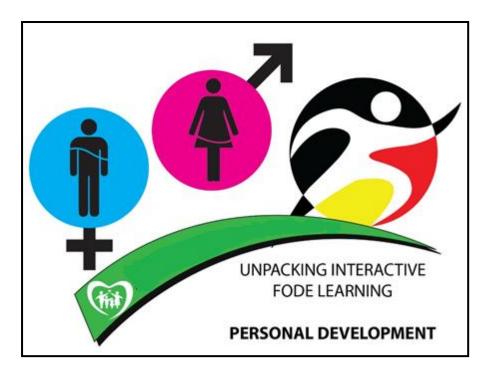




GRADE 10

PERSONAL DEVELOPMENT

UNIT 1



REPRODUCTIVE AND SEXUAL HEALTH



FLEXIBLE OPEN DISTANCE EDUCATION
PRIVATE MAIL BAG, WAIGANI, NCD
FOR DEPARTMENT OF EDUCATION
PAPUA NEW GUINEA

GR 10 PD U 1 1 TITLE

PERSONAL DEVELOPMENT

GRADE 10

UNIT 1

REPRODUCTIVE AND SEXUAL HEALTH

TOPIC 1: REPRODUCTIVE SYSTEMS

TOPIC 2: FAMILY PLANNING AND CONCEPTION

TOPIC 3: SEXUAL RELATIONSHIPS

TOPIC 4: SEXUALLY TRANSMITTED DISEASES

(STDs)

ACKNOWLEDGEMENTS

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Our profound gratitude goes to the former Principal of FODE, Mr Demas Tongogo for leading the FODE team towards this great achievement. Special thanks to the staff of Personal Development Department who played an active role in coordinating the writing and editing processes.

We acknowledge the professional guidance provided by the Curriculum and Assessment Division throughout the processes of writing and the services given by members of the Personal Development Subject Review and Academic Committees.

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DIANA TEIT AKIS PRINCIPAL

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SECRETARY'S MESSAGE

Achieving a better future by individual students and their families, communities or the nation as a whole, depends on the kind of curriculum and the way it is delivered.

This course is a part of the new Flexible, Open and Distance Education curriculum. The learning outcomes are student-centred and allows for them to be demonstrated and assessed.

It maintains the rationale, goals, aims and principles of the national curriculum and identifies the knowledge, skills, attitudes and values that students should achieve.

This is a provision by Flexible, Open and Distance Education as an alternative pathway of formal education.

The course promotes Papua New Guinea values and beliefs which are found in our Constitution, Government Policies and Reports. It is developed in line with the National Education Plan (2005 -2014) and addresses an increase in the number of school leavers affected by the lack of access into secondary and higher educational institutions.

Flexible, Open and Distance Education curriculum is guided by the Department of Education's Mission which is fivefold:

- To facilitate and promote the integral development of every individual
- To develop and encourage an education system satisfies the requirements of Papua New Guinea and its people
- To establish, preserve and improve standards of education throughout Papua New Guinea
- To make the benefits of such education available as widely as possible to all of the people
- To make the education accessible to the poor and physically, mentally and socially handicapped as well as to those who are educationally disadvantaged.

The college is enhanced to provide alternative and comparable pathways for students and adults to complete their education through a one system, many pathways and same outcomes.

It is our vision that Papua New Guineans' harness all appropriate and affordable technologies to pursue this program.

I commend all those teachers, curriculum writers, university lecturers and many others who have contributed in developing this course.

UKE KOMBRA, PhD

Gestomegn

Secretary for Education

COURSE INTRODUCTION



Dear Student.

Welcome to the Grade 10 Personal Development Course.

This Course is based on the National Department of Education approved Lower Secondary Personal Development Syllabus for conventional high school. The Course has been written to enable you to study at home what high school students study in school.

Personal Development is about relationships, character development, healthy living and spirituality. It contributes to integral human development.

In studying the Personal Development Course, you can achieve your potential to lead a productive and harmonious life wherever you live locally, nationally or internationally.

There are four units in this course.

Unit 1: Reproductive and Sexual Health covers Reproductive Systems, Family Planning and Contraception, Sexual Relationships and Sexually Transmitted Diseases (STDs).

Unit 2: Family and Relationships covers Family, Community Values, Peers and Group Affiliation.

Unit 3: Universal Values covers Values, Influences of Universal Values, and Role Models.

Unit 4: Sports Administration covers PNG Sporting Structure, Event Management, Code of Ethics in Sports and Social Issues in Sports.

Each Unit is divided into topics and each topic consists of lessons, summaries, Practice Exercises and Answers. At the end of each lesson, you are expected to do the practice exercises. The answers to each practice exercise are found at the end of each topic. You must correct your own answers. A topic test is given in the Assignment Booklet.

There are four assignments for each unit. You must do these assignments after completing each unit of work and revising all the lessons. Remember to check all your assignments before you send them in for marking. The assignment marks will be added together with your final external examination marks. This will give you a final mark and grade.

There will be an examination after you have completed this course. You will do the examination only after all your Assignments have been marked.

We hope you will find this course useful and interesting. Your Teacher

INTRODUCTION TO UNIT 1



Dear Student,

Welcome to Unit 1 of the Grade 10 Personal Development Course. This Unit is called **Reproductive and Sexual Health**. You will study it, using the steps suggested in the **Study Guide** on the next page.

This Unit is based on the National Department of Education approved Personal Development Syllabus for conventional high school. So you will study at home what High school students study in school.

The four Topics you will study are:

- 1. Reproductive Systems
- 2. Family Planning and Contraception
- 3. Sexual Relationships
- 4. Sexually Transmitted Diseases (STDs)

In Topic 1 – **Reproductive Systems** – You will learn about Human Reproductive Systems, Male Reproductive Systems, Female Human Reproductive Systems and Menstrual Cycle.

In Topic 2 – **Family Planning and Contraception** – You will learn about Pregnancy and Child Development, Prenatal Care, Family Planning and Family Size.

In Topic 3 – **Sexual Relationships** – You will learn about Sexual Health and Puberty, Rights and Responsibilities in Relationships, Sexuality, Sexual Intercourse and Fertilisation and Gender.

In Topic 4 – **Sexually Transmitted Diseases** – You will learn about Sexually Transmitted Diseases (STIs), HIV/AIDS, Preventive Strategies and Risk Assessments, Caring for and Accepting Infected Persons and Seriousness of the Situation in PNG.

Each Topic has **Lessons** with **Practice Exercises** and **Answers**. You must read each lesson and work through the Practice Exercises. You will have to correct your own answers. The answers to the Practice Exercises are given at the end of each Topic. When you complete a Topic, you will then complete the **Topic Test** in the **Assignment Booklet**. You will repeat the same process until you complete the Unit.

You will do an assignment after completing this unit in the **Assignment Booklet** and submit it to your FODE centre for marking. Remember each assignment mark is added to the final external examination mark. This will give you a final mark and grade.

We hope you will enjoy studying this Unit for your Personal Development.

STUDY GUIDE

Follow the steps given below and work through the lessons.

- **Step 1** Start with Topic1, Lesson 1 and work through it in order.
- **Step 2** When you complete Lesson 1, you must do Practice Exercise 1.
- **Step 3** After you have completed the exercise, you must correct your work. The answers are given at the end of each Topic.
- **Step 4** Then, revise well and correct your mistakes, if any.
- **Step 5** When you have completed all these steps, tick the check-box for Lesson 1, on the content page, like this:

V Lesson 1: Know About Yourself

Then go on to the next lesson. You are to repeat the same procedure until you complete all the lessons in a Topic.

As you complete each lesson, tick the box for that lesson on the content page, like this $\sqrt{}$ This will help you check your progress.

Assignment: Topic Test and Unit Test

When you have completed all the lessons in a Topic, do the Topic Test for that Topic, in your Assignment Booklet. The Unit book tells you when to do this.

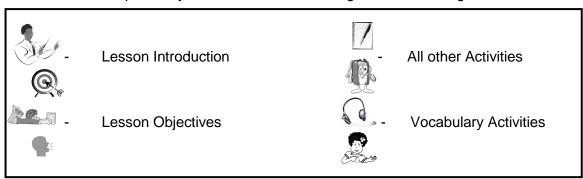
Marking:

The Topic Tests in each **Assignment** will be marked by your **Distance Teacher**. The marks you score in each Assignment will count towards the final result. If you score less than 50%, you will have to repeat that Assignment.

Remember, if you score less than 50% in three (3) Assignments, your enrolment will be cancelled. So, you are encouraged to do your work carefully and make sure that you pass all Assignments.

All the best in your studies!

The following icons are used in each Lesson in this Unit. Icons are the symbols used in this book to indicate the parts of your lessons. The following are the meanings of these icons.



TOPIC 1

REPRODUCTIVE SYSTEMS

In this topic you will learn about:

- human reproductive systems
- male reproductive systems
- female reproductive systems
- menstrual cycle

TOPIC 1: REPRODUCTIVE SYSTEMS

Welcome to Topic 1 on Reproductive Systems. In this topic you will learn about Human reproductive System, Male reproductive systems, Female reproductive systems and the Menstrual Cycle.

There are four lessons:

Lesson 1: Human Reproductive Systems

In this lesson you will define the human reproductive system and identify its functions.

Lesson 2: Male Reproductive Systems

In this lesson you will identify the male reproductive system, its functions and the role of ejaculation.

Lesson 3: Female Reproductive Systems

In this lesson you will identify female reproductive system and its functions.

Lesson 4: Menstrual Cycle

In this lesson you will define menstrual cycle and identify its function.

In doing so, you will find out more about what you are made of-The Human Reproductive System. You will explore and learn more about the male and female reproductive systems are, and what different organs or parts are responsible for in the human body. As well as finding out more about what the menstrual cycle is and its importance in the female body.

We hope you will enjoy studying this topic.

Lesson 1: The Human Reproductive System



Welcome to lesson 1 of unit 1. In this lesson you will learn about the human reproductive system.

Your Aims:

- define reproductive system
- identify its functions



What is a reproductive system?

A **reproductive system** is the system of organs within a living being or human, which work together for the purpose of reproduction. **Reproduction** is the process by which organisms make more organisms like themselves. In people, the reproductive system is essential in creating more humans.

The reproductive system

As you grow up, your body changes and you become sexually mature. This means that your reproductive system develops so that you are able to have children. The stage in life when you begin to develop into an adult is called *puberty*. The time between puberty and being a mature adult is known as *adolescence*. During adolescence you learn to think and behave as an adult. It is important to be a mature adult before you think about having children of your own.

In the human reproductive process, there are two types of sex cells or gametes:

- the male gamete sperm
- the female gamete egg or ovum

Humans like other living things, pass certain characteristics of themselves to the next generation through their *genes*, the special carriers of human traits. These genes come from the male's sperm and the female's egg, which is produced by the male and female reproductive systems. Your physical shape and some of your personalities are passed on through genes from your parents. This makes you similar to others in your family. Like height and hair colour, the size, shape and many other traits are inherited from your parents.

Both male and female reproductive systems are essential for reproduction. Each sex has its own unique reproductive system that is designed to produce, nourish and transport either the egg or the sperm. The sex cells meet in the female's reproductive system (the ovary) to create a new individual. The female needs a male to fertilize her egg, although it is she who carries the baby in her womb from conception through to childbirth.



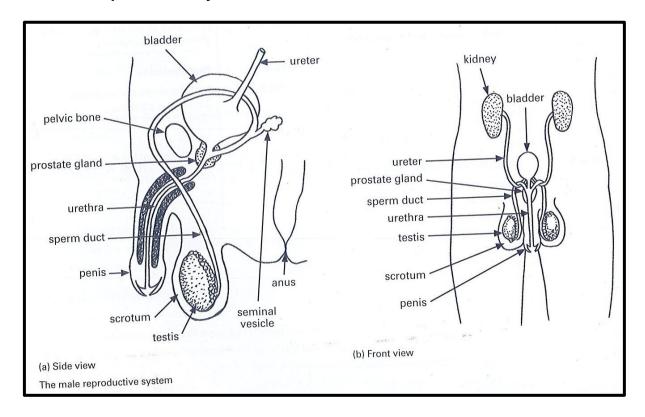
Reproduction is the process by which living things make more living things like themselves.



Activity 1.1 This activity will help you name the human reproductive glands and define few key words. Answer the following questions.

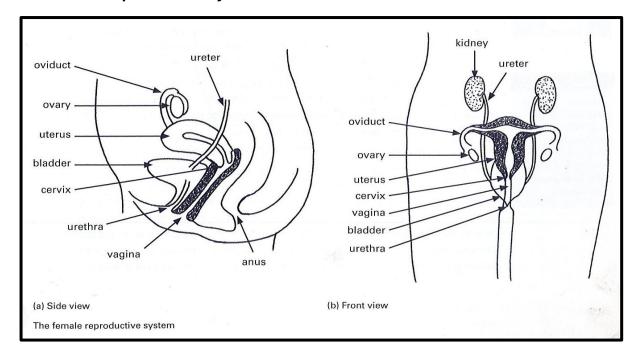
Defin	e:
	reproduction
	puberty
•	adolescence
	Name the two types of sex cells.
	a)b)

The male reproductive system



Side view and front view of male reproductive organs

The female reproductive system



Side view and front view of female reproductive organs.

The main parts and functions of the reproductive system

The table below shows the main reproductive organs of males and females and their functions.

Main Parts	Functions
Sperm duct	Muscular tubes that the sperm travels through to the
-	penis after they leave the testis
Penis	Male organ used for sexual intercourse
Testis	Male sex gland that produces sperm
Urethra	The tube through which the male semen is ejaculated
Scrotum	The bag of skin and muscles in males that contains the
	testicles
Prostate glands	Produce fluid that helps the sperm to move
Cervix	The passageway that connects the uterus to the vagina
Uterus	The place where the baby develops
Ovary	The female reproductive organ that produces ova
Oviduct (fallopian tubes)	The tubes through which an ovum passes from the
	ovary to the uterus
Vagina	Female organ used for sexual intercourse, and is the
	passage leading to the cervix



Practice Exercise:

Summary

You have now come to the end of the first lesson. In this lesson you have learned that;

- Reproductive system is the system of organs within living things which work together for the purpose of reproduction.
- Reproduction is the process by which organisms make more organisms like themselves. All living things reproduce.
- The genes that your parents passed along to you are for your physical shape and some of your personality.
- Each sex has its own unique reproductive system that is designed to produce, nourish and transport either the egg or the sperm.

NOW DO PRACTICE EXERCISE 1 ON THE NEXT PAGE.

1.	Write a brief explanation of each of the following terms that were used in the lesson by researching them using a dictionary or another available source.
	Genes:
	Gamete:

2. Complete the table below by writing the parts and functions of the common reproductive system parts that are found in both the male and female reproductive systems. Write 3 for males and 3 for females.

PARTS	FUNCTIONS

List some of the genes that you have inherited either from your mother or fron your father.

CHECK YOUR WORKANANGWERS A ARREINET THE END OF TOPIC 1.

Activity 1.1

- 1. **Reproduction** is the process by which organisms make more organisms like themselves.2. Menstruation is when a flow of blood is passed out of a woman's body.
- 2. **Puberty** is the stage in life when you begin to develop into an adult.
- 3. **Adolescence** is the time between puberty and being a mature adult.
- 4. In the human reproductive process, there are two types of sex cells or gametes;
 - The male gamete sperm
 - The female gamete egg or ovum

Lesson 2:

The Male Reproductive System



Welcome to lesson 2 of unit 1. In the last lesson you learnt about the human reproductive system. In this lesson you will learn about the male reproductive system.



Your Aims:

- identify the male reproductive system
- identify its functions
- identify the role of ejaculation

The Male Reproductive System

The main parts of a male reproductive system are the penis and the testicles which are outside of the body. The job of the **penis** is to carry urine out of the body and also to carry sperm in the semen so that it can fertilise an egg.

The main job of the **testicle** is to produce sperm. A man will produce millions of sperm throughout his life. The testicles hang outside the body in a bag called **scrotum.** This keeps the testicle is slightly cooler than the rest of the body, which helps to produce healthy sperm. Two tubes called **sperm ducts** lead to the urethra.

The **urethra** is the tube inside the penis that carries both sperm and urine outside the body. The sperm are carried in thick milky-white liquid that nourishes the sperm called **semen.** The purpose of the **sperm** is to fertilise the egg, which will then grow into a baby. When a boy starts to produce sperm, it means that it is possible for him to become a father.

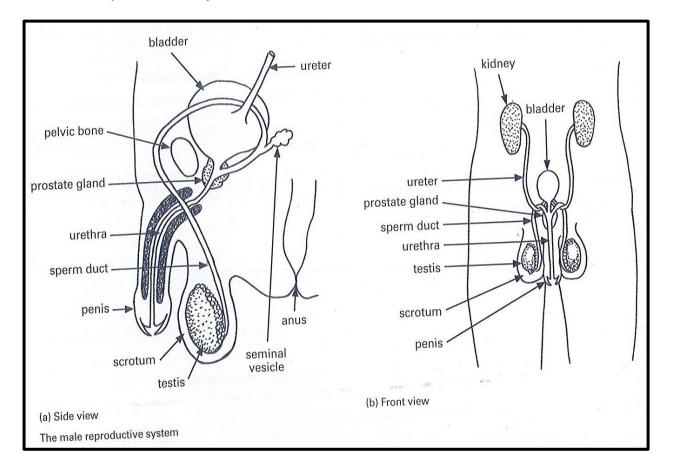
Sometimes when a boy is asleep, semen passes out of his penis. When this happens it is called **wet dream**. A wet dream is a normal thing to happen and boys should not feel ashamed about it.

All boys are born with a foreskin, a fold of the skin at the end of the penis covering the glands. Some boys are circumcised, so their foreskin is cut away by specialised medical officers. *Circumcision* is not medically necessary. It is done because of:

- religious beliefs
- concerns about hygiene
- social and cultural beliefs

The penis still functions in the same way regardless of whether or not the foreskin has been removed.

The male reproductive system





What happens in an ejaculation?

During sexual intercourse, the erect penis is pushed inside the vagina. During ejaculation, semen passes out through the urethra in the penis.



Activity 2.1 Answer the following questions.

b)	
Defir	ne:
(a)	a wet dream
(b)	circumcision
List s	some reasons why men circumcise themselves.

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

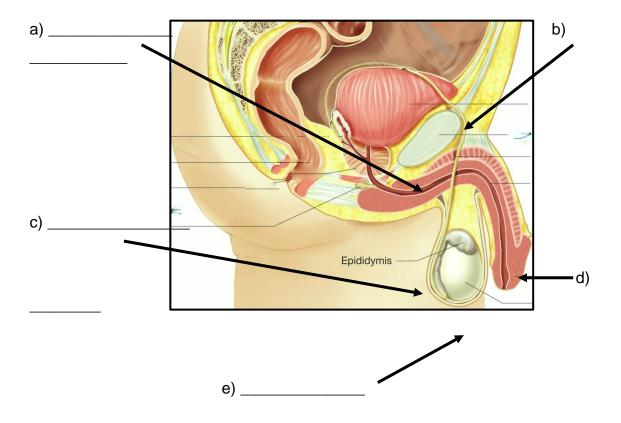
You have now come to the end of the second lesson. In this lesson you have learned that;

- The main parts of a male reproductive system are the penis and the testicles which are outside of the body.
- Penises work in the same way regardless of whether or not the foreskin has been removed.
- Circumcision is not medically necessary.

Practice Exercise: 2

1. Use the following words to correctly label the diagram below. You will not be able to use all the words from the list.

scrotum, testicles, urethra, penis, prostate gland, sperm duct, seminal vesicle



- 2. Explain what these words mean:
 - a) sperm

b) semen

3. What is your view on circumcision, do you agree or disagree with the practise? Explain why you agree or not.

CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 1.

Answers to Activities

Activity 2.1

- 1. **Penis** The job of the **penis** is to carry urine out of the body and also to carry sperm in the semen so that it can fertilise an egg.
 - **Testicle** The main job of the **testicle** is to produce sperm. A man will produce millions of sperm. A man will produce millions of sperm throughout his life.
- 2 (a) A **wet dream** is the time when a boy is asleep and semen passes out of his penis. A wet dream is a normal thing to happen and boys should not feel ashamed about it.
- 2 (b) All boys are born with a foreskin, a fold of the skin at the end of the penis covering the glands. Some boys are circumcised, so their foreskin is cut away
- 3. **Circumcision** is done because of
 - religious beliefs
 - concerns about hygiene
 - social and cultural beliefs

Lesson 3: The Female Reproductive System



Welcome to lesson 3 of unit 1. In the last lesson you learnt about the male reproductive system. In this lesson you will learn about the female reproductive system.



Your Aims:

- identify the female reproductive system
- identify its functions
- define ovulation

The female reproductive system

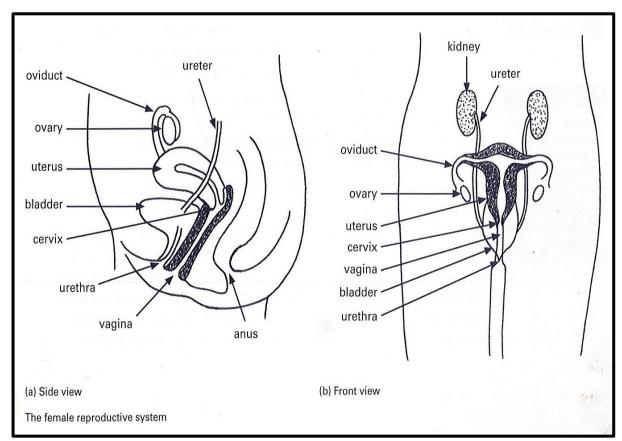
The main parts of a female reproductive system are the uterus, the ovaries, the oviduct and the vagina which are all inside the body.

At puberty the **ovaries** begin to release eggs. Usually one egg is produced each month from one of the ovaries. During **ovulation**; that is when an egg or **ovum** is released from an ovary, it travels down the **oviduct** or the **fallopian tube** towards the uterus.

The *uterus* is the place where the baby develops. Before the egg is released, the uterus grows a special lining to receive it in case it is fertilised. If the egg is fertilised by a sperm in the oviduct, it moves down into the uterus and begins to grow into a baby. Fertilisation is also known as *conception*.

If the egg is not fertilised it will die after one or two days and later pass out of the body. The lining of the uterus continues to grow for several days. It then begins to break up and passes out of the body through the vagina with some blood. This is called having a period or *menstruation;* normally it lasts for about four to five days. Periods are a normal thing to happen and girls should not feel ashamed about it. When a woman is pregnant, her period will stop. When she is not pregnant, her period continues every month and will usually stop when she is between the ages of about forty and fifty.

Traditionally, women in PNG use leaves to absorb the flow of blood. Modern feminine hygiene methods use cotton pads and tampons or napkins made of material. Some girls have pains when they have their periods and may have different feelings before or during a period. For example, a girl might feel worried, get angry, or be more easily upset at these times. These different moods can occur because of the chemical changes happening inside her body, and are therefore normal body reactions.



The female reproductive system



What happens in ovulation?

Inside the female body, there are two sex organs called **ovaries**. Once a month, an egg called **ovum** is released from one of the ovaries. The releasing of the egg is called **ovulation**.



Activity 3.1 Answer the following questions.

What is another	name for fertilisation and what happens at this time?

Vhat is anoth	er name for a period and what happens	at this time?
it what age d	oes a woman stop having her period?	



Summary

You have now come to the end of the third lesson. In this lesson you have learned that:

- The main parts of a female reproductive system are the uterus, the ovaries, the oviduct and the vagina which are all inside the body.
- Ovulation is the egg release from one of the ovaries in the female body.
- If the egg is not fertilised it will die after one or two days and later pass out of the body.
- Traditionally, women in PNG use leaves or dry grass to absorb the flow of blood.
- Some women or girls may experience period pains or different emotions during the time of menstruation.

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.

NOW DO PRACTICE EXERCISE 3 ON THE NEXT PAGE.

3

Answ	ver the following qu	estions.	
1.		ts of the female reproductive system.	
	a)	b)	
	c)	d)	
2.	Explain what the fu	nction of the female reproductive system is.	
3. Ex	plain what happens i	f a female egg is not fertilized.	

Answers to Activities

CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 1.

Activity 3.1

Practice Exercise:

- 1. Inside the female body, there are two sex organs called **ovaries**. Once a month, an egg called **ovum** is released from one of the ovaries. This egg release is called **ovulation**
- 2. Another name for fertilisation is conception and this is when the male's sperm fertilises the female's egg or ovum.
- 3. Another name for a period is menstruation and it happens when a girl experiences a flow of blood coming out of her body through her vagina.
- 4. Between the ages of about 12 and fifty.

Lesson 4: The Menstrual Cycle



Welcome to lesson 4 of unit 1. In the last lesson you learnt about the female reproductive system. In this lesson you will learn about the menstrual cycle.



Your Aims:

define menstrual cycle identify its functions

Menstrual cycle

The **menstrual cycle** is the process of ovulation and menstruation in women or girls who have reached menstruation age. It is the regular natural change that occurs in the female reproductive system. It becomes a cycle since it happens on a regular bases, that is once a month and when the woman is not pregnant.

What is ovulation?

When a girl is 12 years of age, her body begins to change. Her breasts get larger. Hair grows under her arm and on her vagina. Her voice deepens, her hips become broader and changes begin to happen inside her young body. These changes occur as the girl's body changes to a woman's body, so that she can have a baby.

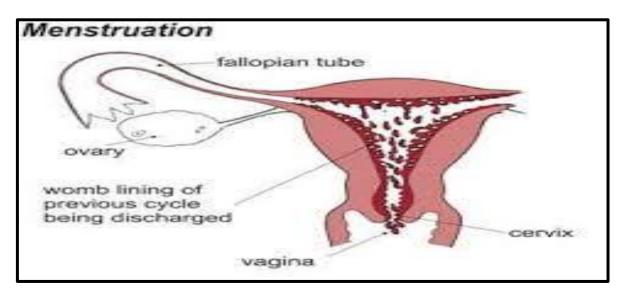
Inside the female body, there are two sex organs called **ovaries**. Once a month, an egg called **ovum** is released from one of the ovaries. This egg release is called **ovulation**. The egg moves along one of the fallopian tubes to the uterus. If the egg is fertilized by a male sperm, it will grow into a baby in the following 9 months.



Ovulation is the egg release from one of the ovaries in the female body.

What is menstruation?

At the time of ovulation, the uterus prepares itself to have a baby. A soft thick lining of tissue forms in the uterus. If the egg is not fertilised, the lining is not needed. It breaks down and is passed out of the body in a flow of blood. This is *menstruation*. It takes about four to five days for the menstrual flow to pass out of the body through the vagina.



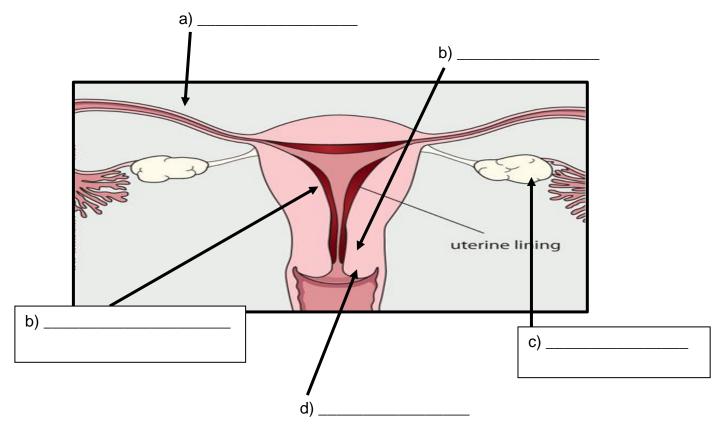
This is what happens during menstruation

Having a flow of blood every month is usually called *having a period*. Girls and women all over the world between the ages of twelve and forty-five, approximately, have periods once a month, except when they are pregnant.



Activity 4.1 Answer the following questions.

1. Use the following terms to correctly label the diagram below. uterus, cervix, ovary, vagina, oviduct, ovum, menstruation



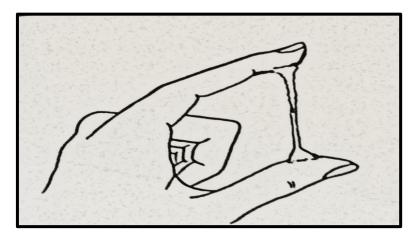
Define menstruation.
Explain why a thick lining of tissue forms in the uterus?
Why do you think it is important for you to show understanding and respect for
girls or women who are having their menstruation?

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.

Now, you look at the ovulation method.

The ovulation method

A woman can only become pregnant for a few days each month close to the time of ovulation, which is when she produces an egg. Ovulation usually occurs fourteen days before the start of her period. When she is fertile, she can also feel clear, slippery mucus in her vagina which will strand so onh between two fingers.



Mucus strand stretching between two fingers.



When a woman is fertile the mucus from her vagina can stretch between her fingers.

When a woman keeps a record of her periods and mucus days on an ovulation chart each month, it will help her to know when she is fertile. If a couple wants to have a baby then they must have sexual intercourse close to or during the time of ovulation. If a couple does not want to have a baby, then sexual intercourse must be avoided at this time.



Sperm can live in the vagina for two or three days, so a woman can become pregnant when she has sexual intercourse either just before or after ovulation.

The ovulation method is a natural method of family planning but it is not always reliable because some women find it hard to know when they are ovulating. Another

disadvantage is that a couple can only have sexual intercourse for about three or four days after the woman's period and for about ten days before her next period. Both the man and woman must communicate and cooperate to make this method work well.

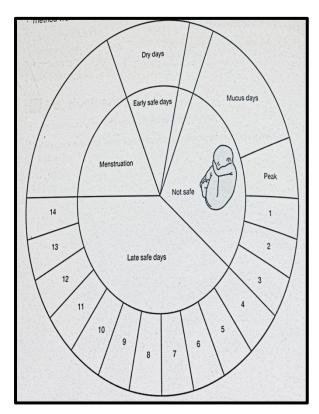


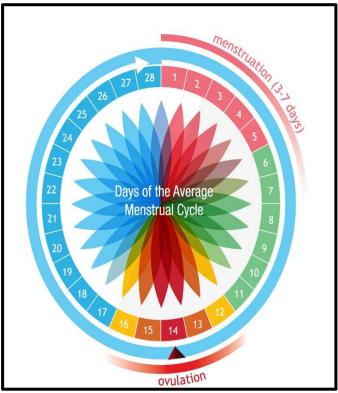
Women have different lengths of the menstrual cycle; it can be longer or shorter, so the time of ovulation will be different. Normally ovulation takes 28-30 days in a month

The ovulation and menstrual cycle

The two charts below, present the same kind of information. The menstrual cycle of most females is an average 28 day cycle. Some women have more than 28 days while others have less. Each female has a different cycle. It is important for all females to understand their individual cycle. All females should try to establish their cycle starting at the age of 13. You can be certain of your cycle if you have studied you're your menstrual cycle for for than 10 years. Only then you can say what your average cycle is.

To help us understand the ovulation cycle, let us look at a typical 28 day cycle.





A typical 28 days Cycle.

Menstruation

Most women have an average 5-7 days menstrual flow. Day one is when the first blood spots/stains are sighted. It does not necessarily mean a flow. It is just a spot that is indicating that menstruation is starting. That day is counted as day 1.

Days 2-3 are light flow days. Day 4 is heavy and days 5-6 are light flow days. Day 7 is usually the last day when blood spots/stains are seen.

Day 8-10 are first safe days. Infertile mucus is present. These days are often referred to as the 'dry days'.

Day 11-12, fertile mucus is sometimes present. It is advisable to not have sex if you wish to avoid pregnancy. This is because sperms may live up to 5 days inside the female body. Engaging in sexual intercourse during this time may most likely result in a pregnancy. However, sex at this time is most likely to result in a girl child. This is because he sperm that carries the 'x' chromosome or the 'girl' determining chromosome, always stays alive a little longer and has the patience to hang around and wait for the egg. The 'y' chromosome or 'boy' determining chromosome usually does not have the patience to do so and therefore dies quickly.

Day 13 – 15, the fertile mucus is present and pregnancy will definitely occur. Day 14 is ovulation day for most women; an egg is released and it is certain a pregnancy will occur. Research has shown that having sex during ovulation is most likely to give the couple a boy child. This is because the sperm carrying the 'y' chromosome swims faster than the sperm carrying the 'x' chromosome, and therefore is most likely to fertile the egg.

During day 16-28, the egg dies while the womb lining or endometrium continues to thicken. These are infertile days and pregnancy is not likely to occur if a couple engages in sexual intercourse. These days are often referred to as 'safe days' for couples who wish to avoid pregnancy.

Important:

Engaging in sex during these days can help you avoid pregnancy, but you will not be able to avoid STIs if you engage in sex with someone who is not your husband/wife or when you have sex with multiple partners.

Benefits of Using the Cycle

Benefits of using the ovulation cycle include:

- It is the natural way of doing family planning
- Guides you to avoid unwanted pregnancy
- Helps you determine the sex of your unborn child

- Couple can enjoy sex
- Helps couples space their children
- Gives confidence to females once they identify their cycle

Why is i ovulation		101 6	a 1116	מוו נט	De i	naue	awa	11 6 01	euu	Calc	u ab	out
If a coup	ıts to	o hav	∕e a	baby	, wh	en is	the	right	time	to I	have	se
	its to	hav	/e a	baby	, wh	en is	the	right	time	to I	have	se
	its to) hav	/e a	baby	, wh	en is	the	right	time	to I	have	se
	its to) hav	/e a	baby	, wh	en is	the	right	time	to I	have	se
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	its to) hav	/e a	baby	, wh	en is	the	right	time	to I	have	se

GR10 PD U 1	34	TOPIC 1 LESSON 4



Summary

You have now come to the end of the lesson. In this you have learned that:

- Ovulation is the time in a woman's body when an egg called ovum is released from the ovary. This happens once a month.
- A woman's body passes out a flow of blood during menstruation.
- Both men and women must know about the ovulation method to avoid unwanted pregnancies.

NOW DO PRACTICE EXERCISE 4 ON THE NEXT PAGE.

Practice Exercise: 4

a)	Monthly period:
	Monthly period.
b)	Fertile:
c)	Pregnancy
Refe	Is it safe to have sexual intercourse if a woman feels mucus? Explain why or why not.
	Is it safe to have sexual intercourse if a woman feels mucus? Explain

CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 1.

Answers to Activities

Answers to Activity 4.1

- 1. a) (oviduct) fallopian tube b) cervix
 - c) uterus d) vagina
- 2. Menstruation is when a flow of blood is passed out of a woman's body.
- 3. To receive the egg in case it comes fertile
- 4. Individual student's answer may vary

Answers to Activity 4.2

- 1. It is important for a man to be made aware or educated about the ovulation method so that he can better communicate and cooperate with his partner or wife to avoid unwanted pregnancy.
- 2. If a couple wants to have a baby then they must have sexual intercourse close to or during the time of ovulation\
- 3. When a woman becomes pregnant, her menstrual periods stop.

ANSWERS TO PRACTICE EXERCISES IN TOPIC 1

Practise Exercise 1

1.

- **Genes** Unit in a chromosome which controls heredity
- *Gamete* Sexual cell able to reunite with another in reproduction
- 2. Individual student's answers may vary (No standard answers)
- 3. Students answers may vary depending on what information they use from the table

Practise Exercise 2

1.

- Penis carries urine out of the body and also to carry sperm in the semen so that it can fertilise an egg
- Testicle produce sperm
- Scrotum keeps the testicles slightly cooler than the rest of the body, which helps to produce healthy sperm
- Sperm fertilise the egg, which will then grow into a baby
- Sperm duct tube that lead to the urethra through which the sperm travels
- Semen thick milky-white liquid that nourishes the sperm and also carries or transports the sperm
- Urethra the tube inside the penis that carries both sperm and urine outside the body

Practise Exercise 3

- 1. a) uterus b) ovaries c) oviduct d) vagina
- 2. To reproduce
- 3. It will die after 1-2 days and later pass out as blood.

Practice Exercise 4

- Students may have their own explanations for each of the terms. Sample answers
 - a) the time of menstruation
 - b) when female egg is fertilized by a male sperm
 - c) when a woman is with child
- 2. a) No, it is not safe to have sexual intercourse if a woman feels mucus.
 - b) Another name for early safe days is 'dry days'.
 - c) Menstruation comes between the early safe days and late safe days.
- 3. Safe days are Day 8 10 and Day 16 28 Unsafe days are Day 11 14

TOPIC 2

Family Planning and Contraception

In this topic you will learn about:

- pregnancy and child development
- prenatal care
- family planning
- family size

TOPIC 2: FAMILY PLANNING AND CONTRACEPTION

Welcome to Topic 2 on Family Planning and Contraception. In this topic you will learn about Pregnancy and Child Development, Prenatal Care, Family Planning and Family Size.

There are four lessons:

Lesson 1: Pregnancy and Child Development

In this lesson you will define pregnancy and child development then identify stages of pregnancy and child development and factors influencing child development.

Lesson 2: Prenatal Care

In this lesson you will identify prenatal care.

Lesson 3: Family Planning

In this lesson you will define family planning and identify types of family contraceptives and their effectiveness.

Lesson 4: Family Size

In this lesson you will define family size and identify the relationship between family size and family welfare.

In doing so, you will learn more about pregnancy, the prenatal care, child development and factors influencing child development. You will also understand family planning, the use of contraceptives and its impact on the family size.

We hope you will enjoy studying this Topic.

Lesson 5: Pregnancy



Welcome to lesson 5 of unit 1. In the last lesson you learnt about the menstrual cycle. In this lesson you will learn about pregnancy.

Your Aims:



- define pregnancy.
- identify stages of pregnancy.

What is pregnancy?

Pregnancy can be simply defined as the stage of being pregnant or having a baby develop in the womb of a woman. As we learnt previously, **fertilisation or conception** occurs when the male's sperm unites with and fertilises the female's egg or ovum.

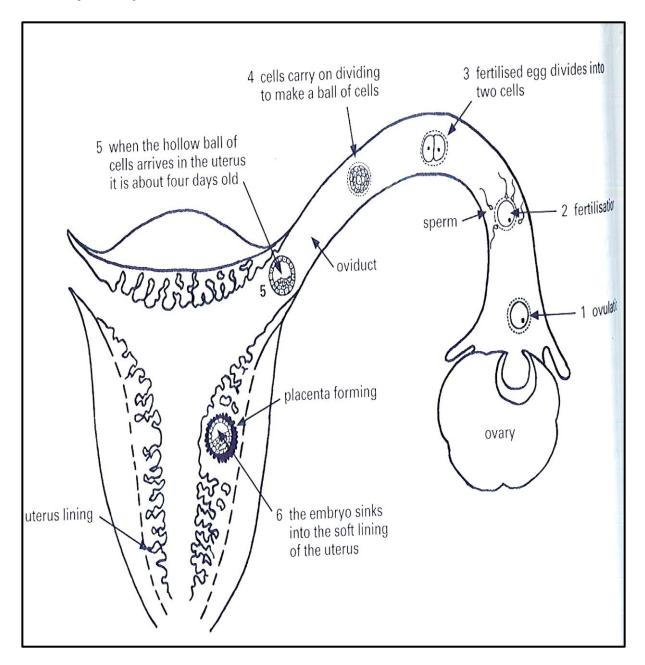
The main steps in the early development of the baby from the time of the fertilisation of the egg until it is born are as follows;

- During sexual intercourse, semen is ejaculated which contains millions of sperm.
- Some sperm pass through the cervix into the uterus and begin to swim up the oviduct or the fallopian tube.
- When an egg moves down the oviduct, one of these sperm may combine with it to form a fertilised egg. When this happens, it is the time of **conception** or **fertilisation** and as a result, the woman will become pregnant. The rest of the sperm will all die within a few days.
- When no egg is present in the oviduct, all the sperm die and get absorbed in the body.
- The fertilised egg takes about a week to pass down the oviduct to the uterus. The egg divides many times to make a ball of cell called the embryo.
- The embryo then sinks into the soft lining of the uterus which has grown to receive it. This is called implantation.



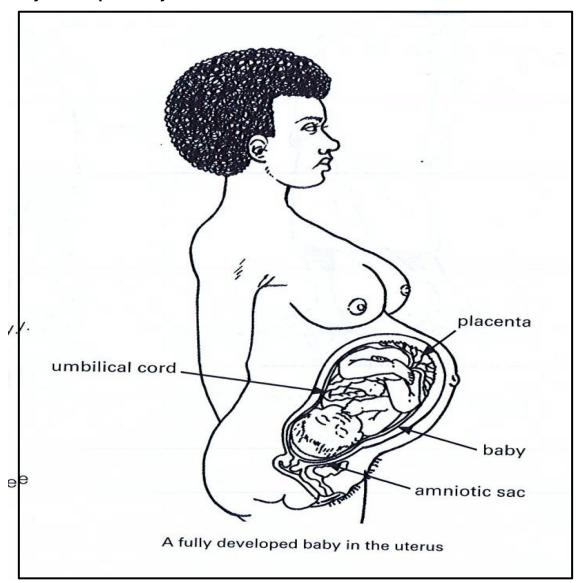
Pregnancy can be simply defined as the stage of being pregnant or having a baby develop in the womb of a woman.

Journey of a sperm



- A special organ starts growing from the embryo and the mother. This is called the placenta. The placenta is attached to the embryo by the umbilical cord.
- The umbilical cord contains three blood vessels. One carries dissolved food and the other two carry waste products away.
- About three months after fertilisation, bones begin to form; the embryo looks more like a baby and is called a **foetus.**
- The foetus continues to grow and develop inside the uterus until it is thirty-eight weeks old.
- When the baby is ready to be born, the muscles of the uterus contract and gradually open the cervix so that the baby can be pushed out. This process is called **labour**. It is also known as the delivery of the baby.

A fully-developed baby



The *amniotic sac* ia a sac or a bag full of liquid that surrounds and protects a developing baby in the womb.

The 1st sign that a woman is pregnant is when she stops having her period, although periods can stop for a other reasons.

Why does a woman stop having her period?

Some women do not have their periods when they are breast feeding, which helps to prevent them from becoming pregnant again too quickly.



Activity 5.1 Answer the following questions.

V _	/hat is pregnancy?
_	
<u> </u>	efine implantation.
_	
E	xplain how a baby develops or grows.
_	
	hat is another term for delivery of the baby and explain what happens at this me?
_	
_	

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.

Stages of pregnancy

STAGE	FEATURES OF THE UNBORN BABY
1 month	 The ball of cell is an embryo growing inside the female uterus.
	 It is the size of a water melon seed.
	 Outer layer – nervous system, skin and hair.
	 Inner layer – skeleton, bones, muscles, kidney, sex organs, and so on.
2 months	 Embryo is now called a foetus, which means 'little one'.
	 The uterus expands to make room for the new living thing.
	 It now measures1.6cm.
	 The embryonic tail is gone, all organs, muscles and nerves begin to form.
	 Hands bend at the wrist, legs begin to form, and eyelids begin to cover
	the eyes.
	 Mother needs to drink plenty of clean water.
3 months	 Foetus is around 7 to 8 cm long.

	 Weighs about the same as half a banana.
	Forms tiny unique fingernails.
4 months	 Foetus is about the size of an avocado.
	 11.6 cm long from crown to backside.
	Weighs about 100 grams.
5 months	Foetus weighs about 360 grams
	 Up until now, it has been weighed from the crown to the backside but
	from this point on the measurement will be from the crown to the heel. It
	is now about 27 cm long.
	• Eye brows and eyelids are fully developed, fingernails cover the finger
	tip.
	 Foetus can now hear conversations
6 months	 The baby weighs around 1.1 kg and is about 38 cm long from head to toe
	 In boys, testicles descend and in girls the clitoris is formed.
	 The baby's head is getting bigger and brain growth is very rapid.
7 months	 The baby now weighs about 2 kg and measures about 44 cm from head
	to toe.
	 It should be ready for delivery by turning upside-down.
	Bones are hardening.
	Skin is less red and wrinkled.
	The baby's head moves into the pelvis and presses firmly against the
	cervix.
8 months	 Weighs about 2.8 kg and measures approximately 50cm.
	 Many babies now have a full head of hair.
	 Babies at week 39 usually weigh about 3.2 kg and continue to build the
	fats store.
	The organs are fully developed and in place but the lungs will be the last
	organ to reach maturity.
9 months	Baby is almost due
	 At average, the baby is more than 51cm long and weighs about 3.4 kg,
	but babies vary widely in size at this stage.
	 The average width of the baby's head is about 7-8cm long.



Activity 5.2 Answer the following questions.

ع ا	in what happens to the baby and the mother at;
	3 months
	6 months

9 month			

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have now come to the end of the lesson. In this lesson, you have learned that:

- **Pregnancy** is the stage of being pregnant or having a baby developing in the womb of a woman.
- Pregnancy can be a risky or stressful time for women and their babies.
- High risk mothers are mothers who have a greater risk of having problems during pregnancy.
- The **amniotic sac** is a sac or a bag full of liquid that surrounds and protects a developing baby in the womb.
- Some women do not have their periods when they are breast feeding which helps to prevent them from becoming pregnant too quickly.

NOW DO PRACTICE EXERCISE 5 ON THE NEXT PAGE.

P	ractice	Exercise:	5
•	lactice	LACICISC.	9

	efly explain each of the following key terms to show that you understand the aning of each term.
•	Foetus
•	Embryo
•	Placenta
•	Umbilical cord
	fer to the Stages of Pregnancy on page 43 to answer the following
a)	What is another word for foetus?
b)	At what stage is the foetus the side of a watermelon seed and an avocado?
c)	What happens at 39 weeks?

e) Explain what happens to the organs at 8 months. There are three vessels in the umbilical cord, explain what their functions are What is the advantage in the instance when a woman who is breast feeding does not have her period?	There are three vessels in the umbilical cord, explain what their functions What is the advantage in the instance when a woman who is breast feedir	d)	What happens to the baby's head at 7 months?
What is the advantage in the instance when a woman who is breast feeding	What is the advantage in the instance when a woman who is breast feeding	e)	Explain what happens to the organs at 8 months.
		Ther	re are three vessels in the umbilical cord, explain what their functions are

CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 2.

Answers to Activities

Activity 5.1

- 1. **Pregnancy** is the stage of being pregnant or having a baby developing in the womb of a woman.
- 2. *Implantation* is when the embryo sinks into the soft lining of the uterus which has grown to receive it.
- 3. When an egg is moving down the oviduct, one of these sperm may combine with it to form a fertilised egg. When this happens, it is the time of *conception* or *fertilisation* and as a result the woman will become pregnant.

Activity 5.2

- 1. At 3 months, the foetus is around 7 to 8 cm long and weighs about the same as half a banana. It now begins to form tiny unique fingernails.
- 2. At 6 months, the baby weighs around 1.1 kilograms and is about 38cm long from head to toe. In boys, the testicles descend while in girls the clitoris is formed. The baby's head is getting bigger and brain growth is very rapid.
- 3. At 9 months, the baby is almost due. At average, the baby is more than 51cm long and weighs about 3.4 kilograms, but babies vary widely in size at this stage.

Lesson 6: Birth and Child Development



Welcome to Lesson 6 of unit 1. In the last lesson you learnt about pregnancy. In this lesson you will learn about birth and child development.



Your Aims:

- identify stages of child development.
- identify factors influencing child development
- identify antenatal care.

What is birth?

What is prenatal or antenatal care?

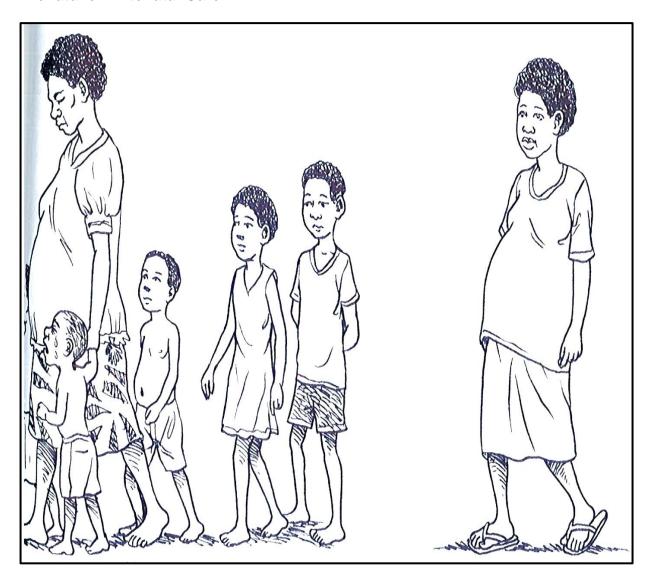
Prenatal or antenatal care is the management of pregnancy and prepares the mother for a normal delivery and for looking after the baby.

Prenatal visits to the hospital are important for the health of both the infant and mother. Health care providers can educate mothers on important health issues such as their diet and nutrition, exercise, immunizations, weight gain and abstaining from drugs and alcohol.

The proportion of deliveries with complications is higher for women who received neither antenatal clinic nor delivery care than for women who received antenatal care only or both antenatal and delivery.

Mothers who receive late or no prenatal care are more likely to have babies with health problems. Mothers who do not receive prenatal care are three times more likely to give birth to a low-weight baby, and their babies are five times more likely to die.

Prenatal or Antenatal Care



Pregnancy can be a risky or stressful time for women and their babies In PNG, many women die when they are giving birth. When we understand the risks, there are many things that we can do to look after the mother and her baby so that they both stay healthy.



It is important to look after mothers when they are pregnant so that they stay healthy and have healthy babies.

Some women have a greater risk of having problems and are known as *high risk mothers.*

Examples of High Risk Mothers	Consequences of No-Prenatal Care
 having their first baby 	 will develop toxemia (a serious

	complication of pregnancy which include high blood pressure, rapid large weight gain due to edema; swelling of hands, feet and body).
 have had four or more children already 	 will have birth complications such as prolonged labor.
are having problems with their pregnancy	will have excessive bleeding.
have had problems in the past giving birth	 Caesarean mothers – an operation done to remove the baby from the womb.

Prolonged labour and excessive bleeding can increase the risk of neonatal deaths. Overall, there had been an increase in the proportion of deliveries with those complications.

<u>TEN THINGS PREGNANT MOTHERS SHOULD DO</u>

- 1. Do normal work but get plenty of rest. Do not carry or lift heavy things because this can harm the baby.
- 2. Eat plenty of different kinds of food to help the baby grow and develop properly.
- 3. Do not smoke or drink alcohol, both of which can harm the baby.
- 4. Do not take medicine unless they are given to you by health workers because this can harm the baby.
- 5. Attend the antenatal clinic regularly to be checked by health workers.
- 6. Be able to recognise the signs that labour is starting such as regular contractions, slight bleeding or fluid coming from the vagina.
- 7. Make plans about where the baby will be born.
- 8. Wash every day and wear clean, loose clothes to prevent infections.
- 9. Go to the hospital, health centre or aid post if the mother has any problems such as bleeding, fever, and cough, pain when passing urine or vaginal discharge.
- 10. Make plans about what family planning method she will use after the baby is born.



Activity 6.1 Answer the following questions.

y is pregnancy said to be a risky or stressful time for women and the bies?
enatal clinic is not only for the pregnant mother or woman, their husband I partners are also encouraged to attend as well. Why do you think this is

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have now come to the end of the lesson. In this lesson, you have learned that:

- **Prenatal care** is the way we look after mothers when they are pregnant so that they stay healthy and have healthy babies.
- Pregnancy can be a risky or stressful time for women and their babies.
- **High risk mothers are** mothers who have a greater risk of having problems during pregnancy.

Ex	xplain what <i>high risk mothers</i> mean.
	hy are some pregnant women labelled as high risk mothers?
W	hy is the pregnant mother encouraged to eat a variety of good food?
	Thy is the pregnant mother encouraged to eat a variety of good food? Thy is it important to make plans where the baby will be born?

CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 2.

Answers to Activities

Activity 6.1

- 1. **Prenatal or antenatal care** is the way we look after mothers when they are pregnant so that they stay healthy and have healthy babies.
- 2. Many women have died when giving birth or lost their babies, especially when they did not take good care of themselves during pregnancy.
- 3. Husbands and partners of pregnant women are encouraged to attend antenatal clinics so that they can help care for the pregnant woman at home during her term of pregnancy.

Lesson 7: Family Planning



Welcome to Lesson 7 of unit 1. In In the last lesson you learnt about birth and child development. In this lesson you will learn about family planning.



Your Aims:

- define family planning
- identify types of family contraceptives and their effectiveness

What is family planning?

Family planning is having children that you planned on having. Family planning allows individuals and couples to have their desired number of children and the spacing and timing of their births. It is achieved through the use of contraceptives and the treatment for involuntary infertility. A woman's ability to space and limit her pregnancies has a direct impact on her health and well-being, as well as on the outcome of each pregnancy.

Easy-going, independent, children may delight in the arrival of a sibling at any time. High-need, sensitive children may find it harder to adjust to a brother or a sister, so they may need more adult attention before and after the sibling comes.

There are advantages and disadvantages of having children close together and further apart. Some of them are listed below;

Advantages of having children too-Disadvantages of having children tooclose- together. close- together. Not having enough personal time Sleepless nights and dirty nappies are out of the way in one block of with one child. years, rather than starting all over • Lack of rest by either one of the again when the other child is parent or both. independent. Parents experience stress from Clothing can be passed on to the lack of resources such as money next child without years of storage. to cater for the children's needs. Children have similar interest so Mother doesn't recover from giving they will play together. birth.

Advantages of Spacing Children

- Having ample time to enjoy with one child and getting know the child before the arrival of another.
- Having older children who can care for themselves and help with the care of the new baby.
- Giving children of all ages the opportunity to play with each other.

Disadvantages of Spacing Children

- Children of widely varying ages having different needs that are hard to meet at the same time, for example getting a child to soccer training when you have a sleeping baby at home.
- A child who has been an only child for several years experiencing a major adjustment when a sibling is born.

Benefits of family planning

Some of the benefits of family planning are highlighted below;

- Improves maternal health and child survival Helping women becoming pregnant to early, too late or too often benefit their children and them.
- Reduces the number of abortions, especially unsafe abortions More than half of all abortions occurring in developing nations are unsafe.
- **Prevents STIs, including HIV/AIDS** Improve access to condoms both male and female, reduces the rate at which STIs, including HIV are spread.
- **Empower women** Women who can control the number and timing of their children can take better advantage of educational and economic opportunities for a better future.
- **Promotes social and economic development and security –** High population growth hampers developing countries' economic development as their expanding populations compete for limited resources.
- Protects the environment Rapidly growing population increases environmental problems and strains the world's resources.

-
-

Activity 7.1 Answer the following questions.

	family planning?
How is f	amily planning achieved?
	e two disadvantages of having children too close?
What ar a. ——— b.	e two disadvantages of having children too close?
a. 	e two disadvantages of having children too close?
a. 	e two disadvantages of having children too close?
a. b.	e two disadvantages of having children too close? one of the benefits of family planning.
a. b.	
a. b.	

Using contraceptives

In order to avoid pregnancy or STIs, it is important not to have sex without some form of contraception during sex. By using contraceptives, you can dramatically reduce your risk of becoming pregnant and, depending on which contraceptive you use, protect your body against STIs, including chlamydia, gonorrhoea, syphilis and the HIV virus.



Contraceptives are drugs, equipment or methods that are used to prevent a woman from becoming pregnant.

1. The Ovulation Method

A woman can only become pregnant for a few days each month close to the time of ovulation, which is when she produces an egg. Ovulation usually occurs fourteen days before the start of her period. When she is fertile, she can also feel clear, slippery mucus in her vagina which will strand so onh between two fingers.

When a woman keeps a record of her periods and mucus days on an ovulation chart each month, it will help her to know when she is fertile. If a couple wants to have a baby then they must have sexual intercourse close to or during the time of ovulation. If a couple does not want to have a baby, then sexual intercourse must be avoided at this time.

2. Condoms

A condom is a thin rubber skin that a man unrolls over his erected penis before sexual intercourse. The semen is caught inside the condom so that the sperm does not fertilise the egg.

3. The Pill

The pill is a tablet that contains certain special chemicals that prevent a woman from ovulating. The tablet usually comes in special packets of twenty-eight pills, one for each day of the month.

4. Injection-Depo-Provera

Depo-Provera is a contraceptive that is given to a woman every three months as an injection by a doctor or a nurse. It works in the same way as the pill by stopping ovulation.

5. Intra-Uterine Device (IUD)

The Intra-uterine device or IUD is a small piece of plastic that is placed inside the woman's uterus by a doctor or a nurse. The best time for a woman to be given a IUD is after the birth of a child.

6. Sterilisation

Both men and women can have an operation that prevents them from having children.

- In men, the sperm tubes are cut or tied. This is called vasectomy.
- In women, the egg tubes are cut or tied. This is called *tubal ligation*.





Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have now come to the end of the lesson. In this lesson, you have learned that:

- Family planning allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births.
- By using contraceptives, you can dramatically reduce your risk of become pregnant and, depending on which contraception you use, protect your body against STIs, including chlamydia, gonorrhoea, syphilis and the HIV virus.
- Contraceptives are drugs, equipment or methods that are used to prevent a woman from becoming pregnant.

NOW DO PRACTICE EXERCISE 7 ON THE NEXT PAGE.

7

Practice Exercise:

Def	fine contraceptives.
\∕\/h	at is a condom and how does it help prevent pregnancy?
	et is a defident and new does it help prevent programby:
-	
⊨xţ	plain what the pill is and how it prevents pregnancy.
Diff	ferentiate between Injection-Depo-Provera and Intra-Uterine Device
Diff	ferentiate between vasectomy and tubal ligation.

CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 2.

Answers to Activities

Activity 7.1

- 1. **Family Planning** is having children that you planned on having and not children conceived by accident.
- 2. Family Planning is achieved through the use of contraceptives and the treatment for involuntary infertility.
- 3. (i) Not having enough personal time with one child.
 - (ii) Lack of rest by either one of the parent or both.
- 4. **Improves maternal health and child survival** helping women becoming pregnant too early, too late or too often benefit their children and them.

Lesson 8: Family Size



Welcome to lesson 8 of unit 1. In the last lesson you learnt about family planning. In this lesson you will learn about family size.



Your Aims:

- define family size
- identify the relationship between family size and family welfare

What is family size?

In order to define family size, we must first define the word family. A **family** is a group of people who live together in the same house and care for each other. However, the most important type of family that we need to consider is the **nuclear family**. A nuclear family consists of both parents living with their own children. A smaller size nuclear family would be both parents and 3-4 children. A bigger size nuclear family would consist of both parents with 8-10 children.

A small nuclear family can cater for the needs of all children unlike the bigger size nuclear family. There are different kinds of families that are found in societies around the world apart from the nuclear family. These types of families are shown below;

TYPES OF FAMILY	DEFINITION			
Extended family	Parents living with children, grandparents, uncles, aunties,			
	cousins, and so on.			
De facto family	Parents not legally married but recognized by the community			
Single parent family	A mother or father bringing up children alone			
Blended family	A man and woman who have been married before get married to each other and live with their children from their previous			
	marriages.			

Having looked at what a family is and the different kinds of families, we can now simply define *family size* as how big or small a family is. There are many factors that contribute to the size of a family. For example, in the village, a couple may decide to have many children so that they can help in gardening, gathering firewood, hunting and the many other more practical chores that people in the village are required to do. In the city, due to the high cost of living, the urban couple might only want to have 2-3 children so that they can manage to cater for their needs.



Family size refers to the size of a family in terms of how many members are there in the family.



Activity 8.1 Answer the following questions.

1.	Define family.
2.	Define family size.
3.	List one advantage each of having a big family and a small family.
4.	Identify the different types of families as shown in the diagrams below.

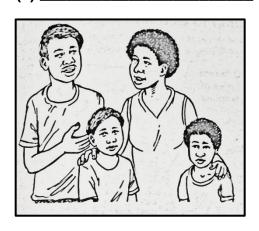




(b) ____



(c) _



Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.

What is family welfare?

Welfare is the wellbeing or the state of being well, happy or prosperous. **Family welfare** is the wellbeing of a family in terms of happiness, good health, security, shelter and love and so on. In other words, when there is food on the table or roof over our heads, when we are safe and in good health, our family is happy. When a family is happy, there is togetherness, love and care for each other and so the family can become successful or prosperous.

The relationship between family size and family welfare.

There are many factors that contribute to the wellbeing of a family when it comes to family size. Let us take location for example. In a rural setting, having a big family can be a bonus to the family as there are plenty hands to do all the work or chores that need to be done. In an urban setting on the other hand, a big family would be seen as a burden especially when there are too many mouths to feed, shelter and clothes, and so on. Having looked at this example, we can say that the size of a family can have a big impact on the family welfare.

Activity 8.2 Answer the following questions.

Explain the	relationship between family size and family welfare.
List few thi	ngs to consider when making decisions about family size.

4. In the tables below, list at least three advantages and three disadvantages of a big and small family.

(a) Small Family

Advantages	Disadvantages				
1.	1.				
2.	2.				
3.	3.				

(b) Big Family

Advantages	Disadvantages
1.	1.
2.	2.
3.	3.

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have now come to the end of the lesson. In this lesson, you have learned that:

- Family size is the number of members in a family and family welfare is the wellbeing of a family.
- The size of a family affects its welfare.
- There are advantages and disadvantages of both big and small families.
- There are five (5) different types of families; nuclear family, extended family, de facto family, single parent family and the blended family.

NOW DO PRACTICE EXERCISE 8 ON THE NEXT PAGE.

Practice Exercise: 8

			of the		ving	key	terms	to	show	that	you	unders	stand	the
(a) F	amil	y size												
(b) F	amil	y welf	are											
(c)Fa	amily	,												
(d)R	elatio	onship)											
(e)E	xtend	ded fa	mily											
(f)Sii	ngle	parer	t fami	ly										
(g)	De	e facto	o fami	ly										
(h)N	luclea	ar fam	ily											
(i)Ble	ende	d fam	ily											

CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 2.

Answers to Activities

Activity 8.1

- 1. A family is a group of people who live together in the same house and care for each other.
- 2. Family size refers to the size of a family in terms of how many members there are in the family.
- 3. One of the advantages of a big family is sharing chores at home so that work is done in a short period of time unlike a small family whereby many chores will be left incomplete.

One of the advantages of a small family is that each child enjoys attention from both parents while attention is divided amongst a bigger family.

- 4. (a) Extended family
 - (b) Single parent family
 - (c) Nuclear family

Activity 8.2

- 1. **Family welfare** is the wellbeing of a family in terms of happiness, good health, security, shelter and love and so on.
- 2. There are both advantages and disadvantages of family size and family welfare when put together. An example would be a small size family can afford to live in the city unlike a bigger family in terms of finance.
- 3. A few things to consider when making decisions about family size are; finance, job security, location (city/village) and so on.

4. (a) SMALL FAMILY

ADVANTAGES	DISADVANTAGES
1.	1.
2.	2.
3.	3.

(a) BIG FAMILY

ADVANTAGES	DISADVANTAGES
1.	1.
2.	2.
3.	3.

ANSWERS TO PRACTICE EXERCISES IN TOPIC 2

Practice Exercise 5

1.

- Foetus: The embryo at three months that looks like a baby. Here the bones have begun to form.
- Embryo: A ball of cell that is the result of the egg or ovum dividing many times.
- Placenta: A special organ starts growing from the embryo and the mother.
- Umbilical cord: This is a code that is attached to the placenta. The umbilical cord contains three blood vessels. One carries dissolved food and the other two carry waste products away.

2.

- Another name for a foetus is little one.
- Watermelon seed 1 month, Avocado 4 months.
- Babies at 39 weeks usually weigh about 3.2 kg and continue to build the fats stores.
- At 7 months, the baby's head moves into the pelvis and presses firmly against the cervix.
- At 8 months, the organs are fully developed and in place but the lungs will be the last organ to reach maturity.
- 3. The umbilical cord contains three blood vessels. One carries dissolved food and the other two carry waste products away.
- 4. Helps to prevent them from becoming pregnant again too quickly.

Practice Exercise 6

- 1. **High risk mothers** refer to pregnant women who have a greater risk of having problems during pregnancy and child birth.
- 2. High risk mothers are those who;
 - are having their first baby
 - have had four or more children already
 - are having problems with their pregnancy
 - have had problems in the past giving birth
- 3. To help the baby grow and develop properly.
- 4. So that the pregnant woman and her family are prepared and know where to go when and if she is in labour.
- 5. So that she can avoid being pregnant too quickly after child birth.

Practice Exercise 7

- Contraceptives are drugs, equipment or methods that are used to prevent a woman from becoming pregnant.
- 2. **A condom** is a thin rubber skin that a man unrolls over his erected penis before sexual intercourse. The semen is caught inside the condom so that the sperm does not fertilise the egg.
- 3. **The pill** is a tablet that contains special certain chemicals that prevent a woman from ovulating. The tablet usually comes in special packets of twenty-eight pills, one for each day of the month.
- 4. **Injection Depo-Provera** is a contraceptive that is given to a woman every three months as an injection by a doctor or a nurse. It works in the same way as the pill by stopping ovulation while the Intra-uterine device or IUD is a small piece of plastic that is placed inside the woman's uterus by a doctor or a nurse. The best time for a woman to be given an IUD is after the birth of a child.
- 5. In men, the sperm tubes are cut or tied. This is called *vasectomy* while in women; the egg tubes are cut or tied. This is called *tubal ligation*.

Practice Exercise 8

1.

- (a) Family size is the size of a family in terms of how many members are there in the family.
- (b) Family welfare is the wellbeing of a family in terms of happiness, good health, security, shelter and love and so on.
- (c) Family is a group of people who live together in the same house and care for each other.
- (d) Relationship is the connection between two or more things or people.
- (e) Extended family refers to parents living with children, grandparents, uncles, aunties, cousins, and so on.
- (f) Single parent family is a mother or father bringing up children alone.
- (g) De facto family refer to parents not legally married but recognised by the community.
- (h) Nuclear family refers to parents living with their own children.
- (i) Blended family is when a man and woman who have been married before get married to each other and live with their children from their previous marriages.
- 2. The two disadvantages of a single parent family are;
- 3. An example of a factor that has an advantage that contributes to having a bigger nuclear family is
- 4. The 3 reasons why extended families are beneficial in our societies are
- 5. The sentence 'the size of a family affects its welfare' means

TOPIC 3

SEXUAL RELATIONSHIPS

In this topic you will learn about:

- rights and responsibilities in relationships
- Sexuality
- sexual intercourse and fertilisation
- sexual health and puberty
- gender

TOPIC 3: SEXUAL RELATIONSHIPS

Welcome to Topic 3 on Sexual Relationships. In this topic you will learn about Rights and Responsibilities in Relationships, Sexual Intercourse and Fertilisation, Sexual Health and Puberty and Gender.

There are five lessons:

Lesson 1: Rights and Responsibilities in Relationships

In this lesson you will identify rights and responsibilities in sexual relationships and the difference between rights and responsibilities.

Lesson 2: Sexuality

In this lesson you will define sexuality and sexual behaviours and identify sexual behaviours.

Lesson 3: Sexual Intercourse and Fertilisation

In this lesson you will define sexual intercourse and fertilization and the fertilization process.

Lesson 4: Sexual Health and Puberty

In this lesson you will differentiate between caring and accepting infected persons and identify ways of caring and accepting infected persons.

Lesson 5: Gender

In this lesson you will define gender, identify common gender issues in PNG and the society's expectation.

In doing so, you will find out more about Sexually Transmitted Diseases (STIs) and how they are transmitted or spread. You will identify the different kinds of STIs and which ones are on the rise or common in PNG and discover ways of avoiding such diseases. You will also look at HIV/AIDS - how to control it, how to care for or accept those that are living with the disease and how serious the situation is in PNG with regards to HIV/AIDS.

We hope you will enjoy studying this Topic.

Lesson 9: Rights and Responsibilities in Relationships



Welcome to lesson 9 of unit 1. In the last lesson you learnt about family size. In this lesson you will learn about rights and responsibilities in relationships.



Your Aims:

identify rights and responsibilities in sexual relationships identify the difference between rights and responsibilities

Rights and Responsibilities

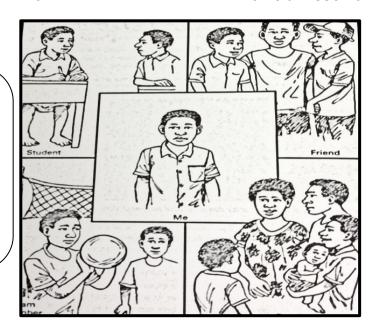
Rights are the things that you can normally expect to be met by others while **responsibilities** are things that you are required or expected to do, something more like your duties or obligations. For example, you being respected by another human being is your right. Your responsibility is to respect that other person too.

When you have a relationship with somebody it takes time for the two of you to know each other well and to find out if you are suitable for each other. Sometimes young people are in too much of a hurry and do things that they feel sorry about later. We can all do things that we regret so it is best to think properly before you do anything.

When you are in a relationship, both people have rights and responsibilities. You should talk to each other, listen to each other and respect each other. You should not be forced into doing something that you do not want to do. You need to be confident about your values and your beliefs and be able to decide what you will and will not do. You need to make this clear to your partner, and then make sure that you do not change your mind.



This boy has a relationship as a student to his teacher, teammate to his teammates, son and brother to his family and as a friend to his peers. He has rights and responsibilities to these different groups so he must always learn to make wise decisions.



Different kinds of relationships

What is Relationship?

Relationship is the way in which two people or groups of people behave towards each other. One of the most important needs of a human being is to be involved in relationships with other people. In all cultures throughout the world, individuals share relationships with other people in the community so that they are able to help each other. There are many types of relationships that people have but in this lesson we will look particularly at sexual relationships.

Sexual Relationship

Sexual relationship is the intimate or close physical bond that two people have towards each other as seen in married couples. Sexual feelings are normal because as we get older we want to have a sexual relationship which will require us to make sexual decisions. When you make such decisions, it is based on moral and ethical values that you learnt from important people in your life such as family, friends, teachers and members of your church. These decisions show the respect you have for yourself and for others.

One of the most important things to decide is whether to have a sexual relationship. Just because your body begins to physically mature does not mean you are ready to have a sexual relationship. If you have a boyfriend or a girlfriend, then you need to decide on how far you will go in your relationship before things start to happen. You do not need to have sexual intercourse in order to enjoy being with somebody else.



When you make a decision to wait until you are ready, and put it into practice, it shows that you are a strong person and know how to behave responsibly.



Activity 9.1 Answer the following questions.

Dillele	entiate rights from responsibilities.	
List or	e right in a sexual relationship.	
List or	e responsibility in a sexual relationship.	
Define	relationship.	

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.

Dealing with pressure to have sex

Some young people try to force their girlfriends or boyfriends to have sexual intercourse when they do not want to. It can be very difficult when the person that you want to be with is trying to make you do something that you really do not want to do.

For example, if you are encouraged to consume alcohol and your self-control is reduced or lacking, then you might have sex more easily. For this reason, it is always very important to think about these things beforehand, to assert yourself and not to change your mind and give in to pressure. If you feel that you are being pressured, you have to be assertive or to express yourself confidently so that it is clear to the other person what your feelings are.

Some of the things that may happen in such circumstances are shown in the illustrations in the following pages.



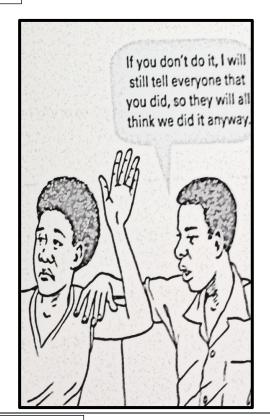
Negotiation and Sexual Activity

- Focus on the problem and not the other person
- Focus on the needs of you and your partner and not their position on the problem.
- Emphasise common ground what do you both agree about?
- Be creative about opinions try to think of new ideas or solutions.
- Make a clear agreement that you both understand.

1.

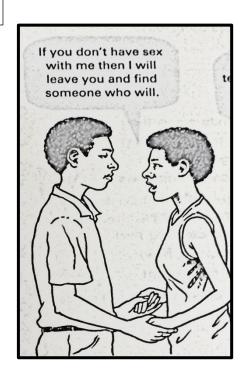


2.

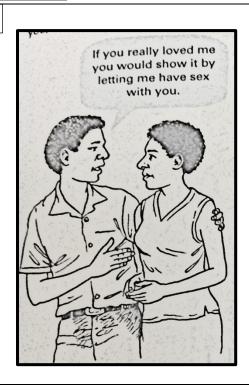


Being pressured to having sex

3.



4.



Being pressured to having sex



RESPECT your partner's decision and do not force them to do anything that they do not want to do. If your partner does not want to have sex, that is their **RIGHT**, it is your **RESPONSIBILITY** to respect their decision.



Activity 9.2 Refer to the stories below to answer the following questions.

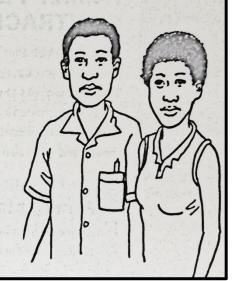
Elsie and Patrick

Elsie and Patrick have been friends since they were in Grade 9 but have been trying to keep it a secret. They spend time together when they can and like to hold hands and sometimes kiss and cuddle each other. They have both agreed that they are not ready to have sex, but just recently after a school dance they met alone and started to feel very excited. Now Elsie is worried that in the future they might lose control and have sex, even though they have both said that they do not want to.



Felicity and Joseph

Joseph is in Grade 10 and has told Felicity's friends that he would like to make friends with Felicity. Felicity is in Grade 9 and boys in Grade 10 don't usually look at girls in her grade. Felicity doesn't think that she is very pretty and so she is pleased that an older boy is interested in her. She doesn't know much about him although some girls have told her that he already has a girlfriend and only wants her so that he can have sex with her and then he will dump her. She is not sure if this is true or if the other girls are jealous because he is interested in her and they think he is good looking.



Wh whe	y do some people end up doing something that they do not want en they are in a situation like Elsie's and Patrick's?
Hov	v can Felicity be assertive in this situation?

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.

Some important points:



NEGOTIATION AND SEXUAL ACTIVITY

- Focus on the problem and not the other person.
- Focus on the needs of you and your partner and not their position on the problem.
- Emphasis common ground what do you both agree about?
- Be creative about opinions try to think of new ideas or solutions.
- Make a clear agreement that you both understand.



Summary

You have now come to the end of the lesson. In this you have learned that:

- Rights are the things that you can normally expect to be met by others while responsibilities are things that you are required or expected to do, something more like your duties or obligations.
- **Relationship** is the way in which two people or groups of people behave towards each other.
- Respect your partner's decision and do not force them to do anything that they do not want to do. If your partner does not want to have sex, that is their right, it is your responsibility to respect their decision.

NOW DO PRACTICE EXERCISE 9 ON THE NEXT PAGE.

Practice Exercise: 9

	e a brief explanation of each of the following key terms to show that you erstand the meaning of each term.
•	Sexual relationship:
•	Respect:
•	Assertive:
Wha have	at would be a right thing to do if a person feels that he/she is pressured to e sex?

-	Look at each of the four examples on page 79. Explain what should happen in each case by stating how the other person should respond.
	Picture1
	Picture 2
	Picture 3
	Picture 4

CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 3.

Answers to Lesson Activities

Activity 9.1

- 1. Rights are the things that you can normally expect to be met by others while responsibilities are things that you are required or expected to do, something more like your duties or obligations.
- 2. Individual answers may vary. No standard answers.
- 3. Individual answers may vary. No standard answers.
- 4. Relationship is the way in which two people or groups of people behave towards each other.

Activity 9.2

Individual answers may vary. No standard answers.

Lesson 10: Sexuality



Welcome to lesson 10 of unit 1. In the last lesson you learnt about rights and responsibilities in relationships. In this lesson you will learn about sexuality.



Your Aims:

- define sexuality and sexual behaviours
- identify sexual behaviours

What is sexuality?

Sexuality describes the feelings and activities that a person goes through in expressing himself or herself as a sexual being. It is a total expression of who we are as individuals. It describes how important sexual expression is in a person's life. Our sexuality seems to be formed by the time we reach our teens – although it may be many years later before we come to accept our sexuality.

What makes up our sexuality?

Sexuality involves many aspects of being human. The four major components of sexuality include:

- 1. Sensuality is connected to our physical feelings
- 2. Intimacy and relationships close personal relationship with another being
- Gender and sexual identity being feminine or masculine and being female or male
- 4. Sexual health moral and physical care given to our sexual being

Each of these components can have a healthy and or unhealthy aspect that is generally influenced by an individual's values, culture, experience and spirituality.

Sex and sexuality

Sexuality is not just about sex, although people often define sexuality in terms of genitals, what we do with them and who we do it with. Sexuality begins before birth and is a lifelong learning process until we die. Sexuality involves and is shaped by many things, including:

- Values and beliefs
- Attitudes
- Experiences
- Physical attributes

- Sexual characteristics
- Societal expectations
- Sexual orientation

Sexuality

- . Sexuality:
 - is the whole being of who you are, what you believe, what you feel, and how you respond towards your expressions as a sexual being
 - includes your relationships and intimate encounters
 - is expressed in the way you speak, smile, stand, sit, dress, dance, laugh, cry, and so on.



Sexuality is all this, including the way religion, morals, friends, age, body concepts, life goals and self-esteem shape your sexual life.



Activity 10.1 Answer the following questions.

С	Define Sexuality
_	
_	
_	
_	
I	_ist the 4 major components of sexuality.
а)
b)
)
d)
١	lame 3 things that shape our sexuality.
а)
b	1
)

4. When is sexuality actually formed?

GR10 PD U 1	87		TOPIC 3 LESSON 10
check your a			to the end of this lesson to orrections before moving on
Human sexu	al behaviours		
themselves s		•	ople say or do to express meone is sexually excited.
•	and courtship – the proces tic meetings prior or before		a sexual relationship through
	ng or hugging – an affections to show love and affections.		r holding someone close in
3. kissing	J		
	 the behaviour in which ly attractive 	you show somed	one that you find him or her
5. sexual man p	intercourse – the physical utting his penis inside a wo	activity of sex, us man's vagina	sually describing the act of a
	is likely to present his or		e becomes sexually excited. ough one or more of these
Activi	ty 10.2 Write a short questions.	sentence to	each of the following
1. In you why.	opinion, when is the best	time or age to ha	ve sexual activities? Explain

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have now come to the end of the lesson. In this you have learned that:

- Sexuality is not just about sex, although people often define sexuality in terms of genitals, what we do with them and who we do it with.
- Sexuality describes the whole way a person goes about expressing himself or herself as a sexual being. It describes how important sexual expression is in a person's life.
- A number of components make up the sexuality of a human being.
- Sexual behaviours arise when someone is sexually excited and wishes to express these feelings sexually.

NOW DO PRACTICE EXERCISE 10 ON THE NEXT PAGE

Write a brief explanation of each of the following key terms to show that you

Practice Exercise: 10

1.

understand the meaning of each term. Sexuality: Sexual behaviour: Sexual feeling:

2. Refer to the picture below to answer the following questions.



Components of sexuality

Sexuality is said to be expressed in the way we do different things. Some of these things are illustrated in this picture. Name at least four of these things.

CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 3.

Answers to Activities

Activity 10.1

- 1. Individual answers may vary. No standard answers.
- 2. The four major components of sexuality are;
 - 1. Sensuality
 - 2. Intimacy and relationships
 - 3. Gender and sexual identity
 - 4. Sexual health
- 3. Any 3 of these 6 answers are correct.

Sexuality involves and is shaped by many things, including:

- Values and beliefs
- Attitudes
- Experiences
- Physical attributes
- Sexual characteristics
- Societal expectations
- 4. Sexuality begins before birth.
- 5. Our sexuality seems to form by the time we reach our teens

Activity 10.2

Individual answers may vary. No standard answers.

Lesson 11: Sexual Intercourse, Fertilisation and Conception



Welcome to lesson 11 of unit 1. In the last lesson you learnt about sexuality. In this lesson you will learn about sexual intercourse, fertilisation and conception.



Your Aims:

- define sexual intercourse and fertilisation
- identify the fertilization process

Sexual intercourse

Sexual Intercourse is a natural act and an important part of adult life. How, when, where, why and with whom you have sex for the first time, will have lasting effects and will shape your attitude towards sex for the rest of your life.

What happens during 'Sexual Intercourse'?

During sexual intercourse, the sexual movement of the penis in the vagina ejaculates semen in the vagina. This ejaculation of semen contains millions of sperm. Some sperm pass through the cervix into the uterus and begin to swim up the fallopian tubes.

No one should have sexual intercourse out of a sense of obligation and fear. Any form of forced sex is rape. Whether the perpetrator is a stranger or someone you know, "NO!" MEANS "NO!" Alcohol and other drugs impair judgement and reduce inhibitions or logical thinking, leading to situations which sexual intercourse is likely to occur.



Activity 11.1 Answer the following questions.

Explain	what happe	ans during	sexual IIII	ercourse.		

(a) Is _ _	s it appropriate?
(b) Is	s it helpful to you?
(c) H	low does it affect you?
_	
(d) D	Poes it influence you in anyway?
Imag pres	gine that you are on a date and your boyfriend or girlfriend is trying sure you into having sexual intercourse.
Imag	gine that you are on a date and your boyfriend or girlfriend is trying

Ovulation method review

In Lesson 4 of Unit 1, we learnt that inside the female body, there are two sex organs called ovaries. Once a month, an egg called **ovum** is released from one of the ovaries. This egg release is called **ovulation**. The egg moves along one of the fallopian tubes to the uterus. If the egg is fertilized by a male sperm, it will grow into a baby in the following 9 months.

Fertilisation and conception

Fertilisation occurs when the male sperm meets the female egg (ovum). When the egg is fertilised the genes or the chromosome from each of the male and female combine to create a cell. This is when the woman gets pregnant. This cell then starts to divide, becoming a collection of cells that grows into a human baby.

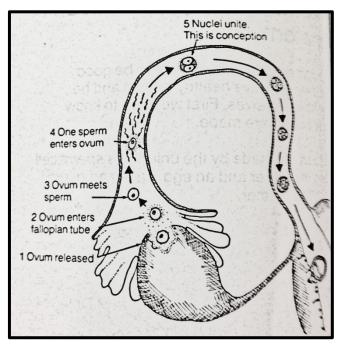


When the male sperm and the female egg unite or are fertilised, we say that *conception* has occurred.

The Conception Process

This is how it happens:

- 1. The ovary releases an ovum. This is called **ovulation**
- 2. The ovum moves along the fallopian tube
- 3. When a woman has sexual intercourse with a man, millions of sperm are released into the woman's body. Many of the sperm will not reach the ovum in the fallopian tube but some should
- 4. One sperm will penetrate or enter the ovum. Once this sperm has entered, not other sperm can enter the ovum
- 5. The sperm then loses its tail and the two nuclei (sperm and ovum) move together The moment in which the nuclei unite is the moment of *conception*



The process of fertilisation and conception



A few days after an egg is fertilised in the fallopian tube, it attaches itself to the thickened lining of the uterus. It takes about 40 weeks for the fertilised egg to become a fully developed baby.



Activity 11.2 Answer the following questions.

Wr 	nat are the names given to the male nuclei and female nuclei?	
De	scribe how a female can get pregnant.	

3.	Explain what happens a few days after fertilisation of an egg in the fallopian tube.

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have now come to the end of the lesson. In this you have learned that:

- Sexual intercourse is not something that people should go around practicing irresponsibly but as an act of love and trust between a couple recognised as married by the society.
- Conception occurs when the male sperm fertilises the female egg.
- Any form of forced sexual intercourse is 'rape'.
- During intercourse, millions of sperm are released into the woman's body but only one fertilises the female egg. This is called fertilisation.

NOW DO PRACTICE EXERCISE 11 ON THE NEXT PAGE

Practice Exercise: 11 Define the following terms. 1. a) Conception: b) Ovulation: 2. List the different stages of the conception process. d) _____

3. Think about the impact of having a baby.

(a)	How would having a baby in the next 12 months affect your f
	How would your daily routines change if you had a little baby to tak of?
(c)	List some financial responsibilities that you would have if you had a b
Wh	at was the important lesson you learnt about sexual intercourse?
Г	CHECK YOUR WORK, ANSWERS ARE AT THE END OF TOPIC

Answers to Activities

Activity 11.1

- Individual answers may vary. No standard answers. Individual answers may vary. No standard answers. Individual answers may vary. No standard answers. 1.
- 2.
- 3.

Activity 11.2

- 1. Sperm and ovum.
- 2. A woman gets pregnant when a male sperm fertilises a female egg.
- 3. A few days after an egg is fertilised in the fallopian tube, it attaches itself to the thickened lining of the uterus. It takes about 40 weeks for the fertilised egg to become a fully developed baby.

Lesson 12: Puberty and Sexual Health



Welcome to lesson 12 of unit 1. In the last lesson you learnt about sexual intercourse, fertilisation and conception. In this lesson you will learn about puberty and sexual health.



Your Aims:

- define puberty and list the changes that take place in puberty
- define sexual health
- identify factors influencing sexual health

Puberty

As you grow up, your body changes and you become sexually mature. This means that your reproductive system develops so that you are able to have children. The stage in life when you begin to develop into an adult is called **puberty**. The time between puberty and being a mature adult is known as **adolescence**. During adolescence you learn to think and behave as an adult. It is important to be a mature adult before you think about having children of your own.

If we look at a group of teenagers who are all at the same age, it is normal for them to be at different stages of development. Girls usually start to develop before boys and we can see a number of **physical changes** taking place in both.

Physical changes in girls	Physical changes in boys
Breasts develop	Voice breaks or gets deeper
Hips get wider	Beard starts to grow
Pubic hair starts to grow	Pubic hair starts to grow
Monthly period starts	Sperm begins to be produced
Underarm hair starts to grow	Underarm hair starts to grow

As well as the physical changes that take place during puberty, there are also **social** and **emotional** changes. These changes allow you to think and behave as an adult and this can be a difficult time for some young people. During this time

- you may find that your feelings are mixed up and your moods change quickly.
- you may feel shy or embarrassed or uncomfortable about yourself, but this is normal.

In adolescence your body and feelings are changing, and it can sometimes take several years before you begin to know and accept yourself and have confidence to give your point of view or to make important decisions in your life.

Sexual Health

Sexual health refers to the state of physical, mental and social well-being of an individual in relation to their sexuality. It requires a positive and respectful approach to sexuality; as well as, the possibility of having pleasure and safe sexual experiences that are free from discrimination and or intimidation or force. Sexual health is about how we are able to take care of ourselves in terms of:

- (a) Sexual relationships
- (b) Sexual intercourse
- (c) Sexually transmitted infections (STIs)

It is very important that we know and understand what sexual health is so that we can be able to avoid problems, especially those that can be a threat to our lives.

(a) Sexual Relationships

Sexual feelings are normal to have and as living beings we want to have a sexual relationship or a more intimate bond with another person. This will therefore require us to make sexual decisions. When you make such decisions, it is based on moral and ethical values that you learnt from important people in your life such as family, friends, teachers and members of your church. These decisions show the respect you have for yourself and others.

(b) Sexual Intercourse

Sexual intercourse is a natural act where two people (male and female) come together in sexual contact. It is an important part of adult life especially in the creation of new life. How, when, where, why and with whom you have sex for the first time will have lasting effects and will shape your attitude towards sex for the rest of your life.

(c) Sexually Transmitted Infections (STIs)

Sexually transmitted infections or STIs, are diseases that are transmitted through sexual intercourse. Common STIs include; gonnorrhoea, syphilis, chlamydia, hepatitis B and HIV/AIDS. These STIs and more will be discussed in detail in Topic 4.

Scientists have found that there are more than 20 different STIs that are passed from one infected person to another through sexual activity. Many people who have an STI do not develop any symptoms and may not be aware

they have an infection that can be passed on to their sexual contacts. We need to know and learn about STIs so that we can be able to look after ourselves in order to avoid these deadly diseases.

Activity 12.1 Write brief sentences to answer the following questions.

in your own words, use	e the 3 components of Sexual Health to define wh
What is puberty?	
What is adolescence?	

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have now come to the end of the lesson. In this you have learned that:

- The stage in life when you begin to develop into an adult is called *puberty*. The time between puberty and being a mature adult is known as *adolescence*.
- As well as the physical changes that take place during puberty, there are also social and emotional changes
- Sexual feelings are normal to have and as living beings we want to have a sexual relationship or a more intimate bond with another person.
- Sexual health refers to the state of physical, mental and social well-being of an individual in relation to their sexuality.
- It is very important that we know and understand what sexual health is so that we can be able to avoid problems, especially those that can be a threat to our lives.

NOW DO PRACTICE EXERCISE 12 ON THE NEXT PAGE.

Practice Exercise:	12

In your own words, explain what the following components of sexual health means to you and its importance. 1. Sexual Relationships 2. Sexual Intercourse Sexually Transmitted Infections (STIs) 3. Gonorrhoea is an STI. Research and find out about its cause, symptoms and 4. treatment. Cause: Symptoms:

l r	Treatment:					
С	HECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 3.					

Answers to Activities

Activity 12.1

- 1. Individual answers may vary. No standard answer.
- 2. **Puberty** is the stage in life when you begin to develop or change into an adult.
- 3. **Adolescence** is the time between puberty and being a mature adult.

Lesson 13: Gender



Welcome to lesson 13 of unit 1. In the last lesson you learnt about puberty and sexual health. In this lesson you will learn about gender.



Your Aims:

- define gender
- identify common gender issues in PNG
- identify society's expectations

What is gender?

Apart from having an intimate bond with another person, the word sex can also be defined as biologically or physically being born a male or female or being a boy or girl. However, although *gender* is defined as the fact of being male or female, gender can also be determined by cultural and socials influences. For example, a young person who was born a male would choose to socially, dress and behave like a female.

The differences in the bodies of men and women discussed in your previous lesson have caused all societies to have traditional gender roles. Because of these differences men and women have taken different responsibilities, do work differently as well as involve in activities differently.

The physical differences that make a male different from a female are:

- Males have beard, hairy chest, broad shoulders, deep voice, a muscular body and their sex organ consists of a penis and testicles.
- Females have breasts that protrude at about the age of 12, a sharp peak voice, curved bodies, usually grow their hair long and their sex organ is called the vagina.



Gender, a social influence.

Common gender issues

In Papua New Guinea's traditional society, men usually do the physical work of clearing the land for gardening and putting up the fence. Women usually do the planting and weeding to maintain the garden. Since women have babies, they do most of the parenting roles and household chores.

In a traditional society, the community usually expects you to behave in certain ways because of your gender. These expectations sometimes result in stereotyping-for example, the belief that all girls like to cook.



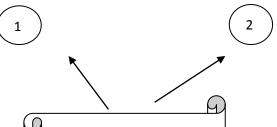
A woman's role.

Unfortunately, some of these expectations show the power or control that men/boys have over women and girls and are not always fair. For example, men having more than one wife but a woman cannot marry more than one man.

However, in many societies today, this kind of belief or stereotyping is improving where more girls are now sent to school and take up courses or studies which they were unable to take up before. They are also able to go out and work and earn an income just like the men and at the same time take care of their families. At the same time, men are beginning to take on roles that only women used to do.







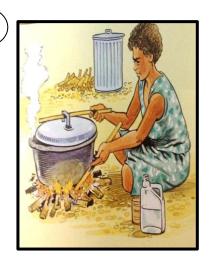
Roles that both men and women have in today's community.



*

Women's roles

- 1. Look after and bring up children
- 2. Sell food at the market
- Cook food and feed the family
- 4. Do laundry
- 5. Do the dishes
- 6. Collect water and firewood
- 7. Gardening
- 8. Clean and maintain the house, etc.





Because of the many roles that women have, the stereotype perception or view is that a woman's place is at home and so they do not have the time to leave the house and do other things such as leisure and recreational activities.

6	
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16	
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(a)

(b)

(c)

(d)

Activity 13.1 Answer the following questions.

Men have protruding breasts

Females have smooth and curved bodies

Females have hairy chests

Males have testicles

1. Read each statement given and write **True** or **False** beside each one of them.

Complete the table below to show waste father, mother, sister or brother	who does the prescribed jobs in your family).
Jobs done in the house	Who does this job in the house?
Pays for school fees	
Cooks most of the meals	
Washes the plates	
Baths the baby	
Fixes a broken step	
Washes clothes for the family	
Feeds the animals (pigs and dogs)	
Cleans the toilet and bathroom	

3.	Referring t distribution			2,	what	can	you	say	about	the	jo

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have now come to the end of the lesson. In this you have learned

- Gender is being a male or a female
- Gender roles are usually determined by the physical differences of males and females
- Most societies are improving in their beliefs about traditional gender roles providing more opportunities for girls now than in the past.
- In a traditional society, the community usually expects you to behave in certain ways because of your gender. These expectations sometimes result in stereotyping-for example, the belief that all girls like to cook.

NOW DO PRACTICE EXERCISE 13 ON THE NEXT PAGE.

Practice Exercise:	13	

- 1. Write a short argumentative essay titled 'A woman's place is at home.'
 - You can either argue for or against.

•	 Make sure your arguments are clear and straight to the point. Start with a good Introduction and end with a convincing Conclusion. 					

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CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 3.

Answers to Activities

Activity 13.1

1.

- (a) False
- (b) False
- (c) True
- (d) True

2.

Jobs done in the house	Who does this job in the house?
Pays for school fees	Mother and Father
Cooks most of the meals	Mother and girls
Washes the plates	Mother and girls
Baths the baby	Mother and girls
Fixes a broken step	Father and boys
Washes clothes for the family	Mother and girls
Feeds the animals (pigs and dogs)	Mother and girls
Cleans the toilet and bathroom	Mother and girls

3. In traditional Papua New Guinean setting, the job distribution is not fair because the females do most of the jobs/chores and not the males.

ANSWERS TO PRACTICE EXERCISES IN TOPIC 3

Practice Exercise 9

- 1. Individual answers may vary. No standard answer.
- 2. Individual answers may vary. No standard answer.
- 3. Individual answers may vary. No standard answer.
- 4. Cause: It is caused by bacteria that live in warm, moist places such as the urethra and the vagina.

Symptoms: *In males* – feeling the need to urinate many times, a burning pain when passing urine and a discharge of pus from the end of the penis.

In females – they have the same symptoms but they are much more difficult to notice, and females do not know if they have the disease.

Treatment: Penicillin or antibiotics can help treat this STI.

Practice Exercise 10

Individual answers may vary. No standard answer.

Practise Exercise 11

- 1. Individual answers may vary. No standard answers.
- 2.
- (a) Stand
- (b) Smile
- (c) Dress
- (d) Talk

Practice Exercise 12

- 1. Conception occurs when the male sperm fertilises the female egg.
- 2. The different stages of the conception process are;
 - (a) The ovary releases an ovum. This is called ovulation.
 - (b) The ovum moves along the fallopian tube.
 - (c) When a woman has sexual intercourse with a man, millions of sperm are released into the woman's body. Many of the sperm will not reach the ovum inn the fallopian tube but some should.
 - (d) One sperm will penetrate or enter the ovum. Once this sperm has entered, not other sperm can enter the ovum.
 - (e) The sperm then loses its tail and the two nuclei (sperm and ovum) move together. The moment in which the nuclei unite is the moment of conception.
- 3. Individual answers may vary. No standard answers.
- 4. Individual answers may vary. No standard answers.

Practice Exercise 13

Individual answers may vary. No standard answers.

TOPIC 4

SEXUALLY TRANSMITTED DISEASES

In this topic you will learn about:

- sexually transmitted diseases
- hiv/aids
- preventive strategies and risk assessments
- caring for and accepting infected persons
- seriousness of the situation in PNG

TOPIC 4: SEXUALLY TRANSMITTED DISEASES

Welcome to Topic 4 on Sexually Transmitted Diseases. In this topic you will learn about Sexually Transmitted Diseases, HIV and AIDS, Preventive Strategies and Risk Assessments, Caring for and Accepting Infected People.

There are five lessons:

Lesson 1: Sexually Transmitted Diseases

In this lesson you will define Sexually Transmitted Infections and identify types of Sexually Transmitted Infections

Lesson 2: HIV and AIDS

In this lesson you will define HIV and AIDS, identify modes of transmission, identify the consequences of those who live with HIV and AIDS and

Lesson 3: Preventive Strategies and Risk Assessments

In this lesson you will define risk assessment, identify risk assessment tools and prevention strategies.

Lesson 4: Caring for and Accepting Infected Persons

In this lesson you will differentiate between caring and accepting infected persons and identify ways of caring and accepting infected persons.

Lesson 5: Seriousness of the Situation in PNG

In this lesson you will identify the status and seriousness of the disease in PNG and ways to kerb the disease at the national level.

In doing so, you will find out more about Sexually Transmitted Diseases (STIs) and how they are transmitted or spread. You will identify the different kinds of STIs and which ones are on the rise or common in PNG and discover ways of avoiding such diseases. You will also look at HIV/AIDS - how to control it, how to care for or accept those that are living with the disease and how serious the situation is in PNG with regards to HIV/AIDS.

We hope you will enjoy studying this Topic.

Lesson 14: Sexually Transmitted Diseases (STIs)



Welcome to lesson 14 of unit 1. In the last lesson you learnt about gender. In this lesson you will learn about sexually transmitted diseases/STIs.



Your Aims:

- define Sexually Transmitted Infections
- identify types of Sexually Transmitted Infections

Sexually Transmitted Infections (STIs)

Sexually transmitted infections or STIs are usually spread by having sexual intercourse with a person who is infected. Sexually transmitted infections are sometimes called **sexually transmitted diseases (STDs)** or **venereal diseases.m**There are many STIs, but the four most common and important ones in PNG are *gonorrhoea*, *syphilis*, *Donovanosis and HIV/AIDS*.

Scientists have found more than 20 different sexually transmitted infections (STIs) that are passed from one infected person to another through sexual activity. Many people who have an STI do not develop any symptoms and may not be aware they have an infection that can be passed onto their sexual contacts.

Sexually Transmitted Infections or STIs

- Gonorrhoea

- Syphilis

- Donovanosis

- HIV/AIDS

Hepatitis B

- Non-specific Urethritis

- Chlamydia

- Pelvic Inflammation Disease (PID)

- Genital Warts

- Genital Herpes

- Thrush

- Trichomoniasis

- Bacterial Vaginosis

- Pubic Lice

- Scabies

Symptoms of Sexually Transmitted Infections

When STIs do produce signs and symptoms, they usually develop on the genital area. Your sexual contacts may also experience signs and symptoms.

The signs and symptoms of STIs

- ✓ Discharge from the penis, vagina or anus
- ✓ Pain and discomfort when urinating
- ✓ Pain during sex
- ✓ Abnormal or unusual vaginal bleed
- ✓ Lumps and bumps on the genitals
- ✓ Genital sores
- ✓ Genital itching
- ✓ Genital irritation or pain
- ✓ Rash on genitals

Avoiding Sexually Transmitted Infections

The best way to stop STIs is to be in a monogamous relationship with one partner who does not have any STIs including HIV/AIDS. Passing on an STI is unhealthy and embarrassing as well as an unnecessary, disrespectful thing to do to another person. A person who has had an STI should not have sex until given an all clear from the doctor.

Condoms will give you some form of protection from most STIs, but not all because:

- Genital warts, genital herpes, and other STIs can be passed on during sex with a condom because the condom does not always cover the infected area.
- Scabies or pubic lice can be passed on just by very close contact.

If you are having sexual intercourse with different people you should get tested regularly at the health centre. It is important to remember that:

- Some STIs have no symptoms
- Many STIs are easy to treat in the early stages, but if left for a long time it is more difficult to treat
- If ignored, some STIs can women and men infertile, that is unable to make babies.



Activity 14.1 Answer the following questions.

1.	Read each statement given and write True or False beside each one of them. (a) Gonorrhoea is a common STI in PNG								
	(b) Condoms protect us from all STIs								
	(c) Venereal diseases is another name for STIs								
	(d) All STIs have symptoms								
	(e) Genital warts is the same thing as genital herpes								
	(f) The best way to avoid STIs is have one partner who is faithful								
2.	Give reasons why it is important to have regularly tests at the health centre when you have more than one or two sexual partners.								
3. Wh	y is it that condoms do not protect us from all STIs?								

Common STIs in Papua New Guinea

STI-**GONORRHOEA**

Cause -It caused by bacteria that lives in warm, moist places such as the urethra and the vagina

Symptoms - In males, feeling the need to urinate many times, a burning pain when passing urine and a discharge of pus from the end of the penis.

> In females – they have the same symptoms but they are much more difficult to notice, and females do not know if they have the disease.

STI-SYPHILIS

Cause -It caused by bacteria that lives around the sex organs, in the mouth and in the blood

Symptoms - At first there is a small, painless sore on the penis or outside the vagina. This sore has a regular shape and hard edge but goes away in about six weeks if no treatment is given. Weeks or months later, some or all of these symptoms may occur;

- A rash of small red marks on all parts of the body
- Enlarged lymph glands
- Fever
- Sores on moist areas of the body, such as mouth, sex organs and armpits.

STI-**DONOVANOSIS**

It caused by bacteria that lives in warm, moist places Cause -

Symptoms - Small sores or ulcers appear in or around the sex organs. The edges are raised and hard and there is a watery discharge with a bad smell. The ulcers are often very painful and look like a piece of raw meat. If they are not treated gradually they get bigger and

parts of the genitals are eaten away.

Treatment - Antibiotic called chloramphenicol over a period of three weeks or until the ulcers have disappeared.

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Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have now come to the end of the lesson. In this you have learned that:

- **Sexually infected infections** or STIs are usually spread by having sexual intercourse who a person who is infected.
- When STIs do produce signs and symptoms, they usually develop on the genital area.
- The best way to stop STIs is to be in a monogamous relationship with one partner who does not have any STIs including HIV/AIDS.

NOW DO PRACTICE EXERCISE 14 ON THE NEXT PAGE

Practice Exercise: 1	4	4
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1. Use the information given for the three STIs and complete the table below.

Type Of STI	Cause	Symptom	Treatment
	It caused by bacteria that lives in warm, moist places.		
			Injections of penicillin but if not treated quickly, it can result in death.
✓ Gonorrhoea			

CHECK YOUR WORK. ANSWERS ARE AT THE END OF TOPIC 4.

Answers to Activities

Activity 14.1

1.

- (a) True
- (b) False
- (c) True
- (d) False
- (e) False
- (f) True
- 2. It is important to have regular tests if you have more than one or two sexual partners because;
 - Some STIs have no symptoms
 - Many STIs are easy to treat in the early stages, but if left for a long time it is more difficult to treat
 - If ignored, some STIs can women and men infertile, that is unable to make babies.
- 3. Condoms do not protect us from all STIs because;
 - Genital warts, genital herpes, and other STIs can be passed on during sex with a condom because the condom does not always cover the infected area.
 - Scabies or pubic lice can be passed on just by very close contact.

Lesson 15: HIV and AIDS



Welcome to lesson 15 of unit 1. In the last lesson you learnt about sexually transmitted infections/STIs. In this lesson you will learn about HIV and AIDS.

Your Aims:



- define HIV and AIDS
- identify modes of transmission
- identify the consequences of those who live with HIV and AIDS

HIV and AIDS

In the 1980s a new disease began to appear in some parts of the world. In Africa, it was called the 'slim disease' because many times the people who got it lost a lot of weight and eventually dies. At first the doctors did not understand how the disease was spread but after a few years they found out it was a sexually transmitted infection that affects the immune system of the body. The disease was Acquired Immune Deficiency Syndrome (AIDS) and it is caused by a virus called the Human Immunodeficiency Virus (HIV).

The immune system of the body protects us against disease and helps us to fight infections caused by bacteria and viruses. However, the HIV virus causes the immune system of the body to lose its ability to fight infection. Diseases such as pneumonia and cancer can then use the chance to attack the body because it is weak, and so they are known as **opportunistic infections.** These diseases continue to develop until the patient dies.

Did you know?

Acquired means obtained

Immune means the system of the body that

protects us against diseases

Deficiency is the deficiency lack of something

Syndrome is a group or set of conditions that

shows you have a particular disease



An **opportunistic disease** is an infection that you get when your immune system is low and allows disease-causing organisms to infect your body.

How is HIV transmitted?

In order to be transmitted, the virus must leave the body of an infected person and enter the blood stream of an uninfected person.

Ways HIV can be transmitted

- During sexual intercourse with an infected person
- When giving an injection if needles and syringes are being reused
- When giving tattoos and during traditional ceremonies that cut the skin
- From an infected mother to her baby before birth, during birth or when breastfeeding

Ways HIV cannot be transmitted

- Mosquitoes or other insects
- Coughing or sneezing
- Hugging and kissing
- Sharing towels and bed sheets
- Sharing the same toilets



People who are infected with the virus are described as **HIV- positive**, and when they have sex they continue to spread the virus without knowing.

Signs and Symptoms of HIV/AIDS

It is not possible to know by physical appearance if a person has HIV because the virus may remain in the body for many years without causing any signs or symptoms. Only a blood test can tell if a person has HIV.



Reproduction is the process by which organisms make more organisms like themselves.

Many other infections can cause these common signs and symptoms of AIDS together or separately, but usually not for more than one month:

- Weight loss of more than 10% of the total body weight
- Prolonged fever for more than one month
- Chronic diarrhoea for more than one month

Other signs and symptoms, especially in conjunction with the ones above are:

- Persistent cough for more than one month
- Headache and stiff neck for over a month
- Swollen glands for more than one month large lumps in the armpits, neck and the top of the legs
- Fast growing, dark brown lumps on the skin
- Recurrent herpes or shingles painful spots and ulcers
- Thrush in the mouth white patches on the tongue, roof of the mouth, back of the throat and inside of the cheeks.

Prevention of HIV/AIDS

You can avoid getting the HIV virus through a method known as ABCDE

- **A** for Abstaining from sexual activities
- **B** for Being faithful to one partner
- **C** for using a Condom
- **D** for Delaying sexual activities
- **E** for Educating people about the dangers of HIV/AIDS

People with HIV/AIDS need

- A sympathetic attitude
- Family and public support
- To eat protein with protein and vitamins
- To use a condom with any sexual partner
- To stop smoking, drinking alcohol or chewing tobacco
- To drink boiled water
- To do regular exercise

Sports and HIV/AIDS

When there is no evidence that people playing sports have been infected by other players. However, it is possible that transmission could occur id an HIV infected player had a bleeding. If this happens;

- Wear latex or plastic gloves when treating injured people
- Stop the activity, cleanse the wound, treat it with antiseptic and cover it
- A player who is bleeding must leave the grounds immediately for medical help
- Bleeding must be stopped, the wound dressed and there must be no blood



Activity 15.1 Answer the following questions.

Which of thes	se situations or behaviours can transmit HIV/AIDS? Write Yes or
No.	
(a)	Swimming in a public pool with others who are HIV
positive.	
(b)	Being bitten by a mosquito that has bitten a person who is
HIV po	sitive
(c)	Sharing tattoo needles with people who are HIV positive
(d)	Sharing towels with people who are HIV positive
(e)	Cleaning the wound of an infected person while wearing
gloves	
(f)	Breast feeding a baby when HIV positive
(g)	Touching a person who is HIV positive
(h)	Having sexual intercourse with someone who is HIV
positive	
(i)	Being friends and talking with someone who is HIV
positive	•

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have now come to the end of the lesson. In this you have learned that:

- HIV virus causes the immune system of the body to lose its ability to fight infection
- In order to be transmitted, the virus must leave the body of an infected person and enter the blood stream of an uninfected person.
- It is not possible to know by physical appearance if a person has HIV because the virus may remain in the body for many years without causing any signs or symptoms. Only a blood test can tell if a person has HIV.

NOW DO PRACTICE EXERCISE 15 ON THE NEXT PAGE.

Practice Exercise: 15

1.	Your brother has just moved to study at the University of Papua New Guinea. He is young, wild and free in this big city and your family is worried about him with the rising cases of HIV/AIDS cases in Port Moresby.
	Write a letter to him explaining how he could contract the HIV virus and how to prevent this from happening. (Use the notes in this lesson to help you write your letter.)

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	WORK. ANSWERS ARE AT 1	

Answers to Activities

Activity 15.1

1. If you thought you had HIV/AIDS you must go for a blood test asap at the nearest clinic. Do not have unprotected sex with your partner until you get the results back from your test.

2.

- (a) No
- (b) No
- (c) Yes
- (d) No
- (e) No
- (f) Yes
- (g) No
- (h) Yes
- (i) No
- (j) No

Lesson 16: Preventive Strategies and Risk Assessment



Welcome to lesson 16 of unit 1. In the last lesson you learnt about HIV and AIDS. In this lesson you will learn about preventive strategies and risk assessment.



Your Aims:

- identify prevention strategies
- define risk assessment
- Identify risk assessment tools

HIV Prevention

The most common way people become infected with HIV is through unprotected sex. Many people in PNG have unprotected sex without thinking about how dangerous their actions can be. Unprotected sex may result in transmission of HIV and other STIs. The key to halting the epidemic is prevention. HIV prevention refers to practices done to prevent the spread of HIV/AIDS. HIV prevention practices may be done by individuals to protect their own health and the health of those in their community, or may institute by the governments or other organisations as public health policies.

Prevention Strategies

HIV can be transmitted in three main ways

- 1. Sexual transmission
- 2. Transmission through blood
- 3. Mother- to-child transmission

Universal HIV prevention methods try to address the three main routes of transmission listed above. HIV testing and counselling as well as HIV awareness education are central to preventing HIV transmission.

The ABCD strategy, a national strategy in PNG is used to prevent the spread of HIV and STIs and to promote safe sex and healthy living. ABCD stands for:

A = Abstinence – this means that a person chooses not to have any kind of sex that could expose them to HIV (no vaginal, anal or oral sex). Abstinence is the surest way to prevent becoming infected with HIV.

B = **Be** faithful- this means both partners only have sex with each other and both get tested for HIV at a local hospital or clinic.

C = Condoms- for people having sex, condoms are the only way to protect themselves from becoming infected with HIV, condoms should be used every time a person has sex to reduce the risk of becoming infected with HIV.

D = **delay** the time of first sex (delay the time you lose your virginity

We should all use A, B and C

Many people in PNG, particularly women, do not have the power or control to follow the ABCD strategy.

- Often women are forced to engage in sexual activities and are not able to abstain
- Being faithful requires that both partners are faithful to one another. Often one partner may faithful, but does not know whether their husband or wife is faithful to them
- Often people do not discuss using a condom with their partner, because they are scared of how their partner will react.

The only method that is 100% safe is abstinence. However, most adults will have sex at some point in time in their lives. The only universally medically proven method for preventing the spread of HIV during sexual intercourse is the correct use of condoms, and condoms are the only method promoted by health authorities worldwide. Males condoms are very effective (95-99% safe) if used correctly and consistently (all the time) and female condoms are 95% safe when used correctly and consistently being faithful to your partner relies on them being faithful to you. For HIV positive mothers wishing to prevent the spread of HIV to their child during birth, antiretroviral drugs have been medically proven to reduce the likelihood of spread of HIV.

Social Strategies

Social strategies do not require any drug or object to be effective but rather require person to change their behaviour .There are many ways of reducing the spread of HIV in our communities, homes and schools. **HIV is a preventable disease**. The most important way of avoiding infection with HIV is **behaviour change**.

- having fewer sexual partners
- being faithful to your husband/wife (they need to be faithful to you too and you both need to be HIV negative so you will need an HIV blood test).
- Always ask the new sexual partner about his or her sexual history
- Practice safe sex(using a condom every time you have sex or not having penetrative sex)
- Not having sex too young/ getting married too young or for the wrong reasons
- Not having sex while drunk
- Not using sex workers

- Not raping women, forcing them to have sex or being a sugar daddy(and older man giving gifts to a younger women in return for sex)
- Do not share needles
- Getting an HIV blood test and STI test
- If you are a healthcare worker always wear protective gloves in situations that involve exposure to blood or other body fluids.

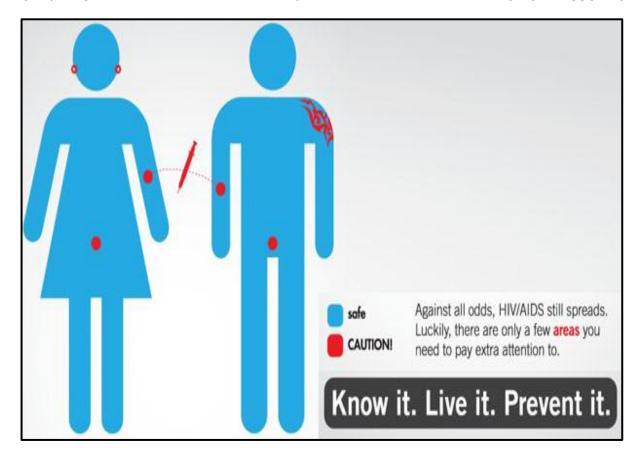
Other methods of prevention of HIV are:

- Only breast feeding for the first 6 months (or until the baby starts eating mashed food)
- Take antiretroviral therapy (ART), can lower a person's viral loads and reduce the risk of onward HIV transmission.
- Sterilize blades and fluids and needles in boiling water or neat bleach when skin cutting or tattooing.
- Avoid blood in fights and accidents
- A man who is fully circumcised (the entire foreskin removed) has a lower risk of contracting HIV or passing on HIV during unprotected sex .he should still use a condom.

How to avoid the spread of HIV in blood

• Do not touch the blood of another person, especially if you have any small cuts on your body.

Strategies for positive prevention should aim to support people with HIV to protect their sexual health, to avoid new STIs, to delay HIV/AIDS disease progression and to avoid passing their infection onto others. Strategies for positive prevention are not stand alone, but work in combination with one another.





Activity 16.1 Answer the following questions.

What is I	HIV prevention	on? 						
	the nationa what the nat		for preventice gy means?	n of	HIV/AIDS	in	PNG?	Brie

	Which group of people in particular are vulnerable to the national strategy of PNG, and why is that so?
_	
-	
-	
-	
_	
	List at least 5 social strategies of reducing the spread of HIV AIDS
_	
-	
-	
_	
_	
_	
-	
	Why is condom used as a prevention method of reducing the spread of HIV and how effective is the use of both male and female condom?
_	
-	
-	
-	
_	

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.

HIV/AIDS Risk Assessment

Risk assessment specific to sexually transmitted and blood borne diseases is critical in the era of HIV infection. The HIV risk assessment is a quick and simple way to give you a sense of whether you should get an HIV test. A risk assessment is a procedure. It is undertaken in order to discover if there are any possible adverse effects that could harm people. Numerous risk assessment protocols exist and may be used.

The goal of HIV/AIDS risk assessment should be to identify that the place the client at risk for HIV/AIDS infection contains a brief HIV/AIDS assessment checklist that has been used successfully with a wide variety of populations at risk. Risk assessment should bedone on a regular basis and with every new patient. Sexual and drug use risks should be determined along with other risks during routine history taking.

"I think that we have to be constantly asking ourselves, "How do we calculate the risk?' And sometimes we don't calculate it correctly; we either overstate it or understate it."- Hillary Clinton

In the process of HIV risk assessment, clients are asked a series of questions to assess their risk for sexually transmitted diseases, including hepatitis and HIV. These are very personal and intimate questions that are asked in order to give an accurate assessment of health risks, and it is important that the client answer honestly and accurately as possible.

HIV/AIDS Risk Assessment Tools

Your behaviour can determine your risk for HIV/AIDS. Sex particularly can be risky business in this day and age. There are many risk assessment tools and methodologies available to help people or organisations assess their health and safety risks.

The most common risk assessment tools are checklist, which are a useful tool to help hazards. Other kinds of risk assessment tools include: guides, guidance documents, handbooks, brochures, questionnaires, posters, cards and interactive tools (free interactive software, including downloadable applications which are usually specific for people at risk with HIV/AIDS).

Below are only 2 examples out of the many types of risk assessment tools that are provided to support conversations on HIV/AIDS with clients or patients and /or program participants.

- Sphere HIV risk Assessment tool is an innovative, practical and engaging instrument that focuses on the risk assessment conversation, offers strategies and suggest a sequence of topics to follow. The tool provides facts that justify discussion on certain topics, open ended questions on those topics and space for notes.
- BRAT- behavioural Risk Assessment Tool was developed by the Wisconsin HIV Prevention Evaluation work group with additional input from experts from the centre for AIDS Intervention Research (CAIR) and centres for Disease Control and Prevention (CDC).

The brat is a two-page form that collects information regarding HIV prevention clients on:

- Demographic characteristics (race, ethnicity, age, gender,)
- Sexual practices (including condom use and gender of partners)
- Injection and other drug us (including needle sharing practices)
- HIV-related and risk factors (trading sex for drugs, sex under the influence of alcohol drugs, homelessness)
- HIV antibody testing history



Activity 16.2 Answer the following questions.

What is the goal of HIV risk assessment? Describe the process of HIV risk assessment?		
Describe the process of HIV risk assessment?	hat is the goal of HIV risk assessm	nent?
Describe the process of HIV risk assessment?		
Describe the process of HIV risk assessment?		
	escribe the process of HIV risk asso	essment?

GR10 P	D U 1	141	TOPIC 4 LESSON 16
4.	List at least 5	HIV risk assessment tools.	
5.	What is the us	e of HIV risk assessment tools?	

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have come to the end of lesson 12. In this lesson you have learnt that:

- Unprotected sex may result in transmission of HIV and other STIs.
- The key to halting the epidemic is prevention.
- HIV prevention refers to practices done to prevent the spread of HIV/AIDS which can be done by individuals to protect their health and the health of those in the community.
- The national strategy used to prevent the spread of HIV and STIsin PNG is the ABCD. ABCD stands for:
 - A = Abstinence
 - B = Be faithful
 - C = Condoms
 - **D = delay** the time of first sex (delay the time you lose your virginity)
- . We should all use A, B and C
- The HIV risk assessment is a procedure, a quick and simple way to give you a sense of whether you should get an HIV test.
- HIV risk assessment is undertaken in order to discover if there are any
 possible adverse effects that could harm people.
- The goal of HIV/AIDS risk assessment is to identify that the place the client at risk for HIV/AIDS infection contains a brief HIV/AIDS assessment checklist that has been used successfully with a wide variety of populations at risk.
- HIV risk assessment tools include checklist, guides, guidance documents, handbooks, brochures, questionnaires, posters, cards and interactive tools (free interactive software, including downloadable applications which are usually specific for people at risk with HIV/AIDS).

NOW GO ON TO DO PRACTICE EXERCISE 16.

P	ractice	Exercise:	16
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How	can HIV positive mothers prevent the spread of HIV to their child at
What	should positive prevention strategies aim at?
How	can you and your partner protect yourself from HIV/AIDS

CHECK YOUR ANSWERS. ANSWERS ARE AT THE END OF TOPIC 4.

Answers to Activities

Activity 16.1

- 1. HIV prevention refers to practices done to prevent the spread of HIV/AIDS.
- 2. The national strategy in PNG used to prevent the spread of HIV and STIs and to promote safe sex and healthy living is the ABCD which stands for:
 - **A = Abstinence –** means that a person chooses not to have any kind of sex that could expose them to HIV (no vaginal, anal or oral sex). Abstinence is the surest way to prevent becoming infected with HIV.
 - **B** = **Be** faithful- means both partners only have sex with each other and both get tested for HIV at a local hospital or clinic.
 - **C = Condoms-** for people having sex, condoms are the only way to protect themselves from becoming infected with HIV, condoms should be used every time a person has sex to reduce the risk of becoming infected with HIV.
 - **D** = **delay** the time of first sex (delay the time you lose your virginity.) We should all use A, B and C

- **3.** Many people in PNG, particularly women, do not have the power or control to follow the ABCD strategy.
 - Often women are forced to engage in sexual activities and are not able to abstain
 - Being faithful requires that both partners are faithful to one another. Often one partner may faithful, but does not know whether their husband or wife is faithful to them
 - Often people do not discuss using a condom with their partner, because they are scared of how their partner will react.
- **4.** Any 5 of the following may be considered as the answer:
 - having fewer sexual partners
 - being faithful to your husband/wife (they need to be faithful to you too and you both need to be HIV negative so you will need an HIV blood test).
 - Always ask the new sexual partner about his or her sexual history
 - Practice safe sex(using a condom every time you have sex or not having penetrative sex)
 - Not having sex too young/ getting married too young or for the wrong reasons
 - Not having sex while drunk
 - Not using sex workers
 - Not raping women, forcing them to have sex or being a sugar daddy(and older man giving gifts to a younger women in return for sex)
 - Do not share needles
 - Getting an HIV blood test and STI test
 - If you are a healthcare worker always wear protective gloves in situations that involve exposure to blood or other body fluids
- 5. Condom is the only universally medically proven method for preventing the spread of HIV during sexual intercourse .Males condoms are very effective (95-99% safe) if used correctly and consistently (all the time) and female condoms are 95% safe when used correctly and consistently being faithful to your partner relies on them being faithful to you.

Activity 16.2

- 1. The HIV risk assessment is a quick and simple way to give you a sense of whether you should get an HIV test. It is a procedure and is undertaken in order to discover if there are any possible adverse effects that could harm people.
- 2. The goal of HIV/AIDS risk assessment should be to identify that the place the client at risk for HIV/AIDS infection contains a brief HIV/AIDS assessment checklist that has been used successfully with a wide variety of populations at risk.
- 3. In the process of HIV risk assessment, clients are asked a series of questions to assess their risk for sexually transmitted diseases, including hepatitis and

- HIV whereby personal and intimate questions are asked in order to give an accurate assessment of health risks and it is important that the client answer honestly and accurately as possible.
- 4. The most common risk assessment tools are checklist, which are a useful tool to help hazards. Other kinds of risk assessment tools include: guides, guidance documents, handbooks, brochures, questionnaires, posters, cards and interactive tools (free interactive software, including downloadable applications which are usually specific for people at risk with HIV/AIDS).
- **5.** The use of HIV risk assessment tools and methodologies are to help people or organisations assess their health and safety risks.

Lesson 17: Caring and Accepting Infected Persons



Welcome to lesson 17 of unit 1. In the last lesson you learnt about preventive strategies and risk assessment. In this lesson you will learn about caring and accepting infected persons.



Your Aims:

- differentiate between caring and accepting
- identify ways of caring and accepting infected persons

Accepting and supporting people living with HIV/AIDS

People infected with HIV can live for many years without developing AIDS. They can work, raise their children, garden, help others, play sports, and go to church-everything they would normally do.

Living positively works. People with HIV who take care of themselves and have a positive outlook on life can live much longer than other people with the virus – even without medicines or other treatment.

Acceptance is an important part of the emotional process of coping with HIV or any life changing situation. In order to move on you have to get to the point that you can accept HIV as a part of your life, and decide that you are going to deal with it. Just because you accept something does not mean that you have to like it.

However, for you to live your life and be happy, you have to take care of yourself in new ways, accepting that HIV is a part of your life is a beginning. The more you learn about HIV the better.



Supporting PLHIV

There are many things that people living with HIV can do to stay healthy and they should be encouraged and supported to help themselves for as long as it is possible to do so. Giving your support to people living with HIV encourages people to get tested and treated and helps prevent the spread of HIV. Aside from being worried about their health, they often confess to a bigger, more immediate fear-being rejected by their loved ones and by society.

Being supported by your family, friends, wantoks, and work mates help. If you are rejected or shamed then you will be depressed and unhappy and get sick quickly. Love and care are important to fight the illness. Many people find prayer and their church very supportive too.

Life is not easy for a PLHIV and rejection from friends and family can make it worse. By giving PLHIV your support and understanding, you can help them get back on track to lead strong and fulfilling lives.

People living with HIV also have a responsibility to protect others. They must tell their sexual partners that they are infected with HIV and always use a condom for sex. People living with HIV should avoid scars cutting and tattooing and should tell their health worker. The fear of rejection is sometimes so strong that it stops people from getting tested and treated, inevitably increasing the risk of the spread of HIV.

If people living with HIV have the support and understanding of their loved ones, they can continue living happy and productive lives. Similarly if people who are thinking of getting tested have the support and encouragement from the people they love, they will more likely go for testing, and potentially put a stop to the spread.

How to support PLHIV

There are many ways of supporting your loved one:

- Listen to them
- Do not judge
- Find out as much as you can about HIV/AIDS
- Not showing fear
- Helping them find support group
- Helping them tell others or keeping their story confidential
- Talking to others about HIV/AIDS and reducing fear and ignorance
- Plan for the future
- Help them begin positive living, get the medicines they need and help them get access to ART



Giving your support to people living with HIV encourages them to get tested and treated – and helps prevent the spread of HIV.

Activity 17.1 Answer the following questions.

_	
	What is the responsibility of people living with HIV/AIDS with respe educing the spread of HIV?
_	
-	
H	How are People living HIV encouraged to get tested and treated?
_	
-	
	What would be the result, if people living with HIV and AIDS are given support and understanding by their loved ones?

Caring for someone living with HIV

When a person is infected with HIV, their immune system is no longer able to fight off infections. Preventing infection and sickness is the best way to protect a person living with HIV and to help them live a longer life. It is also important to treat infections when they occur, to help the person stay healthy for as long as possible. Caring for someone living with HIV and AIDS can be stressful and tiring. People living with AIDS need a lot of care, especially near the end of their lives.



It is very important for PNG that we care for people living with HIV/AIDS. Our country cannot afford to replace sick or dying workers, parents, students, or teachers. We need to protect our human resources.

Caring for our loved one is a responsibility we must not ignore. People with AIDS are like any other sick person. As more people in PNG are infected with HIV we will have more and more AIDS patients to care for at home. People should not be afraid of people living with HIV/AIDS.

Caring for people living HIV and AIDS is a responsibility we must not ignore. The current number of people living with HIV and AIDS is already putting pressure on our health services, families, communities and resources. If the number of HIV infections continues to increase, there will be serious effects to the PNG population, culture, development and economy.

People who are infected with HIV are like any other sick people but need extra care because they can get infections very easily .People should not be afraid of people living with HIV and AIDS. Caring for someone living with HIV and AIDS can be stressful and tiring. People living with AIDS need a lot of care, especially near the end of their lives.



Activity 17.2 Answer the following questions.

Why	Why is it important that we care for people living with HIV in PNG?							
	e do not care for people living with HIV, what do you think will ible outcome in the country?							
\\\/\b								
	t is a better way to protect the person living with HIV?							

Ho	How can we help a person living with HIV?						

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have come to the end of lesson 17. In this lesson you have learnt that:

- People infected with HIV can live for many years without developing AIDS.
- People with HIV who take care of themselves and have a positive outlook on life can live much longer than other people with the virus – even without medicines or other treatment.
- Acceptance is an important part of the emotional process of coping with HIV or any life changing situation.
- Giving your support to people living with HIV encourages people to get tested and treated and helps prevent the spread of HIV.
- Being supported by your family, friends, wantoks, and work mates help.
- Love and care are important to fight the illness.
- The fear of rejection is sometimes so strong that it stops people from getting tested and treated, inevitably increasing the risk of the spread of HIV.
- If people living with HIV have the support and understanding of their loved ones, they can continue living happy and productive lives.
- Caring for our loved one is a responsibility we must not ignore. People le with AIDS is like any other sick person.
- It is very important for PNG that we care for people living with HIV/AIDS.
- People who are infected with HIV are like any other sick people but need extra care because they can get infections very easily.
- People living with AIDS need a lot of care, especially near the end of their lives.

Prac	ctice Exercise: 17
1.	How can we support people living with HIV?
2.	In a short paragraph, explain briefly how a person living with HIV can be accepted and cared for in your community?

CHECK YOUR ANSWERS. ANSWERS ARE AT THE END OF TOPIC 4.

Answers to Activities

Activity 17.1

- Acceptance is an important part of the emotional process of coping with HIV or any life situation as it will help you to move on , to live your life and be happy and accept the fact that HIV is part of your life
- 2. People living with HIV also have a responsibility to protect others. They must tell their sexual partners that they are infected with HIV and always use a condom for sex. People living with HIV should avoid scars cutting and tattooing and should tell their health worker.
- 3. Giving your support to people living with HIV encourages them to get tested and treated and helps prevent the spread of HIV.
- 4. If people living with HIV have the support and understanding of their loved ones, they can continue living happy and productive lives. Similarly if people who are thinking of getting tested have the support and encouragement from the people they love, they will more likely go for testing, and potentially put a stop to the spread.

Activity 17.2

- 1. It is very important for PNG that we care for people living with HIV/AIDS as our country cannot afford to replace sick or dying workers, parents, students, or teachers. We need to protect our human resources.
- 2. If we do not care for people living HIV and AIDS it will put enormous pressure on our health services, families, communities and resources. If the number of HIV infections continues to increase, there will be serious effects to the PNG population, culture, development and economy.
- 3. Preventing infection and sickness is the best way to protect a person living with HIV and to help them live a longer life.
- 4. By caring for them as they need a lot of care, especially near the end of their lives.

Lesson 18:

Seriousness of the Situation in PNG



Welcome to lesson 18 of unit 1. In the last lesson you learnt about caring and accepting infected persons. In this lesson you will learn about seriousness of the situation in PNG.



Your Aims:

- identify the status and seriousness of the disease in PNG
- list suggestions on ways to kerb the disease at the national level

HIV in Papua New Guinea

The HIV epidemic in PNG is very serious and is growing very quickly. PNG can learn from other countries that have experienced this epidemic and the terrible effects on their people. Their experiences can help people in PNG prevent HIV and care for those who are already infected.

PNG's HIV/AIDS epidemic is said to be the worst in the pacific region. The first positive HIV blood test was in 1987 although the virus may have been in PNG before then. It is difficult to know how many people are infected and most people who have the virus do not know they have it.

There are about 28,300 confirmed cases by blood test (September 2009, NDoH) and the best estimate of HIV infection is about 60,000 people (NAC, 2007). However very few people have been tested and many AIDS deaths have probably been recorded as TB, pneumonia or malaria. We still do not know the true sizes of the problem in PNG but it is definitely getting worse.

Estimated people living with HIV/AIDS in PNG: 56,175

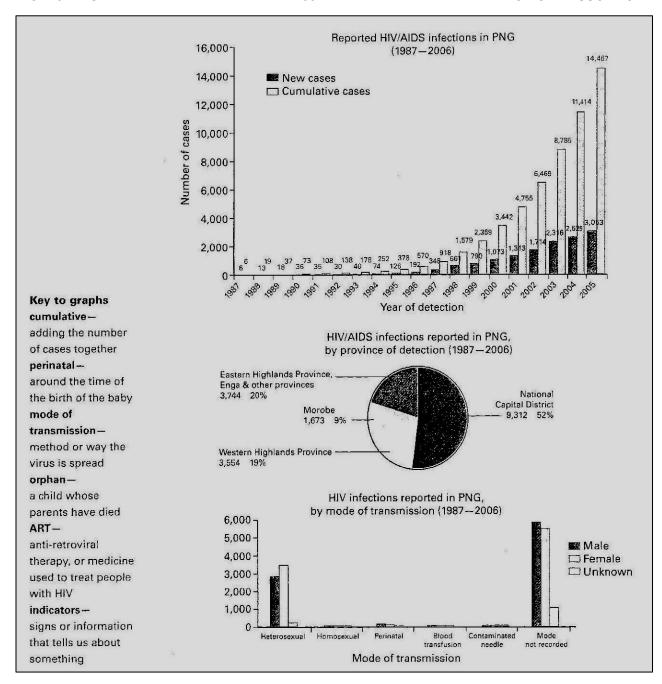
Estimated AIDS deaths in PNG so far: 6000

Estimated AIDS orphans in PNG: 3730

(NACS, 2007)

Number of people on ART: 6079 adults and 348 children

(NDoH, 2009)



According to UNAIDS, HIV cases in the country have been increasing at a rate of 30 precent annually since 1997. From 2002 on, at least 2000 new infections have been reported annually. In 2006, for instance, Papua New Guinea had 4,017 new confirmed cases of HIV, a 30 precent increase from 2005. There is a sharp increasing trend in the projected number of new infections, particularly in rural areas.

The mode of transmission of HIV/AIDS in Papua New Guinea is predominantly heterosexual activity, with most cases occurring among people 20-40 years of age, according to a 2006 report by the National AIDS Council Secretariat and the National Department of Health. Those most at risk include sex workers, their clients, and the partners of clients.

National response

The National response is also challenged by the large number of cultural and linguistic groups, geographical difficulties, and socioeconomic conditions associated with poverty and unemployment.

Papua New Guinea's National AIDS response has been overseen and coordinated by the National AIDS council (NAC) since 1997. The council is a multi-sectoral committee, comprising of representatives of government departments, council of churches, the National council of Women, the Chamber of Commerce, nongovernmental organisations, and PLWHA. The Council's secretariat provides support running day-today operations

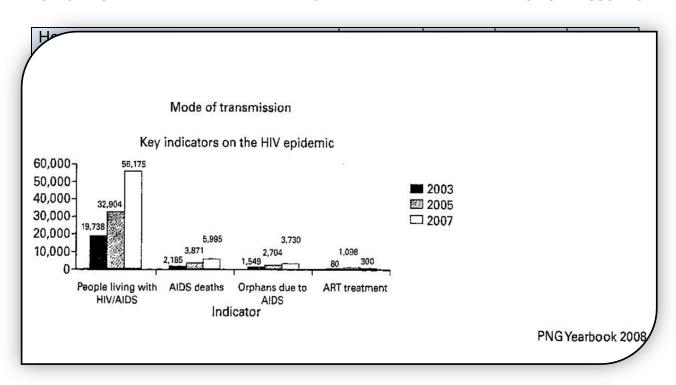
How is PNG responding to the epidemic?

The government, churches and local groups have responded to the threat of the epidemic in a number of ways.

- The HIV/AIDS Management and prevention Act (HAMP Act), the national AIDS Council Secretariat (NACS) and Provincial AIDS Committees in every Province
- The Personal Development subject in all primary and Secondary Schools which teaches life skills
- The new TVET course on HIV/AIDS & STIs
- The Department of Education HIV/AIDS Policy and HIV/AIDS/STI Implementation Plan 2007-2012
- Many other projects, care centres, testing centres and initiatives

All these strategies are trying to change the sexual behaviour of people so they don't become infected by HIV.

How the epidemic of HIV and AIDS affects the community





Activity 18.1 Answer the following questions.

1. What influences the HIV epidemic in PNG? For Traditional Culture, Modern Culture, Church teachings, Media and Economy list the positive and negative influences each one has on the epidemic.

The first one has been done for you.

Negative Influence
HIV Epidemic
E.g.) Bride price means some women have
no control over sex
ii)
/ Epidemic
ii)

c)	How church teachings affect the HIV	Epidemic
i)	i	ii)
1\		
d)	How media affects the HIV Epidemic	
i)		ii)
e)	How the Economy affects the HIV Ep	oidemic
i)		ii)
,		,
2.	How serious is HIV epidemic in PI	NG and in the South Pacific?
۷.	How serious is this epidernic in Fi	NO and in the South Facilit!
3.	When was the first positive HIV bl	ood test done?
4.	According to the NDoH 2000 repu	ort, how many people were confirmed cases
4.		est estimate done by NAC in 2007?
	2) Sieda test and midt mas the be	25. 35a.a don's 27 17.10 iii 2007 .

Thank you for completing this activity. Now, you may go to the end of this lesson to check your answers. Make sure you do the necessary corrections before moving on to the next part of this lesson.



Summary

You have come to the end of lesson 18. In this lesson you have learnt that:

- The HIV epidemic in PNG is very serious and is growing very quickly. PNG can learn from other countries that have experienced this epidemic and the terrible effects on their people. Their experiences can help people in PNG prevent HIV and care for those who are already infected.
- PNG's HIV/AIDS epidemic is said to be the worst in the pacific region.
 The first positive HIV blood test was in 1987 although the virus may have been in PNG before then.
- It is difficult to know how many people are infected and most people who have the virus do not know they have it.

NOW GO ON TO DO PRACTICE EXERCISE 18.

Practice Exercise: 18

1.	For in Pl	the following questions refer to the graphs and the statistics of HIV/AIDS
	a)	How many new cases of HIV/AIDS infections were reported in PNG in 2005?
	b)	In which year were there 570 cumulative HIV/AIDS infections in PNG?
	c)	According the pie graph, which province had the highest HIV/AIDS infections reported in PNG between1987-2006?
	d)	What was the percentage like for HIV/AIDS infections in Western Highlands Province?
	e)	Which mode of transmission is predominant in PNG?
	f)	How many people were living with HIV/AIDS in 2007?
	g)	How many were on ART treatment in 2003?
	h) _	In 2005, how were 3 871 people affected by the epidemic?
	É	According to NACs, 2007, what were the statistics like for people living with HIV/AIDS, number of AIDS deaths, and number of people on ART reatment?
	_	

CHECK YOUR ANSWERS. ANSWERS ARE AT THE END OF TOPIC 4.

Answers to Activities

Answers to Activity 18.1

- 1. Individual answers may vary. No standard Answers.
- 2. The HIV epidemic in PNG is very serious and is growing very quickly and is said to be the worst in the pacific region.
- 3. The first positive HIV blood test was in 1987 although the virus may have been in PNG before then.
- 4. There are about 28,300 confirmed cases by blood test (September 2009, NDoH) and the best estimate of HIV infection is about 60,000 people (NAC, 2007).
- 5. The National response is also challenged by the large number of cultural and linguistic groups, geographical difficulties, and socioeconomic conditions associated with poverty and unemployment.

Papua New Guinea's National AIDS response has been overseen and coordinated by the National AIDS council (NAC) since 1997. The council is a multi-sectoral committee, comprising of representatives of government departments, council of churches, the National council of Women, the Chamber of Commerce, nongovernmental organisations, and PLWHA. The Council's secretariat provides support running day-today operations

ANSWERS TO PRACTICE EXERCISES IN TOPIC 4

Practice Exercise 14

1.

TYPE OF STI	CAUSE	SYMPTOM	TREATMENT
Donovan osis	It caused by bacteria that lives in warm, moist places.	Small sores or ulcers appear in or around the sex organs. The edges are raised and hard and there is a watery discharge with a bad smell. The ulcers are often very painful and look like a piece of raw meat. If they are not treated gradually they get bigger and parts of the genitals are eaten away.	Antibiotic called chloramphenicol over a period of three weeks or until the ulcers have disappeared.
Syphilis	It caused by bacteria that lives around the sex organs, in the mouth and in the blood	At first there is a small, painless sore on the penis or outside the vagina. This sore has a regular shape and hard edge but goes away in about six weeks if no treatment is given. Weeks or months later, some or all of these symptoms may occur; • A rash of small red marks on all parts of the body • Enlarged lymph glands • Fever • Sores on moist areas of the body, such as mouth, sex organs and armpits	Injections of penicillin but if not treated quickly, it can result in death.
Gonorrho ea	It caused by bacteria that lives in warm, moist places such as the urethra and the vagina	Small sores or ulcers appear in or around the sex organs. The edges are raised and hard and there is a watery discharge with a bad smell. The ulcers are often very painful and look like a piece of raw meat. If they are not treated gradually they get bigger and parts of the genitals are eaten away.	Antibiotic called chloramphenicol over a period of three weeks or until the ulcers have disappeared.

2. Individual answers may vary. No standard answer.

Practice Exercise 15

Individual answers may vary. No standard answer.

Practice Exercise 16

- 1. Prevention is the key to halting the HIV epidemic as HIV/AIDS is a growing problem in PNG and around the world which affect the population at every level. Pprevention strategies should aim to support peoplewith HIV to protect their sexual health, to avoid new STIs, to delayHIV/AIDS disease progression and to avoid passing their infection onto others.
- Only breast feeding for the first 6 months (or until the baby starts eating mashed food)
 Take antiretroviral therapy (ART)
- 3. Strategies for positive prevention should aim to support peoplewith HIV to protect their sexual health, to avoid new STIs, to delayHIV/AIDS disease progression and to avoid passing their infection onto others.

4.

- Don't have sex when you are too young
- Use condoms every time you have sex
- Learn as much as you can about HIV and other STIs
- Marry wisely and work on a strong, faithful and loving marriage.
- When you have symptoms that could be related to HIV and other STIs, visit a doctor or health care worker
- Have a HIV blood test
- 5. 2 examples of risk assessment tools are:
 - Sphere HIV risk Assessment tool is an innovative, practical and engaging instrument that focuses on the risk assessment conversation, offers strategies and suggest a sequence of topics to follow. The tool provides facts that justify discussion on certain topics, open ended questions on those topics and space for notes.
 - BRAT- behavioural Risk Assessment Tool was developed by the Wisconsin HIV Prevention Evaluation work group with additional input from experts from the centre for AIDS Intervention Research (CAIR) and centres for Disease Control and Prevention (CDC). The brat is a two-page form that collects information regarding HIV prevention clients on:
 - Demographic characteristics (race, ethnicity, age, gender,)
 - Sexual practices (including condom use and gender of partners)
 - Injection and other drug us (including needle sharing practices)
 - HIV-related and risk factors (trading sex for drugs, sex under the influence of alcohol drugs, homelessness)
 - HIV antibody testing history

Practice Exercise 17

- 1. There are many ways of supporting your loved one:
 - Listen to them
 - Do not judge
 - Find out as much as you can about HIV/AIDS
 - Not showing fear
 - Helping them find support group
 - Helping them tell others or keeping their story confidential
 - Talking to others about HIV/AIDS and reducing fear and ignorance
 - Plan for the future
 - Help them begin Positive living, get the medicines they need and help them get access to ART.
- 2. No standard answers. Answers may vary.

Practice Exercise 18

1.

- (a) 3053 new cases
- (b) Year 1996
- (c) NCD
- (d) 19%
- (e) Heterosexual
- (f) 56175 people
- (g) 300 people
- (h) Deaths in adults and children due to AIDS deaths
- (i) Estimated people living with HIV/AIDS in PNG: 56,175

Estimated AIDS deaths in PNG so far: 6000

Estimated AIDS orphans in PNG: 3730

(NACS, 2007)

Number of people on ART: 6079 adults and 348 children

(NDoH, 2009)

2. Individual answers may vary. No standard Answers.

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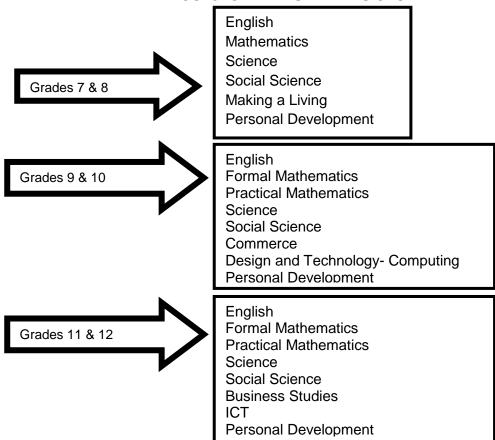
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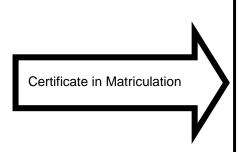
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SUBJECT AND GRADE TO STUDY



REMEMBER:

In each grade, you must study English, Formal Mathematics, Science and Social Science. Commerce and Practical Math are optional. Your Provincial Coordinator or Supervisor will give you more information regarding each subject.



CORE COURSES

Basic English

English 1

English 2

Basic Maths

Maths 1

Maths 2

History of Science & Technology

OPTIONAL COURSES

Science Streams: Biology

Chemistry, Physics and Social Science Streams:

Geography, Introduction to Economics and Asia and

the Modern World

REMEMBER:

You must successfully complete 8 courses: 5 compulsory and 3 optional

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