PRIMARY SIX BASIC SCIENCE AND HEALTH EDUCATION LESSON NOTES - TERM III

SCIENCE AT HOME AND COMMUNITY

WATER

Water is a colourless liquid substance made up of hydrogen and oxygen gases. These gases are in the ratio of 2:1 (H_2O)

Sources of water

- Rain water
- Artesian wells
- Hot springs
- Streams, lakes, rivers, swamps, ponds, oceans, and seas.

Properties of pure water

- It is colourless
- It is without suspended matter like germs.
- It has no smell
- Pure water is tasteless
- Pure water boils at 100^{o}C (212^{o}F) and trees at 0^{o}C (32^{o}F) at sea level.
- Pure water forms lather (foam) very easily) with soap.

Uses of water to the body

- Used for bathing
- Water makes up part of blood as plasma

- Helps to dissolve the digested food for easy absorption in the body.
- Maintains the shape of body cells.
- Cools the body in form of sweat when it evaporates.
- Helps in formation of body fluids such as tears, saliva, urine, sweat etc.

Other uses of water

- For domestic use e.g. cooking, washing etc
- For drinking by man, mammals, and birds
- For irrigation in agriculture
- Used in industries for cooling, washing machines and raw materials.
- Used to generate hydro-electricity
- Used by plants for photosynthesis

Preparation of safe water for drinking

i. Boiling

When water is heated, it boils, to a temperature of 100^{o}C (212^{o}F) this temperature kills germs.

ii. Filtering

This is the process by which a clean or sterilized piece of cloth or local water filter.

Examples of solid impurities filtered are dirt, soil, stones, leaves, animals wastes etc.

NB: Filtered water is not safe for drinking because it may be containing some germs.

iii. Treatment of water

Treatment of water is when chemicals are added to kill germs in it.

Advantages of chemicals used in water treatment

The chemicals kill germs in water

Disadvantages of using chemicals

- They are expensive
- They do not make water clear
- They add some smell and taste to water.

DECANTING

Decanting is a method of removing large particles of objects from water.
Decanting is done by pouring water slowly from one container to another so that heavily particles are left behind. In this method, the three pot system is used to purify the water.

Experiment of the three pot system

Procedures

Get three containers (pots) name them 1,2 and 3.

Get dirty water and pour into the first port and leave it to settle for a day. After one day, all the dirty particles will have settled at the bottom of the first container (pot)

On the second day, change water in to the second pot and also on the third day, when the three days are over, get the water and boil to make it safe for drinking.

WATER IMPURITIES

Impurities are contaminants or foreign objects in water. Water impurities make it unsafe for use. Impurities may be soluble or insoluble organic.

Inorganic impurities

It consists of dissolved mineral salts which make water unsafe to use.

Organic impurities

These include bacteria , fungi and protozoa others may be dead plant materials such as leaves and grass.

Examples of water impurities

- Human wastes
- Animal wastes like urine , drug
- Herbicides
- Insecticides
- Silt from erosion

CLEANING CLOTHES AT HOME

One main use of water at home is to wash clothes. This also called laundry

Step used in cleaning clothes at home

Sorting

- It involves selecting and putting clothes together according to colour , intensity of dirt, nature of the fabric , use of clothes etc.

Soaking

It is the putting clothes in soapy water for some time.

Importance of soaking clothes

- It helps to loasen dirt and dissolve stains
- It saves time during washing as it a little effort to remove it.
- It saves against from tear and wear due to constant rubbing while washings.

Washing

It is the removal of dirt using water and detergent

Rinsing

Clothes are put in clean water. It helps to remove all soapy water from the clothes.

Wringing

It involves squeezing excess water out of the clothes

NOTE : Woolen clothes should be dried without wringing because it may loosen the fabric and makes them to lose their shape.

Drying

Some clothes can be dried out completely under the sun.

Ironing

It helps to remove creases from the washed clothes and bring them to their original form

ACCIDENTS AND FIRST AID

What is an accident?

An accident is a sudden happening that cause harm to the body.

Accidents can take place anywhere.

They may happen at home, school, place of work, where we go for prayers, on the pitch etc.

First aid

This is the first help given to a casuality before he/she is taken to hospital. a casuality is a person who has got an accident.

Burns

These are body injuries caused by heat.

Types of burns

1. Burns
2. Scalds

Burns and scalds

Burns are injuries caused by dry heat.

Causes of burns

a. Hot metals
b. Hot flat iron
c. Acids
d. Glowing charcoal
e. Hot charcoal stove
f. Fire

Degree of burns

Burns and scalds are described using the word degree to tell how severe they are;
There are three types of degrees of burns. These are;

a) First degree burns
b) Second degree burns
c) Third degree burns

First degree burns

These are minor burns which do not form blisters.
A blister is a raised skin with a liquid under neath.
The skin is tender for several days
The skin is unbroken.

First aid

Put the burnt area in cool water immediately after the accident.

Why?
To reduce the temperature of the burnt part.
N.B; First degree burns need no dressing.

Second degree burns

These are burns which form blisters.
They are severe than first degree burns.

Signs of second degree burns

a) Blister are formed
b) Unbroken blisters

FIRST AID

If the blister is broken, wash the area with clean water and soap.
Cover the skin with a bandage or clean cloth.

NB; It is not good to break the blister because it may lead to infection of the wound by germs.
Fats, oil, coffee, herbs or drug should never be put on the burn because they can cause infection.

Sugar should not be put on the burn because it attracts houseflies which bring germs to the wound.
The victim of the second degree burns should be given plenty of fluids to drink.

Third degree burns
There are burns which cause deep burning of the skin.
The skin is burnt deeply and it appears shinny white.
a) The skin is burnt deeply

FIRST AID
Put the burn areas in cool water.
Encourage the casuality to drink a lot of fluids.
NB: Patients of second and third degree burns should be given a lot of fluids to drink.

Why?
They lose a lot of fluids through the burnt skin by evaporation

Prevention of burns and scalds
- Use heat insulators to handle hot objects.
- Cooking from raised places
- Keep petroleum products out of reach of children.
- Do not allow young children to cook.
- Refill lanterns or lamps after putting them off.
- Teach children the dangers of burns
- Tell children to play away from fire places.

Fever and convulsions
Fever is the condition of the body when its temperature goes beyond the normal.
The normal body temperature is 37^oC or $98.H^oF$.
Fever is not an illness but a symptom of many illnesses such as malaria, typhoid, measles.

Effect of fever
It can lead to convulsions

Convulsions
These are uncontrollable jerky movements of the body.
Convulsions can be stopped if the disease causing them is treated.

First aid for convulsions

- Remove all tight clothes from the body of the victim.
- Put an object in the mouth of the victim to stop him from biting the tongue.
- Give the victim plenty of cold drinks
- Take the patient to hospital

First aid for fever

Carry out torpid sponging (cold compress).
A wet cloth is put on the forehead or chest of a victim.

Caution

Do not use very cold water because it leads to convulsions.

Fainting

It is the loss of consciousness for a short time

Main cause of fainting

Reduced supply of blood rich in oxygen and food to the brain.

Conditions that can lead to fainting

- Anxiety
- Heavy body exercises
- Extreme sorrow (sad news)
  fear
- Prolonged hunger

FIRST AID

- Put the victim in open air.
- Remove tight clothings around the neck and chest to enable the victim get enough oxygen.
- Rinse the legs of the victim higher than the head.

Why?

To allow blood flow faster to the brain.
Don't allow the victim to be over crowded

DROWNING

This means dying as a result of having lungs filled water.
Drowning has no first aid since the victim dies.

Near drowning

It is temporary loss of breath due to having one's lungs filled with water.

A person who has nearly
Drowned has only four minutes to live therefore a first aider must be very fast to save his life.

First Aid
Re move the victim quickly from water
Shout for help
Lie the person on his back.
Carry out mouth to mouth breathing (kiss of life)

How to carry out mouth to mouth respiration
- Make the victim to lie on his back
- Tilt the head backwards and keep his mouth opened
- Remove any object stuck in the mouth
- Press the victim's nostrils with your fingers to close them
- Put your mouth directly into the mouth so that the chest rises.
- Stop a bit to let the air out and blow again
- Repeat this many times (about 15 times in a minute)
- Continue the steps until the victim can breathe again by himself.
- Place the heels of your hands between the navel and the ribs of the victim
- Make a quick strong push forward into the ribcage.

How to prevent near drowning
- Acquire swimming skills
- Always empty bath tubs
- Covering all septic tanks
- Putting on a life jacket when traveling on water.
- Fencing pits that builders used to trap water
- Do not allow children to go near water sources without adults
- Do not allow babies to play in basins full of water.

Common drowning places
- Swimming pool
- Ponds
- Streams
- Lakes
- Wells
- Seas and oceans
- Bath tubs

Nose bleeding

This is the flow of blood from the nose.

Causes

- Over inhalation of dry air
- Over blowing or one's nose with cold
- Taking foods one's body is allergic to.
- Taking medications for a long time (aspirin, garlic, ginger)
- Over inhalation of dry air dries the blood vessels in the nostrils and they break.
- Over blowing the nose over strains the blood vessels in the nostrils and they break.
- Taking aspirin, garlic, and ginger prevents normal blood clotting and instead thin the blood.

First Aid

- Let the causality sit and bend forward.
- Pinch the upper side of the nostrils.
- Encourage the causality to breathe through the mouth to prevent over straining the blood vessels.
- Keep the head of the victim higher than the level of the heart.
- Put the ice wrapped in a towel on the nose and check

Why?

To make the lining of blood vessels in the nostrils moist.

NB: do not make the causality to lean back because it allows blood to flow back to the throat which may cause vomiting or irritation.

Prevention

- Keeping the nostrils moist
- Taking citrus fruits such as oranges and lemons to strengthen the lining of blood vessels.
- Taking foods one is not allergic to.

Foreign bodies

A foreign body is any unwanted matter that enters the body.

A foreign body may enter the body through the;

- Nose
- Mouth
- Anus
- Eye
- Ears
- Vagina

Examples of foreign bodies
Insects
Small stones
Seeds (coffee, berries, beans, g.nuts)
Dirty or dust
Soil

Foreign body in the eye
Objects that enter in the eye include; dust, small insects, soil.

First Aid
Wash the eye with plenty of clean water.
Use the corner of a soft piece of cloth to remove the foreign body.
Take the victim to the oculist.

Foreign body in the ear
Examples
Small insects
Small seeds
Small stones

First Aid
- Make the victim sit and bend the head to one side.
- If it is an insect, pour clean water in the ear for the insect to float and come out.
- Flash light at the entrance of the ear if the foreign body is an insect.
- Take the victim to the hospital

Foreign body in the nose
Foreign bodies in the nose include;
- Small insects
- Small seeds
- Small stones

First Aid
Tell the victim to blow his nose hard and fast.
Take the casuality to the health worker.

Foreign body in the throat
Foreign body in the throat are mainly large pieces of food.

Foreign body in the throat lead to choking and death.

First aid

- Give the victim a number of sharp blows in the back
- Wrap your arms around his waist and press the belly upwards strongly.
- If the victim is unconscious, lie him on his back and make several sudden pushes on the belly using heels of your hands.
- It the person does not breathe, try mouth to mouth breathing.
- Take the victim to hospital
- If the victim is smaller than you, turn him over your folded leg and give sharp blows at the back.

Preventing accidents caused by foreign bodies

- Chew food properly
- Do not talk or laugh when eating
- Keep beads, button, coins, and seeds out of reach of children
- Putting on glasses while moving on motorcycles and bicycles
- Teach children not to put seeds, coins, stones, and soil in their eyes, nose, ears, and mouth.

Poisoning

Poison is any substance once taken into the body damages health or cause death.

Ways poison can be introduced into the body

- Through food
- Through air
- Through animal/bites (snakes, rapid dogs)
- Through injections
- Through swallowing (orally)

Common house hold poisons

Paraffin	herbicides
Root poison	Jik
Petrol	Insecticides
Wormcides	Diesel
Acaricides	Drugs (Aspirin/ chloriqune)

Signs of poisoning

- Rapid breathing
- Fever and sweating

- Feeling thirsty
- Mental confusion
- Comma
- Vomiting
- Loss of balance

First Aid
Give the casuality a lot of drinks.

Why?
To dilute poison in the stomach
Make the person vomit.

How to make the person to vomit
- Placing the finger in the mouth or throat.
- Give the victim water mixed with soap
- Rush the victim to the hospital

NB: If the causality has taken paraffin, petrol, or bleach (Jik), do not make him vomit.

Why?
It causes more damage to the stomach and gullet.

Preventing poisoning
- Keep petrol, paraffin out of reach of children
- Keep drugs out of reach of children
- Follow the doctor's prescription
- Buy drugs from recommended pharmacies
- Dispose expired drugs.
- Avoid drugs misuse

The ABC technique followed before giving first AID
A- Air way
B- Breathing
C- Circulation

TOPICAL QUESTIONS
1. Mention the main reason for giving first aid

2. Distinguish burns and scald.
3. How is the cause of burns similar to that of scalds?
4. Why should a burnt hand of a victim be dipped in cool running water?
5. Why is it not advisable to break blisters on the skin?
6. How do heat insulators prevent burns and scalds?
7. Define fever.
8. List down the main effect of fever.
9. Explain the first aid you can give a person who has fever.
10. How would you help a person who has convulsion?
11. What is fainting?
12. State the main cause of fainting?
13. How does drowning differ from near drowning?
14. Why should patients of second and third degree burns be given a lot of drinks?
15. Give one difference between first degree burns and third degree burns.
16. Why is it not good to make the victim who is nose bleeding to face up.
17. How does a foreign body in the throat cause choking?
18. Why would you give plenty of drinks to a person who has taken poison?
19. Why is it dangerous to make a person who has drunk paraffin to vomit?
20. Mention one way of preventing poisoning at home.

SANITATION

Definition:

Sanitation is the general cleanliness of a place where we live.

Ways of maintaining sanitation

- Construction of latrines or toilets for proper disposal of wastes.
- Digging rubbish pits and providing dust bins for proper disposal of house hold refuse.
- Slashing bushes around the homes.
- Draining away all stagnant water to deny mosquitoes breeding and protecting water sources.

Constructing a latrine or toilet

A latrine is pit dug in the ground where human excreta is deposited.

Uses of latrines

They keep faeces and urine where vectors cannot bring them to our food.

Types of latrines

i) Pit latrine
ii) Toilets
iii) Potties

Pit Latrines

Qualities of a well built latrine

- It should be 5 to 7 metres deep
- The floor should be strong enough to stand on and smooth to sweep and clean.
- It should have a hole big enough to allow faeces and urine to pass and small enough to prevent children from falling inside.
- It should have walls and doors to provide privacy to the user.
- It should have a lid to cover the hole.

NB: Covering controls smell and the movement of flies is controlled.

- It should be constructed 10 metres away from the main house and 30 metres from the water source.
- It should be built below the water table or source to avoid contamination.

Site of a pit latrine

- It should be atleast 10 metres from a living house to prevent flies from carrying germs on to food.
- It should be atleast 30 metres away from a water source (water table) to prevent feaces and urine seeping in to water source and contaminate it.

- It sinking rainy seasons
- Should not be built above the water table to prevent the feaces and urine going into and contaminate.

Types of Pit latrine

i) Ordinary pit latrine
ii) VIP latrines

Ordinary pit latrine

It is common in villages
It should have a lid to cover the hole.

The VIP latrine

It is a special type of a latrine with a vent pipe to take out smell and a screen on top to trap flies.

Important features of a VIP latrine

- Vent pipe: it lets out air.
- Screen on top: traps flies
- Spiral shaped walls no doors for free circulation of air.
- It has no lid to let in air

How to construct a VIP latrine

- It should be at least 10 metres away from any school, house, kitchen, and other buildings
- It should be 30 metres away from any water source.
- It should be built on solid ground and not in valleys or swamps.
- Dig a pit of about 5-10 metres deep

Cover the pit in any of the following ways;
i. Use strong poles of hard timbers
ii. Metal bars
iii. Build a house on top of the pit
fix a net or screen on top of the vent pipe.
Place the pipe in its hole.

How to maintain a VIP latrine

- The floor should be swept or washed if it's cemented.
- Wash or remove any feaces, insects, cobwebs and dust from walls and corners of the roof
- Trim grass and bushes around the latrine
- While using a latrine, make sure that the feaces go directly into the hole.

- Clean with any soft tissue or leaves
- Wash your hands with soap after using the latrine.

Toilets (water closet system)

This is a bowl shaped device used for disposing human waste, which is flushed away the bowl by water from a tank (cistern).

Components of a flush toilet system

Parts include;

i. A tank that stores water for flushing
ii. A seat with a cover for sitting.
iii. A pipe that takes water from the tank to the bowl and another that takes it to septic tank.
iv. A septic tank, an underground storage hole for human waste and waste water from kitchen and bathroom (i.e.Sewage)
    The waste materials in the septic tanks are called sewage.
    Sewage from septic tanks may be carried away by pipes (sewers) for treatment to make it less harm.
    Where there is no pipe system, it is carried using vehicles called cesspool empties.
    In Uganda, collection and treatment of sewage from homes and institutions is done by National water and sewage corporation (NSWSC).
v. The lever is either pulled or pushed top release water during flushing.

Flush toilets are commonly used in cities, towns and other places where there is piped water.

Advantages

- Can be put inside the house and vehicles
- They are easy to clean
- They are user friendly, even young children can use them.

Disadvantages

- They are very expensive
- They require a lot of water to function
- They are only used where there is piped water.
- They can easily get blocked if hard objects are put in it.

How to maintain flush toilets

- Keep the seat clean, do not step or urinate in them.
- Flush toilets after use.
- Use only soft tissue or toilet paper after cleaning your self.
- Do not use the toilet when it is blocked.

THE REPRODUCTIVE SYSTEM

Growth is an increase in size e.g. changes from larva to adult.
Development refers to growing gradually and becoming more mature.

Reproduction

This is the process by which all living things multiply and increase in number (become many) i.e. give rise to new off-springs (young ones) to continue a generation of the species.

Types of reproduction

There are two types of reproduction

i) A sexual reproduction
ii) Sexual reproduction

A Sexual reproduction

This is the type of reproduction where no reproductive cells (gametes) are used to produce young ones.

Examples of a sexual reproduction

Vegetation propagation in plants e.g. budding, grafting, layering, marcoting, stem cutting, sulkers, bulbs crown, slips, leaves, and root cutting, cell division, binary fission in single celled animals e.g. Amoeba, bacteria, paramecium.

Sexual reproduction

This is the type of reproduction which involves joining (fussing) or two reproductive cells, male and female gametes.
The union /fission of a male female gametes is called fertilization.
The nuclei of the two cells unite and form a Zygote develops into a new individual or foetus.
In animals, the male reproductive cells (gametes) are called sperms and are produced by the reproductive organs called testes.
The female reproductive cells are called Ova and are produced by the ovaries.

Hermaphrodites
These are animals that contain (have) both male and female reproductive organs (Testes and Ovaries) on themselves. E.g. earth worms and snails.

Types of fertilization
There are two types of fertilization

i) External fertilization
ii) Internal fertilization

External fertilization
This is where the female lays eggs and the male pours sperms on them outside the mother's body to fertilize them e.g. fish and amphibians.

Internal fertilization
This is when eggs are fertilized inside the mother's body after mating.

Human sexual reproduction
Diagram showing the cross section of the female reproductive organs (system)

The female reproductive organs and their functions
The Ovary: there are two ovaries. One on the left and another on the right. Ovaries produce ova (ovum) the female reproductive cells.
Oviduct (fallopian tube): it is the tube down the uterus (womb) from the ovary. It is the passage for an ovum to the uterus. This is when fertilization takes place.
Uterus (womb): it is a bag like structure inside which the foetus or Zygote grows from.
Cervix: This is a ring of muscle which helps to close the lower end of the uterus to the vagina there by protecting it /foetus from external damage.

The structure of gametes

i) Female gamete (an Ovum)
ii) Male gamete (sperm)

The structure of male reproductive organ

Functions of parts of the male reproductive organ

Scrotum: it is a sac or bag that encloses and protects the testes.

Testes: these are glands that produce the male seminal fluids containing sperms; They lie outside the abdominal cavity to make them have lower temperature than the normal body temperature for maximum production of sperm; They start producing sperm cells during adolescence from age 11-16years

Epididymis: it is a long coiled tube which stores and then carries sperms.

Sperm duct: It is an extension of the epididymis and delivers the sperms to the urethra where they pass and go out.

Portare gland: produce a fluid (seminal fluid) which helps to neutralize (make harmless/ the acid in urine in the urethra. It also kill germs which are in sperms.

Seminal vesicles: it stores excess sperms.

Erectile tissue (penis): it is a spongy tissue which when filled with blood it erects (stands) to ejaculate sperms.

Ovulation

This is when mature ova are released from the ovary.

An ovary releases an ovum every month i.e. the release of ova is done alternately.

Menstruation

This is the monthly release of blood from uterus as a result of rupture of the uterus walls.

This helps to was and clean the uterus in preparation to receive a foetus.

NB:

The first menstruation called menarebe starts in girls between the age of 9-15 years.

The last menstruation period end at around 45 years and is called menopause

Normal menstruation takes 3-4 days.

It takes place after every 28 days if all conditions are normal.

It may be interrupted by conception, strong fever, or any abnormalities in the body.

Care during menstruation

- To prevent infection and avoid germs, diseases, one must be clean.
- Use sanitary materials such as tampax, tampons, always, cotton.
- Visit health workers incase abnormalities are noted.

Fertilization

- Fertilization takes place in the oviduct /fallopian tube.
- Immediately after fertilization, the zygote moves to the uterus.

- The zygote attaches itself on to the placenta with the help of an umbilical cord, this process is called implantation.
- The placenta supplies the embryo with food nutrients and oxygen at the same time it removes waste products.
- The umbilical cord transports food to the foetus and waste products from the foetus to the placenta to be carried away by blood.
- The period of pregnancy from conception to birth is called gestation period and lasts for 9 months in humans.
- Development of the foetus takes place in the uterus.
- The ammotic fluid act as shock absorber and protect the foetus.
- The amnion/ amniotic membrane protects the body and had the fluids.

The stages of development are;

Fertilization - Zygote - Foetus - baby

Diagram showing development of the foetus in uterus

Sex determination

Sex of a child is determined by chromosomes found on the gametes/ sex cells, there are X and Y chromosomes XX chromosomes are for girls and XY for boys.

Signs of pregnancy (good and Bad)

- Requirement s of an expectant mother (pregnant mother)
- Good diet (balanced diet) for proper growth of the baby.
- Should avoid taking drugs like tobacco and alcohol.
- Should visit antenatal clinic for medical check up and advice.
- Should rake vaccine against tetanus (texonus toxed)

BIRTH AND LABOUR

After nine months of pregnancy, the mother will go into labour and produce a child.

This is called giving birth or partyrition (child birth).

Labour refers to the effort of child birth shown by antraintions of the uterus.

What makes a baby after birth cry?

It is due to sudden change in temperature (environment change). Crying helps to start the normal functioning of the lungs i.e. breathing starts at birth.

NB: incase a baby fails to cry/breathe artificial breathing should be done immediately.

Single child birth: this is when one child is normally born to mother.

Multiple birth: this is when two or more babies are born at the same time.

Twin: when two babies are born at the same time by the mother.

Twins

Identical twins
This is when one fertilized ovum divides normally and grows into two separate babies.
Identical twins are usually same sex
All their physical aspects are the same.

Siamese twins
These are twins whose body remained joined /fused at one point.

Fraternal twins
This is when two ova are released and fertilized and then develop into twins fraternal twins are not always the same sex.

Multiple birth
If there are three or more ova released and fertilized it results into multiple birth.

Examples of multiple births
Triplets: Three children are born
Quadruplets: Four children are born.

Birth Control Contraception
This is a method of avoiding getting many children you can not care for properly i.e. having the number of children you want and when you want them.

Family planning
This is the use of birth control methods to get the number of children you want and when to have them in family.

Child spacing
This is the provision of enough time between the birth of the different children in family.

Functions of family planning association
- It educates people about child spacing
- Educates people about quality of life when children are few
- Provides people with family planning contraceptives.

Reasons why people have many children
- Ignorance of family planning methods.

- High infant mortality rare
- Traditional practices and values (customs)
- Prestige or fame and security.

Problems of having many children

- If a family has too many children, there will be;
- Inadequate financial resources.
- Lack of enough food for the children
- Poor education for children
- Lack of proper medical care
- High infant mortality rare
- Mothers sickness as a result of having too many children e.g. miscarriage, maternal anemia, fatigue, low birth etc.

How to avoid infant mortality rate (death)

- Immunization against infant killer diseases.
- Participating in health care services e.g. health education
- Practice family planning.

Advantages of family planning

- Immunization against infant killer diseases
- It reduces risk of serious disease and maternal death.
- It reduces cases of abortion/miscarriages
- It improves the health and well being of the family.
- Controls population growth.

Methods of birth control

There are two methods used for birth control namely;

i) Natural Methods
ii) Artificial methods

Natural methods

- Abstaining from sex
- Withdrawal/pulling out before releasing sperms during sex
- Bed separation by couples
- Prolonged breast feeding
- The mucus method (testing Jell)
- Using calendar or moon beads.

Artificial methods

- Use of condoms
- Use of contraceptive pills
- Birth control injections e.g. injecta plan,
- Intra uterine devices e.g. coils, spirals, diaphragm.
- Use of jellies and foams
- Sterilization by vasectomy in men and tube litigation
- Using norplant

MYTHS AND MISCONCEPTION ABOUT ADOLESCENCE AND REPRODUCTION HEALTH

- A myth is a traditional belief that is not true
- Misconceptions are false ideas or beliefs

Myths and misconceptions	Truth
Family planning contraceptive make women permanently barren	When a woman feels she should become pregnant , she just stops using the contraceptives and become pregnant again
Family planning increases teenage pregnancy	Instead teenagers are protected against unwanted pregnancies and STDs / STIs
Use of contraceptive causes high blood pressure and kills women during birth	Once the women use the right drugs as advised by the trained worker. Complications are reduced
Use of contraceptive leads to producing babies with abnormalities such as having one eye , ear being blind or lame	This is not true
Family planning is against the teaching of the church	Atleast the church supports the natural family planning method.
Contraceptives make women to loose hair on the head and grow beards	There is no scientific proof about this

Changes during adolescence and puberty

Adolescence

Adolescence is a period of development changes between child hood and adult hood.
A person at this stage is called an adolescent.

Puberty

This is the period of physical mental and sexual maturity i.e. when becomes a young adult capable of producing.
Changes in adolescents at puberty are called sex characteristics

There are three types namely;

i) Primary sex characteristics
ii) Secondary sex characteristics
iii) Emotional /psychological sex characteristics

Primary sex education (Basic)
This involves the development of sexual organs for reproduction.

Primary sex characteristics in boys
Penis and testicles enlarge (increase in size)
The testicles start producing sperms (boys begin experiencing wet dreams.
Internal organs begin producing fluid like semen.

Primary sex characteristics in girls
Thickening of uterus walls
Menstruation begins
Ovaries develop and start releasing eggs (ovulation starts)

Secondary sex characteristics (physical)
These involve the physical development of the body parts.

Secondary sex characteristics in boys

- Voice breaks and deepens
- Hair grows on different parts of the body e.g. penis, armpits, chest, around the mouth and anus.
- Bones and muscles enlarge i.e. a boy becomes muscular.
- Sweat glands become more active.

Secondary sex characteristics in girls

- Breasts enlarge and looks tender and attractive
- Sweat glands become active making the face look smooth
- The hip (pelvis) enlarge and a girl puts on a lot of weight.

Fungi
Protozoa
Endo parasites
They affect a person through a number of ways causing a lot of pain and suffering

AIDS

The term AIDS stands for; Acquired Immune Deficiency Syndromes
Acquired means got from outside the body
Immune means protected against or safe from disease, the body is always protected by white blood cells.
Deficiency means lack or shortage or AIDS virus destroys white blood cells and the body has shortage or shem.
Syndromes mean a collection or group of diseases and signs which show the presence of a disease.
AIDS is a pattern of disease symptoms which attach and destroy white blood cells leaving the body unprotected against infections.

Causes of AIDS
AIDS is caused by aretgro-virus called HIV (Human Immunodeficiency Virus) commonly called AIDS virus.

Transmission of AIDS virus
- AIDS virus can only survive in the human body.
- The disease can be spread when body fluids of an infected person get into contact wit that of the health person.
- Body fluids can be exchanged in the following ways;
- Sexual contacts with an infected person.
- Blood transfusion from an infected person.
- Sharing or using sharp cutting instruments
- From an infected pregnant mother to her newly born baby at birth.
- From the mother to the baby through breast feeding.

AIDS virus can not spread by;
- Normal shaking of hands
- Bites from mosquitoes and bed bugs
- Caring for AIDS patients
- Sharing cattery and cooking utensils
- Hugging or embracing AIDS patients
- Cleaning, washing beddings and clothing of people with HIV/AIDS

Signs and symptoms of HIV/AIDS
Signs
- The major signs of AIDS are;
- Herpes zoster locally called “Kisip” which inflames the skin making it appear as sealed.
- Chronic diarrhea which may last for more than a week

- Sudden less of about 10% of the normal body weight.
- Skin cancer which is also called Kaposis scarcomer, it causes itching and leads to scratching that leaves black spots.
- Swollen lymph glands especially those of the neck and armpits
- Oral thrush where by the tongue, gums, lips, and inside of the mouth plus the alimentary canal
- Chronic cough which lasts long.

Symptoms

- Tiredness without any proper cause
- General body weakness
- Persistent fever which is on and off
- Loss of appetite
- Sexually active people between the ages of 15-45years
- Rape and defilement victims
- Long distant truck drivers and traders who often have casual sex when away from their married partners for along time.
- Prostitutes who sell themselves for sex to many partners.
- Bar attendants.

Effects of AIDS/HIV

- These are many effects of HIV/AIDS on infected person, family and community.
- They suffer personal pain from the disease.
- The family spends a lot of money on treatment, care and feeding.
- They are stigmatized or isolated in the society.
- Loss of family income if the bread winner dies.
- Many children are orphaned and become child parents.

Prevention and control of HIV/AIDS

- There is currently no cure against AIDS, so people need to guard themselves against the disease by;
- ABC approach
- Having one faithful sexual partner
- Abstain from sexual intercourse until marriage
- Avoid practices which involve risks of getting AIDS like tattooing, ear piercing.
- Use of condoms during sex.
- Screening blood before marriage and transfusion
- Sterling medical instruments.
- Disposing syringes and needles after use.

How can we and manage AIDS patients

- People with AIDS need support in many ways.
- Counseling, is a special form of communication through which a person is helped to control his/her feelings by a counselor.
- Eating a balanced diet.
- Join good social groups to relax and avoid heavy work.
- Should give up bad habits like smoking and drinking alcohol

DISORDERS OF THE REPRODUCTIVE SYSTEM

- Impotence is the inability of a man's penis to become stiff or erect
- Low sperm count
- Is the inability of the testes to produce enough sperms
- Penile cancer
- This is the growth of abnormal cells thatform on the pennies

Enlargement of the prostate glands

This disorder is common in elderly men over 50 years of age

Fibroids

These are swellings called cysts that develop on the wall of the uterus.

Ectopic pregnancy

This is a condition when a fertilized egg implants itself in the oviduct

Ovarian tumours

These are masses of abnormal cells that form on the ovary

Cervical cancer (cancer of the cervix)

This is the condition in which the cervix develop tumours

Inflammation of the oviduct.

Types of counseling

- Pre-HIV antibody test counseling
- Pest-HIV antibody test counseling
- Counseling HIV/AIDS patients
- Importance of counseling
- It prevents AIDS victims from committing suicide
- Avoids spread of the disease to others knowingly.
- To encourage people to continue to live longer and useful.

Organization in Uganda that offers counseling services

In Uganda, there are many governmental organizations which offer counseling.

TASO: The AIDS Support Organization. It also provide supplements food for patients.

AIC: AIDS Information Centre

ACP: AIDS Control Programme of ministry of health. It also provides HIV/AIDS testing.

Gonorrhea

- It is a venereal disease caused by a bacterium called gonococci (sing gonococcus)
- It is spread through unprotected sexual intercourse with an infected person.

Signs in men

- Pain when urinating
- Discharge of pas from the penis
- Painful swelling on the testicles
- Rash and sores on the genital areas

Signs in women

- Slight pain when urinating
- Sometimes very painful monthly periods.
- Vaginal discharge of smelly pas
- Pain in the lower abdomen.

Signs in babies

- Red and swollen eyes
- Pus comes out of the baby eyes
- Blindness.

Effects of gonorrhea

- It leads to permanent damage of male and female reproductive organs.
- Leads to sterility in both men and women.
- Cause blindness in babies.
- Blecks the urethra making urination difficult and painful.

Control and prevention of gonorrhea

- Using the ABC formula for preventing AIDS and other STDs.
- A-Abstain from sexual intercourse
- B- Be faithful to your partner
- Condoms should be used during sexual intercourse

- Seek early medical treatment
- Stop playing sex until you are completely treated.

Syphilis

Syphilis is a chronic and dangerous venereal disease caused by a bacterium called Spirochere
It is spread by having sexual contact with the infected person.

Signs and symptoms vary with stages

- Painful sores called chancre appears 2-5 weeks after infection.
- In second stage a number of signs and symptoms such as sores in mouth, throat, itching skin, rashes appear.
- In the third stage the bacteria cause heart disease, paralysis, blindness and insanity or madness.

Prevention and control of syphilis

It is prevented by practicing ABC approach
Infected people should see a doctor immediately

Other urinary tract infection

- Pelvic inflammatory diseases (PID)
- Infected people should see a doctor immediately
- It affects the abdominal and pelvic area.

Epididymis

Serious infection of the epididymis leading to swelling tenderness and pain in the testicles.

Genital herpes

These are sores (inflammation) of the genirals caused by virus called nerpes simplex.

Trichomoniasis Vaginalis

It is caused by protozoa called trichomonas
The disease causes inflammation of the vagina

Genital warts

These are sores in the sexual parts and around the anus.
They are caused by a virus.

Hydrocele

It is an increase in quantity of fluids in the sac around the testis and epididymis.

Orchitis
Inflammation of the testis due to injury or infection of tuberculosis

Candidacies
It is also called thrash and is caused by a fungus

Sterility
In ability of a man to impregnant a women or a woman failing to conceive

Lymph glandcoma
This refers to enlarge lymph nodes spread by sexual contact.

Urethriris
A disease that cause the urethra to become sore and swollen.

Prevention
- Using ABC approach
- Seeking medical attention
- Personal hygiene especially of the genitals.

PIASCY MESSAGES ABOUT ADOLESCENCE AND REPRODUCTIVE HEALTH
PIASCY STANDS
P – Presidential
I – Intitiative on
A – Aids
S – Strategy for
C – Communication to
Y – Youth
The following messages are passed to us through PIASCY activities
- Abstaining from sex until marriage
- Learn how HIV is transmitted
- HIV damages the immuse system
- People living with HIV and AIDS need care and support
- Testing for HIV
- Managing menstruation
- You need to understand how your body changes at puberty
- Sexually transmitted infections make it easier for HIV infections
- Say no to sex for gifts
- Life skills helps to protect you from HIV.

- Using violence to get sex is wrong
- You have the right to say no to forced marriages.
- Say no to bad touches
- Choose to delay sex
- Avoid risky places and risky behaviours