase
- luteal phase

The length f each phase can differ from woman to woman, and it can change over time.

Menstrual phase



The menstrual phase is the first stage of the menstrual cycle. It's also when you get your period.

This phase starts when an egg from the previous cycle isn't fertilized. Because pregnancy hasn't taken place, levels of the hormones estrogen and progesterone drop.

The thickened lining of your uterus, which would support a pregnancy, is no longer needed, so it sheds through your vagina. During your period, you release a combination of blood, mucus, and tissue from your uterus.

Period symptoms

- cramps
- tender breasts
- bloating
- mood swings
- irritability
- headaches
- tiredness
- low back pain

On average, women are in the menstrual phase of their cycle for 3 to 7 days. Some women have longer periods than others.

Follicular phase

The follicular phase starts on the first day of your period (so there is some overlap with the menstrual phase) and ends when you ovulate.

It starts when the hypothalamus sends a signal to your pituitary gland to release follicle-stimulating hormone (FSH).

This hormone stimulates your ovaries to produce around 5 to 20 small sacs called follicles. Each follicle contains an immature egg.

Only the healthiest egg will eventually mature. (On rare occasions, a woman may have two eggs mature.) The rest of the follicles will be reabsorbed into your body.

The maturing follicle sets off a surge in estrogen that thickens the lining of your uterus. This creates a nutrient-rich environment for an embryo to grow.

The average follicular phaseTrusted Source lasts for about 16 days. It can range from 11 to 27 days, depending on your cycle.

Ovulation phase

Rising estrogen levels during the follicular phase trigger your pituitary gland to release luteinizing hormone (LH). This is what starts the process of ovulation.

Ovulation is when your ovary releases a mature egg. The egg travels down the fallopian tube toward the uterus to be fertilized by sperm.

The ovulation phase is the only time during your menstrual cycle when you can get pregnant. You can tell that you're ovulating by symptoms like these:

- a slight rise in basal body temperature
- thicker discharge that has the texture of egg whites

Ovulation happens at around day 14 if you have a 28-day cycle — right in the middle of your menstrual cycle. It lasts about 24 hours. After a day, the egg will die or dissolve if it isn't fertilized.

Luteal phase

After the follicle releases its egg, it changes into the corpus luteum. This structure releases hormones, mainly progesterone and some estrogen. The rise in hormones keeps your uterine lining thick and ready for a fertilized egg to implant.

If you do get pregnant, your body will produce human chorionic gonadotropin (hCG). This is the hormone pregnancy tests detect. It helps maintain the corpus luteum and keeps the uterine lining thick.

If you don't get pregnant, the corpus luteum will shrink away and be resorbed. This leads to decreased levels of estrogen and progesterone, which causes the onset of your period. The uterine lining will shed during your period.

During this phase, if you don't get pregnant, you may experience symptoms of premenstrual syndrome (PMS). These include:

- bloating
- breast swelling, pain, or tenderness
- mood changes
- headache
- weight gain
- changes in sexual desire
- food cravings
- trouble sleeping

PREGNANCY

Pregnancy occurs when a sperm fertilizes an egg after it's released from the ovary during ovulation. The fertilized egg then travels down into the uterus, where implantation occurs. A successful implantation results in pregnancy. On average, a full-term pregnancy lasts 40 weeks. There are many factors that can affect a pregnancy. Women who receive an early pregnancy diagnosis and prenatal care are more likely to experience a healthy pregnancy and give birth to a healthy baby.

Knowing what to expect during the full pregnancy term is important for monitoring both your health and the health of the baby. If you'd like to prevent pregnancy, there are also effective forms of birth control you should keep in mind.

Symptoms of pregnancy

You may notice some signs and symptoms before you even take a pregnancy test. Others will appear weeks later, as your hormone levels change.

Missed period

A missed period is one of the earliest symptoms of pregnancy (and maybe the most classic one). However, a missed period doesn't necessarily mean you're pregnant, especially if your cycle tends to be irregular.

There are many health conditions other than pregnancy that can cause a late or missed period.

Headache

Headaches are common in early pregnancy. They're usually caused by altered hormone levels and increased blood volume. Contact your doctor if your headaches don't go away or are especially painful.

Spotting



Some women may experience light bleeding and spotting in early pregnancy. This bleeding is most often the result of implantation. Implantation usually occurs one to two weeks after fertilization.

Early pregnancy bleeding can also result from relatively minor conditions such as an infection or irritation. The latter often affects the surface of the cervix (which is very sensitive during pregnancy).

Bleeding can also sometimes signal a serious pregnancy complication, such as miscarriage, ectopic pregnancy, or placenta previa. Always contact your doctor if you're concerned.

Weight gain

You can expect to gain between 1 and 4 pounds in your first few months of pregnancy. Weight gain becomes more noticeable toward the beginning of your second trimester.

Pregnancy-induced hypertension

High blood pressure, or hypertension, sometimes develops during pregnancy. A number of factors can increase your risk, including:

- being overweight or obese
- smoking
- having a prior history or a family history of pregnancy-induced hypertension

Heartburn

Hormones released during pregnancy can sometimes relax the valve between your stomach and esophagus. When stomach acid leaks out, this can result Sin heartburn.

Constipation

Hormone changes during early pregnancy can slow down your digestive system. As a result, you may become constipated.

Cramps

As the muscles in your uterus begin to stretch and expand, you may feel a pulling sensation that resembles menstrual cramps. If spotting or bleeding occurs alongside your cramps, it could signal a miscarriage or an ectopic pregnancy.

Back pain

Hormones and stress on the muscles are the biggest causes of back pain in early pregnancy. Later on, your increased weight and shifted center of gravity may add to your back pain. Around half of all pregnant women report back pain during their pregnancy.

Anemia

Pregnant women have an increased risk of anemia, which causes symptoms such as lightheadedness and dizziness.

The condition can lead to premature birth and low birth weight. Prenatal care usually involves screening for anemia.

Depression

Between 14 and 23 percent of all pregnant women develop depression during their pregnancy. The many biological and emotional changes you experience can be contributing causes.

Be sure to tell your doctor if you don't feel like your usual self.

Insomnia

Insomnia is another common symptom of early pregnancy. Stress, physical discomfort, and hormonal changes can be contributing causes. A balanced diet, good sleep habits, and yoga stretches can all help you get a good night's sleep.

Breast changes

Breast changes are one of the first noticeable signs of pregnancy. Even before you're far enough along for a positive test, your breasts may begin to feel tender, swollen, and generally heavy or full. Your nipples may also become larger and more sensitive, and the areolae may darken.

Acne

Because of increased androgen hormones, many women experience acne in early pregnancy. These hormones can make your skin oilier, which can clog pores. Pregnancy acne is usually temporary and clears up after the baby is born.

Vomiting

Vomiting is a component of "morning sickness," a common symptom that usually appears within the first four months. Morning sickness is often the first sign that you're pregnant. Increased hormones during early pregnancy are the main cause.

Hip pain

Hip pain is common during pregnancy and tends to increase in late pregnancy. It can have a variety of causes, including:

- pressure on your ligaments
- sciatica
- changes in your posture
- a heavier uterus

Diarrhea

Diarrhea and other digestive difficulties occur frequently during pregnancy. Hormone changes, a different diet, and added stress are all possible explanations. If diarrhea lasts more than a few days, contact your doctor to make sure you don't become dehydrated.

Stress and pregnancy

While pregnancy is usually a happy time, it can also be a source of stress. A new baby means big changes to your body, your personal relationships, and even your finances. Don't hesitate to ask your doctor for help if you begin to feel overwhelmed.

The bottom line

If you think you may be pregnant, you shouldn't rely solely on these signs and symptoms for confirmation. Taking a home pregnancy test or seeing your doctor for lab testing can confirm a possible pregnancy.

Many of these signs and symptoms can also be caused by other health conditions, such as premenstrual syndrome (PMS). Learn more about the early symptoms of pregnancy — such as how soon they'll appear after you miss your period.

Pregnancy week by week

Pregnancy weeks are grouped into three trimesters, each one with medical milestones for both you and the baby.

First trimester

A baby grows rapidly during the first trimester (weeks 1 to 12). The fetus begins developing their brain, spinal cord, and organs. The baby's heart will also begin to beat.

During the first trimester, the probability of a miscarriage is relatively high. According to the American College of Obstetricians and Gynecologists (ACOG), it's estimated that about 1 in 10 pregnancies end in miscarriage, and that about 85 percent of these occur in the first trimester.

Seek immediate help if you experience the symptoms of miscarriage.

Second trimester

During the second trimester of pregnancy (weeks 13 to 27), your healthcare provider will likely perform an anatomy scan ultrasound.

This test checks the fetus's body for any developmental abnormalities. The test results can also reveal the sex of your baby, if you wish to find out before the baby is born.

You'll probably begin to feel your baby move, kick, and punch inside of your uterus.

After 23 weeks, a baby *in utero* is considered "viable." This means that it could survive living outside of your womb. Babies born this early often have serious medical issues. Your baby has a much better chance of being born healthy the longer you are able to carry the pregnancy.

Third trimester

During the third trimester (weeks 28 to 40), your weight gain will accelerate, and you may feel more tired.

Your baby can now sense light as well as open and close their eyes. Their bones are also formed.

As labor approaches, you may feel pelvic discomfort, and your feet may swell. Contractions that don't lead to labor, known as Braxton-Hicks contractions, may start to occur in the weeks before you deliver.

The bottom line

Every pregnancy is different, but developments will most likely occur within this general time frame. Find out more about the changes you and your baby will undergo throughout the trimesters and sign up for our I'm Expecting newsletter to receive week-by-week pregnancy guidance.

Pregnancy tests

Home pregnancy tests are very accurate after the first day of your missed period. If you get a positive result on a home pregnancy test, you should schedule an appointment with your doctor right away. An ultrasound will be used to confirm and date your pregnancy.

Pregnancy is diagnosed by measuring the body's levels of human chorionic gonadotropin (hCG). Also referred to as the pregnancy hormone, hCG is produced upon implantation. However, it may not be detected until after you miss a period.



After you miss a period, hCG levels increase rapidly. hCG is detected through either a urine or a blood test.

Urine tests may be provided at a doctor's office, and they're the same as the tests you can take at home.

Blood tests can be performed in a laboratory. hCG blood tests are about as accurate as home pregnancy tests. The difference is that blood tests may be ordered as soon as six days after ovulation.

The sooner you can confirm you're pregnant, the better. An early diagnosis will allow you to take better care of your baby's health. Get more information on pregnancy tests, such as tips for avoiding a "false negative" result.

Pregnancy and vaginal discharge

An increase in vaginal discharge is one of the earliest signs of pregnancy. Your production of discharge may increase as early as one to two weeks after conception, before you've even missed a period.

As your pregnancy progresses, you'll continue to produce increasing amounts of discharge. The discharge will also tend to become thicker and occur more frequently. It's usually heaviest at the end of your pregnancy.

During the final weeks of your pregnancy, your discharge may contain streaks of thick mucus and blood. This is called "the bloody show." It can be an early sign of labor. You should let your doctor know if you have any bleeding.

Normal vaginal discharge, or leukorrhea, is thin and either clear or milky white. It's also mild-smelling.

If your discharge is yellow, green, or gray with a strong, unpleasant odor, it's considered abnormal. Abnormal discharge can be a sign of an infection or a problem with your pregnancy, especially if there's redness, itching, or vulvar swelling.

If you think you have abnormal vaginal discharge, let your healthcare provider know immediately. Learn more about vaginal discharge during pregnancy.

Pregnancy and urinary tract infections (UTIs)

Urinary tract infections (UTIs) are one of the most common complications women experience during pregnancy. Bacteria can get inside a woman's urethra, or urinary tract, and can move up into the bladder. The fetus puts added pressure on the bladder, which can cause the bacteria to be trapped, causing an infection.

Symptoms of a UTI usually include pain and burning or frequent urination. You may also experience:

- cloudy or blood-tinged urine
- pelvic pain
- lower back pain
- fever
- nausea and vomiting

Nearly 18 percent of pregnant women develop a UTI. You can help prevent these infections by emptying your bladder frequently, especially before and after sex. Drink plenty of water to stay hydrated. Avoid using douches and harsh soaps in the genital area.

Contact your healthcare provider if you have symptoms of a UTI. Infections during pregnancy can be dangerous because they increase the risk of premature labor.

When caught early, most UTIs can be treated with antibiotics that are effective against bacteria but still safe for use during pregnancy. Follow the advice here to prevent UTIs before they even start.

Pregnancy or PMS

The symptoms of early pregnancy can often mimic those of premenstrual syndrome (PMS). It may be difficult for a woman to know if she's pregnant or simply experiencing the onset of another menstrual period.

It's important for a woman to know as soon as possible if she's pregnant so that she can get proper prenatal care. She may also want to make certain lifestyle changes, such as abstaining from alcohol, taking prenatal vitamins, and optimizing her diet.

Taking a pregnancy test is the best, and easiest, way to determine if it's PMS or early pregnancy. You can take a home test or visit your healthcare provider.

Some common symptoms of both PMS and early pregnancy include:

- breast pain
- bleeding
- mood changes
- fatigue
- food sensitivities
- cramping

Early pregnancy and PMS are often difficult to tell apart. Learn to distinguish between the two with the help of this Venn diagram.

Pregnancy diet

A healthy pregnancy diet should be much the same as your typical healthy diet, only with 340 to

450 additional calories per day. Aim for a healthy mix of foods, including:

complex carbohydrates

protein

vegetables and fruits

grains and legumes

healthy fats

If you already eat a healthy diet, you'll only need to make slight changes. Fluids, fiber, and iron-

rich foods are especially important during pregnancy.

Vitamins and minerals

Pregnant women require larger amounts of some vitamins and minerals than women who aren't

pregnant. Folic acid and zinc are just two examples.

Once you find out you're pregnant, you may wish to increase your vitamin and mineral intake

with the help of supplements. Be sure to read nutrition labels and seek your doctor's advice

before using any supplements or over-the-counter (OTC) medications.

Although rare, taking supplements could result in vitamin toxicity or overdose. However, a

complete prenatal vitamin will probably contain a good mix of the nutrients that you need for a

healthy pregnancy.

Try it: Shop for complete prenatal vitamins.

The bottom line

Taking care of yourself is one of the best ways to take care of your growing baby. Discover the 18 vitamins and minerals that lay the foundation for an optimal pregnancy diet.

Pregnancy and exercise

Exercise is essential to keeping you fit, relaxed, and ready for labor. Yoga stretches in particular will help you stay limber. It's important not to overdo your stretches, however, as you could risk injury.

Other good exercises for pregnancy are gentle Pilates, walking, and swimming.

You may need to modify your current fitness routine to accommodate your changing body and lower energy levels. Work with your healthcare provider or a personal trainer to ensure that you aren't overexerting yourself. Get more ideas for staying fit in your first trimester.

Pregnancy massage

Practicing relaxation techniques can help relieve some of the stress and anxiety you may feel throughout your pregnancy.

If you're searching for ways to stay calm, consider trying a prenatal massage. A prenatal massage is good for relieving mild tension. It may also help ease your body and muscle aches.

Massages are generally safe at any time during your pregnancy. Some facilities avoid performing them in the first trimester because the risk of miscarriage is highest during this period.

Getting your doctor's approval before you get a massage is a good idea, especially if you've had pain in your calves or other parts of your legs.

Essential oils

Using essential oils during pregnancy is controversial. Some healthcare professionals say that certain oils can be safe and helpful for relaxing and alleviating pain during pregnancy and labor. However, they also warn against using the oils in the first trimester.

According to the nonprofit National Association for Holistic Aromatherapy, the main point of contention is whether oils used during pregnancy can harm the growing baby if they cross over into the placenta.

More research is needed about using essential oils during pregnancy and labor. If you plan to use them, seek guidance from your healthcare provider.

The bottom line

Prenatal massage can be a soothing and tranquil part of your pregnancy routine, with or without the essential oils. See how it compares to other types of massage here.

When to seek medical care

Most women in their 20s or early 30s have a good chance of a problem-free pregnancy. Teens and women over the age of 35 are at a higher risk for health complications.

Underlying conditions

Underlying health conditions such as high blood pressure, diabetes, or cardiovascular disease will increase your risk of pregnancy complications. Other examples include:

- cancer
- kidney disease
- epilepsy



If you have one of these conditions, ensure that it's properly monitored and treated throughout your pregnancy. Otherwise, it can lead to miscarriage, poor fetal growth, and birth defects.

Other risk factors

Other factors that can affect an otherwise healthy pregnancy include:

- multiple-birth pregnancies, such as twins or triplets
- infections, including STDs
- being overweight or obese
- anemia

Pregnancy complications

Pregnancy complications can involve the baby's health, the mother's health, or both. They can occur during pregnancy or delivery.

Common pregnancy complications include:

- high blood pressure
- gestational diabetes
- preeclampsia
- preterm labor
- miscarriage

Addressing them early can minimize the harms done to the mother or the baby. Know your options when it comes to treating pregnancy complications.

Pregnancy and labor

Sometime after your fourth month of pregnancy, you may begin to experience Braxton-Hicks contractions, or false labor. They're completely normal and serve to prepare your uterus for the job ahead of real labor.

Braxton-Hicks contractions don't occur at regular intervals, and they don't increase in intensity. If you experience regular contractions before week 37, it could be preterm labor. If this occurs, call your healthcare provider for help.

Early labor

Labor contractions are generally classified as early labor contractions and active labor contractions. Early labor contractions last between 30 and 45 seconds. They may be far apart at first, but by the end of early labor, contractions will be about five minutes apart.

Your water might break early during labor, or your doctor may break it for you later on during your labor. When the cervix begins to open, you'll see a blood-tinged discharge coating your mucous plug.

Active labor

In active labor, the cervix dilates, and the contractions get closer together and become more intense.

If you're in active labor, you should call your healthcare provider and head to your birth setting. If you're unsure whether it's active labor, it's still a good idea to call and check in.

Labor pain

Pain will be at its height during active labor. Have a discussion with your doctor about your preferred method of dealing with pain.

You may choose drug-free measures such as meditation, yoga, or listening to music.



If you choose to manage your pain with drugs, your doctor will need to know whether to use analgesics or anesthetics.

Analgesics, such as meperidine (Demerol), dull the pain but allow you to retain some feeling. Anesthetics, such as an epidural, prevent certain muscle movement and completely block the pain.

The bottom line

Whether you're planning for a vaginal or a cesarean delivery, you may feel nervous as your due date approaches. Know what to expect with this guide to the different stages of labor.

Prognosis

You're likely to move through each week of your pregnancy without too much trouble. Pregnancy brings with it many changes to your body, but those changes don't always have a serious impact on your health.

However, certain lifestyle choices can either help or actively harm your baby's development.

Some actions that can keep you and your baby healthy include:

- taking a multivitamin
- getting sufficient sleep
- practicing safe sex
- getting a flu shot
- visiting your dentist

Some things you'll want to avoid include:

- smoking
- drinking alcohol
- eating raw meat, deli meat, or unpasteurized dairy products
- sitting in a hot tub or sauna
- gaining too much weight

Medications

It can be hard to determine which medications you can take during pregnancy and which ones you should avoid. You'll have to weigh the benefits to your health against potential risks to the developing baby.

Ask your healthcare provider about any drugs you may take, even OTC ones for minor ailments such as headaches.

According to the Food and Drug Administration (FDA)Trusted SourceTrusted Source, each year 50 percent of pregnant women in the United States report taking at least one medication.

In the 1970s, the FDA created a letter systemTrusted SourceTrusted Source to categorize drugs and their perceived risk to pregnant women. However, they began to phase out this letter system (and use updated drug labeling) in 2015. Their new rules for drug labelingTrusted SourceTrusted Source only apply to prescription drugs.

The service MotherToBaby also provides up-to-date information on the safety of specific drugs.

The bottom line

Learning or relearning all the rules of pregnancy can be overwhelming, especially if you're having your first child. Feel more prepared with this handy list of pregnancy do's and don'ts.

The timing of your first prenatal visit may depend on your overall health. Most women may have their first visit during week 8 of pregnancy. Women whose pregnancies are considered high-risk, such as those who are over 35 or have chronic conditions, may be asked to see their doctors earlier.

MENOPAUSE

Menopause is the time that marks the end of your menstrual cycles. It's diagnosed after you've gone 12 months without a menstrual period. Menopause can happen in y

our 40s or 50s, but the average age is 51 in the United States.

Menopause is a natural biological process. But the physical symptoms, such as hot flashes, and emotional symptoms of menopause may disrupt your sleep, lower your energy or affect emotional health. There are many effective treatments available, from lifestyle adjustments to hormone therapy.

Symptoms

In the months or years leading up to menopause (perimenopause), you might experience these signs and symptoms:

- Irregular periods
- Vaginal dryness
- Hot flashes
- Chills
- Night sweats
- Sleep problems

- Mood changes
- Weight gain and slowed metabolism
- Thinning hair and dry skin
- Loss of breast fullness

Signs and symptoms, including changes in menstruation can vary among women. Most likely, you'll experience some irregularity in your periods before they end.

Skipping periods during perimenopause is common and expected. Often, menstrual periods will skip a month and return, or skip several months and then start monthly cycles again for a few months. Periods also tend to happen on shorter cycles, so they are closer together. Despite irregular periods, pregnancy is possible. If you've skipped a period but aren't sure you've started the menopausal transition, consider a pregnancy test.

When to see a doctor

Keep up with regular visits with your doctor for preventive health care and any medical concerns. Continue getting these appointments during and after menopause.

Preventive health care as you age may include recommended health screening tests, such as colonoscopy, mammography and triglyceride screening. Your doctor might recommend other tests and exams, too, including thyroid testing if suggested by your history, and breast and pelvic exams.

Always seek medical advice if you have bleeding from your vagina after menopause

Causes

Menopause can result from:

• Naturally declining reproductive hormones. As you approach your late 30s, your ovaries start making less estrogen and progesterone — the hormones that regulate menstruation — and your fertility declines.



In your 40s, your menstrual periods may become longer or shorter, heavier or lighter, and more or less frequent, until eventually — on average, by age 51 — your ovaries stop releasing eggs, and you have no more periods.

• Surgery that removes the ovaries (oophorectomy). Your ovaries produce hormones, including estrogen and progesterone, that regulate the menstrual cycle. Surgery to remove your ovaries causes immediate menopause. Your periods stop, and you're likely to have hot flashes and experience other menopausal signs and symptoms. Signs and symptoms can be severe, as hormonal changes occur abruptly rather than gradually over several years.

Surgery that removes your uterus but not your ovaries (hysterectomy) usually doesn't cause immediate menopause. Although you no longer have periods, your ovaries still release eggs and produce estrogen and progesterone.

- Chemotherapy and radiation therapy. These cancer therapies can induce menopause, causing symptoms such as hot flashes during or shortly after the course of treatment. The halt to menstruation (and fertility) is not always permanent following chemotherapy, so birth control measures may still be desired. Radiation therapy only affects ovarian function if radiation is directed at the ovaries. Radiation therapy to other parts of the body, such as breast tissue or the head and neck, won't affect menopause.
- **Primary ovarian insufficiency.** About 1% of women experience menopause before age 40 (premature menopause). Premature menopause may result from the failure of your ovaries to produce normal levels of reproductive hormones (primary ovarian insufficiency), which can stem from genetic factors or autoimmune disease. But often no cause of premature menopause can be found. For these women, hormone therapy is typically recommended at least until the natural age of menopause in order to protect the brain, heart and bones.

Complications

After menopause, your risk of certain medical conditions increases. Examples include:

• **Heart and blood vessel (cardiovascular) disease.** When your estrogen levels decline, your risk of cardiovascular disease increases. Heart disease is the leading cause of death in women as well as in men. So it's important to get regular exercise, eat a healthy diet and maintain a normal weight. Ask your doctor for advice on how

to protect your heart, such as how to reduce your cholesterol or blood pressure if it's too high.

- Osteoporosis. This condition causes bones to become brittle and weak, leading to
 an increased risk of fractures. During the first few years after menopause, you may
 lose bone density at a rapid rate, increasing your risk of osteoporosis.
 Postmenopausal women with osteoporosis are especially susceptible to fractures of
 their spine, hips and wrists.
- Urinary incontinence. As the tissues of your vagina and urethra lose elasticity, you may experience frequent, sudden, strong urges to urinate, followed by an involuntary loss of urine (urge incontinence), or the loss of urine with coughing, laughing or lifting (stress incontinence). You may have urinary tract infections more often.

Strengthening pelvic floor muscles with Kegel exercises and using a topical vaginal estrogen may help relieve symptoms of incontinence. Hormone therapy may also be an effective treatment option for menopausal urinary tract and vaginal changes that can result in urinary incontinence.

- **Sexual function.** Vaginal dryness from decreased moisture production and loss of elasticity can cause discomfort and slight bleeding during sexual intercourse. Also, decreased sensation may reduce your desire for sexual activity (libido).
 - Water-based vaginal moisturizers and lubricants may help. If a vaginal lubricant isn't enough, many women benefit from the use of local vaginal estrogen treatment, available as a vaginal cream, tablet or ring.
- Weight gain. Many women gain weight during the menopausal transition and after menopause because metabolism slows. You may need to eat less and exercise more, just to maintain your current weight

IMPORTANCE OF REPRODUCTIVE HEALTH

- It helps in educating every youth about sexual and reproductive health.
- It creates awareness among adolescents about safe sexual practices.
- It helps in preventing sexually transmitted infections, including HIV/AIDS.
- It protects both the mother and the child from infectious diseases and to deliver a healthy baby.



• It provides complete knowledge about the early pregnancy, infertility, birth control methods, pregnancy, post-childbirth care of the baby and mother, etc.

Sexual health

Sexual health is fundamental to the overall health and well-being of individuals, couples and families, and to the social and economic development of communities and countries. Sexual health, when viewed affirmatively, 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. The ability of men and women to achieve sexual health and well-being depends on their:

- access to comprehensive, good-quality information about sex and sexuality;
- knowledge about the risks they may face and their vulnerability to adverse consequences of unprotected sexual activity;
- ability to access sexual health care;
- living in an environment that affirms and promotes sexual health.

Sexual health-related issues are wide-ranging, and encompass sexual orientation and gender identity, sexual expression, relationships, and pleasure. They also include negative consequences or conditions such as:

- infections with human immunodeficiency virus (HIV), sexually transmitted infections (STIs) and reproductive tract infections (RTIs) and their adverse outcomes (such as cancer and infertility);
- unintended pregnancy and abortion;
- sexual dysfunction;
- sexual violence; and
- harmful practices (such as female genital mutilation, FGM)
- HIV/AIDS.

characteristics of a sexually healthy person

Sexually health person is someone who is sexually healthy as possessing the following characteristics, behaviors, and belief systems around sex and relationships:

- They understand that sexuality is a natural part of someone's life, and sexuality involves more than just sexual behavior.
- A person who is sexually healthy can recognize that everyone has sexual rights.
- Sexually healthy people make safe, reliable efforts to prevent unintended pregnancy, STIs, and also seek care and treatment when they are needed.

- Sexually healthy people have access to sex education, information, and resources to care for sexual health issues.
- A sexually healthy person can experience sexual pleasure, satisfaction, and intimacy when they desire those experiences.
- People who are sexually healthy can openly communicate about their sexual health and needs with intimate partners and healthcare providers when needed

Importance of sexual health

1. Education

Most people learn about the risks of unintended pregnancy and unprotected sex, and how to prevent STIs and unwanted pregnancy. Most likely, they will also learn about sexual abuse, and consensually versus non-consensual sexual acts. It's crucial that people continue to learn about sex and sexuality as they age so that they can make informed, healthy decisions about romantic relationships and their reproductive health.

2. Sexual Safety

Safety can refer to preventing pregnancy and STIs. It can also refer to staying safe from sexual abuse, assault, rape, or sexual exploitation.

While many birth control methods are incredibly effective at preventing unintended pregnancy, most forms of birth control do not prevent against the spread of STIs. Over half of all adults will contract an STI at some point in their lives. STIs can be spread through vaginal, anal, and oral sex.

Unfortunately, some STIs do not even cause any symptoms. It's possible to spread an asymptomatic STI to an unsuspecting partner if a person does not use an effective barrier method during sex. Latex condoms and abstinence are the only effective methods for preventing the spread of STIs during sexual sactivity. It's important to use barrier methods and get regularly tested for STIs if someone is sexually active. Untreated STIs can cause pain, infertility, and they can even kill.

Women who are sexually active may want to consider a hormonal birth control method in addition to condoms to prevent unintended pregnancy. Birth control pills, patches, shots, implants, and rings are incredibly effective at preventing pregnancy, and they also offer numerous health benefits as well. Women who take birth control pills lower their risk of getting ovarian and uterine cancers.

3. Communication

Communication is a significant part of sexual health. When a person becomes sexually active, it's vital that they communicate with healthcare workers. A doctor can inform of their risks, what



types of safety measures to take, and how to prevent sexual health risks. Supportive, knowledgeable healthcare officials can also answer questions relating to sexual health, and prescribe birth control if it fits a person's lifestyle and is safe to take. Sometimes, people may have a sexual restriction or a sexual health issue. An informed doctor can prescribe medications to help with any problems that may limit a person's sexual functioning and lower their quality of life.

So, not only is communication with a healthcare workers an important part of sexual health, so is healthy communication with sexual partners. Relationships thrive when both partners are respectful, and communicate their needs, expectations, and their boundaries. A sexually healthy person is someone that is respectful of their partner's boundaries. It's vital for their sexual health to be in a relationship with someone who does not pressure them into doing something that makes them uncomfortable.

For healthy sexual relationships, both partners need to have open lines of communication about pregnancy, and safe sex practices. Sexually healthy people will tell their partners if they have been diagnosed with an STI so that their partners can get tested and receive treatment. Being in good sexual health means that someone is informed, respectful to themselves and others, and practices safe sex. Sexual health also means that someone can enjoy a sexual relationship without fear or coercion

What are the consequences of poor sexual health?

Poor sexual health can lead to a host of adverse consequences.

- 1. Coercion, and also a lack of education or sexual health resources can lead to unintended pregnancy and STIs.
- 2. Failing to communicate with healthcare workers can also cause long-term physical health consequences such as An unknown, untreated STI can cause the disease to spread, and even cause permanent health issues in the patient.
- 3.Being unable to communicate in sexual and romantic relationships can cause emotional pain and distress, and severely impact the quality of someone's life.

Results of Lack of Sexual Health Resources and Education:



