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Basic Primary Science & Health for Uganda



Teacher's Guide Health Education Volume 2 for Primary 5,6 and 7

Ministry of Education Ministry of Health UNICEF Kampala

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Foreword

As the Primary Science curriculum changes to stress the importance of health, the teacher's goals must also change to stress the reality of applying the science of health to real life.

As a teacher, your first job is to teach, but for what purpose? If your pupils pass all of their examinations only to leave school and have families where their own die children of immunisable diseases: or they themselves are constantly sick from improper hygiene; or they never learn to overcome problems from adolescence, have these pupils truly learnt their lessons? Your most important goal in teaching health is to pupil's attitudes about change health so that they learn to keep themselves and those they care for healthy.

To meet this goal you must consider yourself as part of the change process. People are very likely to note what you do as well as what you say. You are a role model for pupils and community members because you are educated, have access to new knowledge, have the ability to study innovative ideas, and have been put in a position of responsibility to pass information on to others. this Therefore, as a teacher you should strive to practise what you teach. Your personal health habits should reflect your teaching and your teaching should extend beyond the classroom.

This book is not for you alone as a teacher. It has ideas which, if shared, can be useful to the health of your own family, your colleagues and other people with whom you come in contact.

Pupils should also be encouraged to share ideas they learn from you. Use the principles of the CHILD-to-child programme in getting older children to teach younger children (siblings or children who do not attend school) about personal, family and community health. Students can also be agents of change in their own households provided they are taught by you how to introduce new ideas to parents and other family members in tactful and appropriate ways.

and appropriateness need Tact emphasis at all times during the teaching of health, because health can touch on very personal matters. In some cases teaching health can mean change from local customs, going against traditional beliefs or even talking openly about things usually left unspoken. Take the time to learn the facts anđ understand the importance of needs for change yourself. Then keep in mind a respect for all whom you teach, adult and child, so that you express yourself in a way that makes people understand why they do something differently, should and not that what they are doing is wrong.

Help pupils and others you teach change their lives for the better where they can. Many or all of your teaching audience especially in rural area may not have access to clean water, foods or even a piece of soap. Keep in mind their limitations \mathbf{so} that they work towards an understanding of health and help them make changes where they are realistic. We hope that the material contained here gives you renewed confidence to teach health. through science by enriching the lives of those you teach. It has been the goal of the Interministerial Expert Panel ÓП Education and a11 Health contributing writers make to this a healthy experience for all.

Mr. T.K. Mugoya, Chief Inspector of Schools, Ministry of Education, Kampala, Uganda

Acknowledgements

On behalf of the Interministerial Expert Panel on Health Education. and on my own behalf. I wish, first all. to express our thanks and of indebtedness to the Ministries of Education, Health, and Agriculture which, realizing the urgent need for and the crucial importance of Health Education in schools at this stage of Uganda's development. agreed to work together in setting the Interministerial Expert up Health Panel ΔĦ Education (hereinafter referred to simply as the Panel). This Panel was charged with the task of developing a new Health Education svllabus for starting with that of the schools. primary schools, which would make health education an essential and examinable part of the science svllabus.

We are similarly grateful to the following para-governmental institutions international and organizations which agreed to nominate their staff as full members of the Panel: Makerere University, the National Curriculum Development Centre. the Uganda Examinations Board. National UNICEF, WHO, and AMREF. Without setting up of this Panel this the Guide would not have been written.

We are particularly grateful to the current Honourable Ministers of Health and Education not only for giving us the full backing of their respective ministries, but also for continued support, their unwavering encouragement. and the goals committment to and aspirations of the Panel. To them the Panel shall remain indebted.

We are also grateful to the Primary School Teachers, TTC Tutors and Inspectors of Primary Schools who attended the Panel's first three workshops.

thanks also Our the go to staff Headmasters and of the seventeen satellite Primary Schools and four Teacher Training Colleges which the Panel's original on syllabus was pre-tested. Ιt was the experience gained through running these workshops and the pre-test exercise which helped the Panel to revise the syllabus on which this Guide is based.

We also wish to thank the following people who actually took part in writing the Guide: Mr. H.M. Bagarukayo (AMREF), С. Dr. Karamagi (Makerere University), Mr. D. Kasirye (Kyamaganda Teacher's Training College), Mr. D.S. Kiyimba (National Curriculum Development Centre). A. Matembe-Kisuule Mr. (Buddo Primary School), Mr. F. Odet (Ministry of Education), Mrs. Mary Owor National F. (Uganda Examinations Board), Dr. Joseph Pellicer (UNICEF Consultant), Dr. G.G.C. Rwegellera (World Health Organisation), Dr. G.C. Ssembatya (Makerere University) and Mrs. Rose Tiridri (Ministry of Health). In spite of their heavy work schedules they found time to write the Guide and brought to it their varied expertise.

We are especially grateful to Ms. Sally Fegan, the present UNICEF Country Representative, for her invaluable contributions the to work of the Panel in the latter's early days when she was still the UNICEF Health Programme Officer; for her continued and support, encouragement, and guidance since she became the Country

Representative of UNICEF. It was Ms. Fegan, more than anyone else, who kept the Panel going when times were rough and problems seemed unsurmountable. To her we shall ever remain indebted.

We would also like to express our gratitude to Ms. Regina C. Faul-Doyle for her editorial work. Without her enthusiasm, dedication, sheer hard work, and meticulous editing this Guide would never have seen the light of day. Hers was the unenviable task of marrying together into one consistent whole the many disparate parts contributed by various writers.

We wish tο express our indebtedness and gratitude to UNICEF Uganda for its generous financial and material support. It is difficult to see how the syllabus would have been developed and the Guide written without this support and assistance.

Finally, but by no means least, we wish to thank those people, too many to mention by name, who contributed in one way or another to the development of the Primary Health Education Syllabus, and to the preparation and writing of this Guide.

Despite the help of all those mentioned above, or perhaps because of it, we are solely responsible for any errors that may be found in this book, and the conclusions reached therein.

G.G.C.R.

For the Interministerial Expert Panel on Health Education Kampala, Uganda

Introduction

Aims of the Teacher's Guide

Teacher's Guide This is of a series intended one tο supplement the teacher's basic knowledge of science and health education. It is meant to guide the teacher towards specific objectives to be learnt by the pupils at specified levels and and provide factual terms information, teaching hints and suggested activities for the teacher.

Guide Ιn addition this is intended provide to the most up-to-date health information about each subject, striving for practical teaching application to the Uganda situation. The topics briefly are covered but comprehensively as much as space and teaching time allow. However, teachers should as usual search for additional methods and reference materials to continue to teach through their own, and other's experience.

On such an important subject as health, teachers should always take the opportunity to learn more. Ask questions of local experts such as immunisers, health workers. sanitation workers. water development officers and social leaders. The science of health is an ever changing field. Be prepared to adapt your curriculum to new discoveries in the field of medicine, hygiene, nutrition and other health areas. As well, try to change with the times as social circumstances and teaching methods improve.

Teacher's Guide Health Education Volume 2 and the Syllabus

This Teacher's Guide covers the portion of the Science and health Health Syllabus for Primary 5, 6 and 7. The Book is divided in order of Primary School level, further divided into units with general subject headings, and then by specific chapter titles. These chapters are included because they are directly related to health. Health Education Volume 1 for The Primary 1, 2, 3 and 4 will be published separately. The science topics will be covered in other books.

How to use this book

Before you begin the term, read the entire book. This will assist you in understanding at what point pupils may have already covered a related subject, where a subject may be repeated, and what the student will cover in the next term or year that relates to the present material. It will help pupils understand a complicated idea if you refer to what they have learned in the previous term and let them know what will be taught later on. Each chapter is divided into these categories:

- Objectives At the end of your 1 teaching session pupils should know the facts about each objective. These objectives should be seen as test questions for which you explain the answers during the term.
 - 2 <u>Main Ideas</u> This is precise

information that pupils should understand about the subject. They are the messages upon which the pupil builds understanding and belief. They should be seen as the essential messages you wish the pupil to remember about the topic.

- 3 <u>Behavioural Changes</u> These are the teacher's goals to affect the pupil's personal attitudes relating to health habits and practices. Where the pupil is given the facts, understands and believes them, is motivated and has the means to achieve these ends, behavioural changes can take place. Remember to be practical in your expectations of these behavioural changes and remember to practise what you teach!
- 4 Topics These are the themes for discussion and teaching, the components of the main ideas.
- 5 Materials For some sessions it will be suggested that you have on hand additional teaching aids beyond what is found normally in the classroom. Make an effort to let pupils contribute these materials where possible and of substitutes where think items are difficult suggested to obtain.
- 6 Methods/Activities These are suggested ideas to get students to better understand concepts taught. If you do not have the time to do all activities. choose a few that are most practical and interesting. Experiment by yourself or with colleagues ahead of time where methods or activities are unfamiliar. You will avoid

embarrassment, save time and possibly discover a better method or activity by doing so.

7 Notes to the Teacher - These are not included where the topics and ideas are They straightforward. are meant as supportive hints on how tο teach difficult a subject.

Organising your teaching

This book suggests terms in which subjects should be different covered in order to meet requirements of the newly revised science curriculum. Keeping in mind the seasons, your workload, vour class size and other factors, you may need to rearrange your schedule accommodate some of the to lengthier subjects. You may wish to divide one topic over more than one term while you teach other concurrently topics with other Hints to assist your lessons. teaching are to:

- 1 Write your schedule out to be sure all of these important health topics are covered in the proper year.
- 2 Be flexible. If your students are learning more rapidly than planned, add related ideas in the extra time, or try to use all activities suggested.
- 3 If students have a difficult time understanding a subject, think of ways to reinforce the topic in other classes, or as extra-curricular tasks as you must not allow yourself to lag behind or drop a subject entirely.

Dr. G.G.C. Rwegallera, (Chairman) Interministerial Expert Panel on Health Education Kampala, Uganda

Housing and Health

Primary 5, Term 1

Objectives

Having completed this chapter, the pupils should be able to:

- 1 List four reasons why humans live in houses.
- 2 Name some common materials used in building houses in Uganda and their advantages/ disadvantages.
- 3 List six factors that promote good health to consider when looking for a site for a family house.
- 4 Explain the purpose of windows and ventilators.
- 5 List ways to keep houses and compounds clean and maintained to promote good health.
- 6 Describe the siting of latrines and rubbish pits in relation to a family house and their functions towards promoting health.
- 7 Make some common building materials and simple household furniture/utensils and explain their function in promoting good health.

Main ideas for the pupils

- 1 Housing is one of the basic needs for human beings to protect themselves and their property against weather, wild animals and enemies.
- 2 Housing types vary in Uganda

from traditional to modern and are made from many kinds of materials both domestic and imported, permanent and temporary.

- 3 To promote health, houses should be located in areas that are not swampy, are near food and water supplies and have enough space, ventilation and lighting for all inhabitants.
- 4 To help separate disease germs from food and water it is best to have different rooms or facilities for the latrine/toilet, bath, kitchen, food storage and animals.
- 5 Keeping our houses and compounds clean and maintained not only looks good but helps keep us healthy.

Behavioural changes

Pupils should understand the functions of housing so as to be able to contribute to their cleaning and maintenance for their own and their families health.

THE PURPOSE OF HOUSING

Long ago before humans could build the type of houses we see today, they lived in caves and temporary houses made of branches and leaves in order to protect themselves and their property from the cold, rain and sun, fierce animals and other enemies.

HOUSING IN UGANDA

In Uganda, many people live in traditional houses made from local materials. Others live in western style houses made from local and imported materials.

Traditional houses made from mud, sticks and thatch are cheap and easy to make and quick to repair when damaged but they can also be destroyed easily by bad weather, insects and fire. They get old quickly and new ones need to be built again.

In many cases, houses made of mud and sticks do not have windows or have very small windows for security.

Some materials can be made locally to strengthen traditional housing, for example burnt mud or clay bricks and home made cement made from cow dung, ash and sand.

Modern houses are usually made of brick, stone, cement block, glass, steel rods and roofing such as corrugated iron sheets (mabaati), tile, asbestos sheets or concrete. The disadvantage of such houses is that they are usually more expensive to build than traditional housing.

SITING, PLANNING AND BUILDING A HOUSE

The following should be carefully considered when building a good house:

1 <u>Site</u> - Many times a person may not have a choice as to where they build, but if possible they should find property for a house that is

• well drained (not swampy) to avoid mosquito and tsetse fly breeding ground, that is, on flat ground or at the side of a hill rather than the bottom of~a valley.

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- 20 metres from the main road to allow road expansion in future, for the safety of children and for access to transport.
- near a good water supply such as a well, protected spring, water pump or tap water.
- near schools, market and other shopping places.
- 2 Space The number of rooms in a house will depend on whether one is in an urban or rural area, the size of the family and the style of the house (traditional or modern) but generally:
 - there should be a 4 by 3 metre room for every two people.
 - rooms for food and water preparation, eating and food storage should be separate from places for cleaning, bathing, latrines and animals in order to prevent faeces and flies from spreading germs.

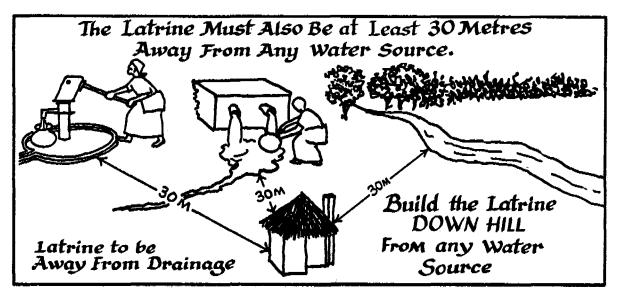
In rural areas most houses have rooms for sitting, dining and sleeping in the main house and the kitchen, latrine, food store and baths are in other smaller "houses" outside.

- 3 <u>Sanitation</u> Every house needs a place to throw rubbish and needs a latrine or toilet.
 - The latrine (pit latrine) should be sited at a lower

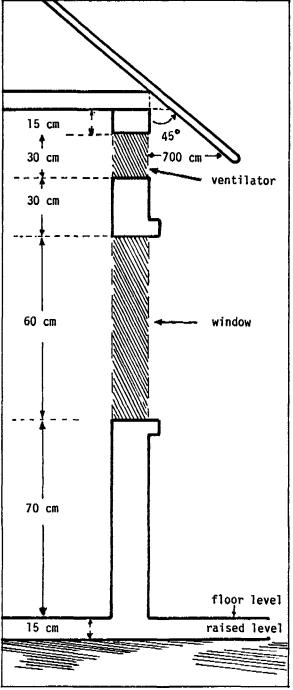
level than the water source (well, spring or pump). If sited at a high level, water from the latrine contaminated by germs in faeces may run down into the water supply and cause the spread of disease.

- The latrine should be at least 5 metres deep, and located 10 metres from the main house and kitchen and 30 metres from any water source.
- Rubbish pits should be at least 30 metres from any dwelling.

The Pit for Latrine Must be at Least 10 Metres away from Any House, Kitchen, School, Hotel etc. HOUSE HOTEL Oregonal of the second second



4 <u>Construction</u> - The materials used in constructing a good house will depend on the amount of labour and money available, but generally:



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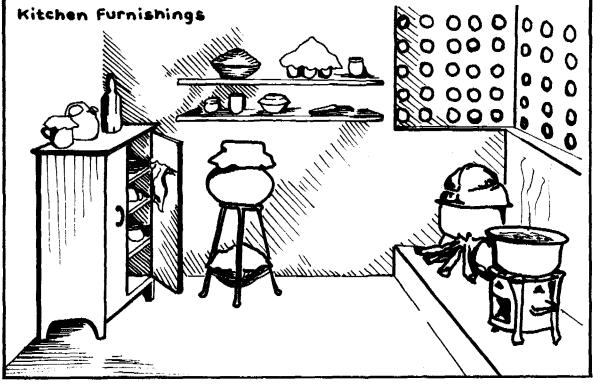
- walls can be made of concrete blocks or mud. poles and burnt or unburnt reeds, muđ bricks or clay bricks. Average height of walls from floor to ceiling should be 205 cm with windows anđ ventilators in every room.
- floors can be made of purchased cement, sand and stone or locally made cement (see activities section for local cement formula).
- ventilation should be encouraged in a house to keep the air moving so that it is dry. cool, clean and fresh. Ventilators can be made of wood and screen or pierced blocks. These are especially important where a house has smoke coming from charcoal used for cooking, as charcoal smoke can be hazardous to health and smoke in general can aggravate lung problems. Air in a house is made fresh making by it circulate through ventilators or windows bv convection current. This is where people in the house heat up the air and it rises. Fresh air currents draw the heated through the windows and air vents. There should also be ventilation in the roof to allow hot or warm air to escape. Ventilators can be on top of windows or high in the walls.
- protection from dampness considered when should be building a house. Dampness breeds moulds and some insect life which can in turn aggravate asthma and allergies or encourage pests

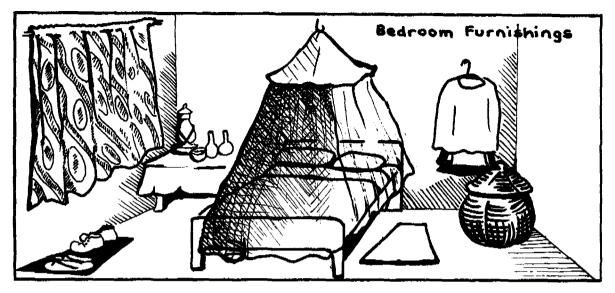
to live in a house. To make a house damp-proof, water proof materials should be put on the wall about 30 cm above ground level, such as plastic sheets, tarred paper or glazed bricks which prevent water from seeping up through the walls by capillary action.

- painting the walls in white or light colours can help keep a house cool. Water or oil based paints are suitable.
- proper lighting from windows helps keep rooms pleasant and facilitates indoor work. Windows can be made of wood or aluminium frames, wire or plastic screen, or glass. should be kept open Windows during the day for ventilation and properly

screened against mosquitoes, barred against thieves and curtained to stop strong sunlight during hot days.

- 5 Furnishing a House In order to make a house comfortable to live in and to protect food and clothing from insects and dirt, furniture of various types are needed in a house. Basic furniture for a house can be:
 - sitting room chairs, mats or carpets, tables, lamps or lantern stands, bookshelves, and curtains.
 - kitchen some type of cooker (wood, charcoal i.e. sigiri, paraffin, gas or electric); fuel store, rubbish bin, food store, water container, utensil tray, cupboard or shelves for pots and pans, and a washing up basin.





- bedrooms-bed, lampstand, baby cot, small table, carpet or mats, shoe rack, clothes hangers, cupboard and curtains.
- bathroom-basin or tub, water container, towel rail, shelf or cupboard.

Materials needed

for the pupils

- materials for home-made cement (cow manure, wood ash, sand, termite mound, water).
- materials for constructing household equipment or home-made furniture (sticks, wood, tin, papyrus, bamboo, reed, banana fibre, grass, muslin cloth, netting, palm leaf).
- materials for mud bricks (mud, clay, grass or straw termite mound).

Methods / Activities

MAKING HOME MADE CEMENT

Have pupils learn the following formula to repair floors or walls

of school latrines, kitchens and other structures. Mix thoroughly

- 1 debe (empty 20 litre tin can)
 fresh cow manure
- 1 debe wood ash
- 1 debe clean sand with water

It may be helpful to have a fundi (expert labourer or construction worker) visit the school and teach the mixing of local cement or arrange a visit to a construction work site where local cement is used.

MAKING MUD BRICKS

Arrange a field trip to the local manufacturer of bricks. Ίf possible get permission from the manager to allow pupils (dressed in appropriate working clothes) to participate in chopping grass or straw, mixing the straw, mud, ant hill and water, forming the blocks in moulds and stacking the bricks. Try to observe the differences between bricks made with and without straw, burnt and unburnt bricks.

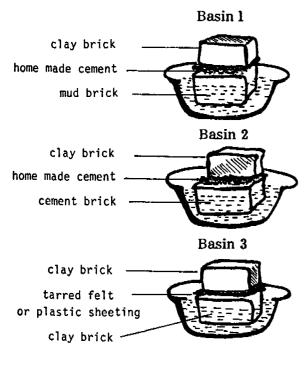
MAKING MODEL HOUSES

In the classroom, pupils can draw out plans for family homes and their compounds. Using sticks, clay; mud, grass, card paper, and other available material, have students build a small model of their houses in the school yard from their drawings.

OBSERVATION OF DAMP-PROOFING

To demonstrate the capillary action of water and the need for damp-proofing a house, obtain 3 basins, 4 clay bricks, 1 mud brick, 1 cement brick, some home-made cement and a small piece of tarred felt or plastic sheeting.

1 In basin one, put the mud brick on the bottom. Fill the basin with water so that it covers 3 quarters of the brick. Put home-made cement on top of the mud brick and place one clay brick on top of the cement.



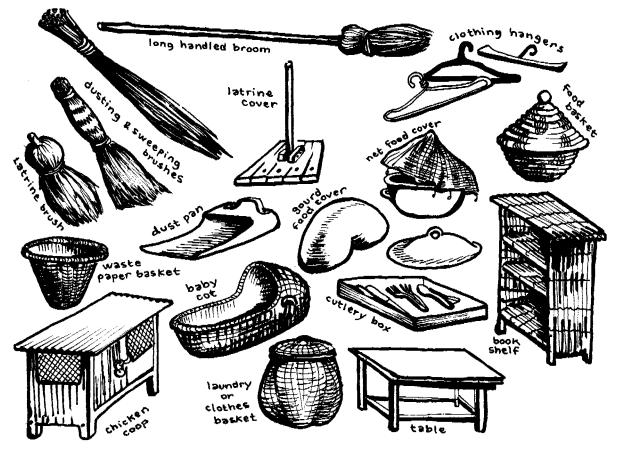
- 2 In basin two, put the cement brick on the bottom. Fill the basin with water so that it covers three-quarters of the brick. Put home-made cement on top of the cement brick and place one clay brick on top of the cement.
- 3 In basin three, put the clay brick on the bottom. Fill the basin with water so that it covers 3 quarters of the brick. Put the piece of tarred felt or plastic sheeting on top of the clay brick and place another clay brick on top of the felt or plastic.

Observe the experiment for about 4 days. After a few days, water will be seen to have risen into the top bricks in basin one and two which are not separated with damp-proofing material.

MAKING HOUSEHOLD ITEMS

Have pupils bring local materials to class to construct an item that contributes to the upkeep or tidiness of a house. Possible items to make are:

- brooms (long or short handled, dusting brushes, latrine brushes)
- food and water covers (for cups, water pots or bowls make muslin cloth, netting, wire mesh, gourd, palm leaf, papyrus or grass and palm leaf covers)
- latrine covers (made of wood or wood and tin)
- coat hangers or clothes pegs
- clothes lines (from poles, sticks, string or wire) or clothes tree
- towel rail (from sticks)
- shoe rack (from sticks)
- cupboard (from papyrus, reed or wood)



- food safe (with netting)
- shelving (from sticks, papyrus, bamboo or bricks and planks)
- tables (from wood, papyrus, reeds, bamboo or cane)
- dust bins or waste paper baskets (woven)
- clothes baskets (woven from palm leaf, papyrus or grass)
- baby cot (woven from papyrus or made of wood)
- dust pan (from tin)
- boxes for cutlery (made of papyrus, palm leaves or wood)
- chicken coop (out of wood and wire)

Have pupils make their own item, then have them explain to the rest of the class how their item functions to keep a house clean or tidy and how that in turn protects our health.

OBSERVING HOUSES AROUND US

Take pupils on a tour of your town or village and let them note different types of houses, their style, size, materials they are made of, presence or absence of paint, site, ventilation, sanitary facilities, condition of compound, and location to road, water and shopping. Try to view modern and traditional housing to note their contrasts.

In the classroom have pupils draw pictures of houses they have seen. Compare this display of "Houses In Our Environment" to illustrations of houses from other parts of the world.

Unit 6 COMMON DISEASES

Diarrhoea and Dehydration Primary 5, Term 1

Objectives

Having completed this chapter the pupil should be able to:

- 1 Define diarrhoea and explain
 what causes it.
- 2 Explain what is meant by the "Four F's" and how they are involved in the spread of diarrhoea.
- 3 Define dehydration and list two common causes of it in humans.
- 4 Describe three symptoms of dehydration.
- 5 Describe the proper treatment for diarrhoea.

Main ideas for the pupils

- 1 Diarrhoea is the symptom of frequent, loose or watery stools.
- 2 Diarrhoea is a symptom of many different diseases, most of which are viral and stop on their own without drug treatment.
- 3 "Four The F's" stand for Flies, Fingers, and Faeces, Food. They represent the most common ways by which diarrhoeal diseases are transmitted.
- 4 Dehydration describes the condition of the body when it doesn't have enough water in

it. Dehydration is most commonly caused bv diarrhoea and vomiting. This condition can quickly lead death if not to treated properly.

- 5 Treatment of diarrhoea follows four simple rules:
 - Give extra fluids.
 - Continue feeding solids.
 - Watch for dehydration.
 - Watch for blood or mucous in the stool or fever.

Behavioural changes

- 1 To encourage the pupils to exercise good health practices to help decrease the incidence of diarrhoeal diseases.
- 2 To encourage the pupils to help their parents in the care of their siblings when they have diarrhoea.

DIARRHOEA AND ITS CAUSES

Diarrhoea is a symptom of many different diseases where a person passes frequent loose or watery stools (faeces). Most cases of diarrhoea are caused by the germs called viruses. Other types of diarrhoea are caused by bacteria and certain parasites.

The germs that cause diarrhoea

enter our bodies when we eat or drink contaminated food or water. An easy way of remembering the common causes of spreading diarrhoea-causing germs is known as the the Four F's. The Four F's stand for Faeces, Flies, Fingers, and Food.



• Faeces - All the different types of viruses, bacteria. and parasites that cause diarrhoea can be found in the faeces of humans. When people defecate on the (pass stool) ground instead of using a latrine, they can start the spread of any disease causing germs that may be in their intestine. If there are small children playing nearby, they are likely to touch or play with the faeces since they don't know any better. If the stool is passed near a water source, the germs can easily contaminate the water when it rains. This can be a very big problem because one contaminated water source can diarrhoea infections cause in many people. Unless you are sure that a water source is safe, (for instance from a borehole with a U-Two or a protected pump,

spring) water should be boiled before it is drunk.

- Flies These common insects are frequently the carriers of diarrhoeal disease. Flies often eat faeces that are out in the open. They also like to eat our is left uncovered food that while it is being prepared or between being saved meals. When the fly travels from the faeces to our food, it often carries the germs from the faeces its feet which then on contaminates our food.
- Fingers Throughout the day, our fingers touch many places that contaminated with mav be diarrhoea- causing germs. We should always wash our hands after passing stool. Other important times to wash hands is before preparing or eating food. Washing can decrease the chance of spreading these germs to ourselves and to others.
- Food Most of the germs that cause diarrhoea can easily stav alive on the foods that we eat. Food bought in the market may be contaminated by the people who grow or sell it. Flies are also very common in the market. The risks of getting diarrhoea by eating contaminated food are greatly decreased by washing the food well. Cooking food will almost always kill the bacteria that cause diarrhoea. Cups, plates, and utensils also need to be kept clean.

DEHYDRATION

The word "dehydrate" means to remove water from something. In this case, "dehydration" refers to the condition of the body when

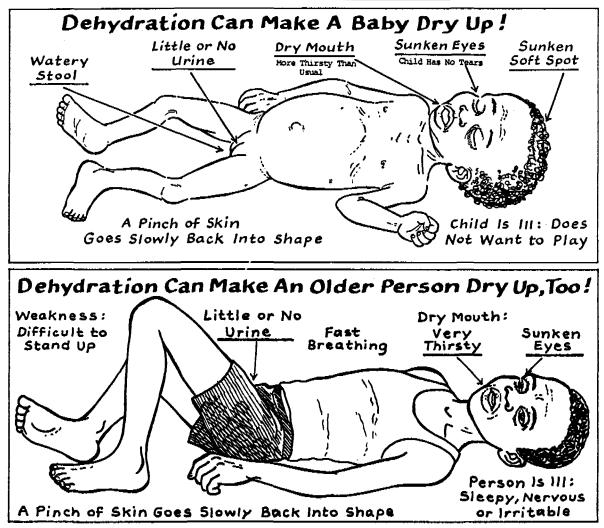
doesn't have enough water in it Diarrhoea is the most it. common cause of dehydration. The frequent, watery stools can quickly drain a person's body of deal of water great and а salts such as important sodium and potassium. Dehydration can be a very serious condition. If the person isn't treated quickly and properly, a person can easily die from it. Remember the "Three D's" - Diarrhoea causes Dehydration which causes Death.

Another common cause of dehydration is prolonged vomiting

because it is another wav that large amounts of fluids are lost quickly from the body. Dehydration caused by diarrhoea and vomiting is especially dangerous in young children since their small bodies quickly are drained of much necessary water and salt.

The common signs of dehydration are:

- Dry mouth the person is often more thirsty than usual unless they are too sleepy to drink.
- <u>Sunken eyes</u> usually there are no, or very few, tears present.
- Sunken fontanelle (the soft spot



on top of a baby's head.)

- Little or no urine is passed any urine that is passed is usually dark yellow.
- A pinch of skin taken from the belly goes slowly back to shape.
- Generally, the person is <u>sleepy</u> or sometimes very irritable.

TREATMENT OF DIARRHOEA

T+ 18 difficult to separate diarrhoea from dehydration since one causes the other. What is important to remember is that most types of diarrhoea are not serious diseases and they will usually stop WITHOUT DRUGS. It is the dehvdration that is the potentially deadly condition. The treatment to prevent dehydration is to REPLACE THE FLUID and salts that are being lost in the diarrhoea. The most common mistake that people make is to stop giving food and fluids in an effort to stop the diarrhoea. This can quickly make the person more ill by hastening the onset of dehydration. There are three simple rules for taking care of a person with diarrhoea:

<u>Rule 1</u> - Encourage the person to drink more liquids than normal. In babies this means breastfeeding more frequently. Older children and adults should drink more of other liquids such as:

- weak, sweet tea
- soups
- fruit juices
- ORS packet (from health worker) mixed in water

Rule 2 - Don't stop feeding regular foods. Give as much food as the person wants. Young children should be fed frequently (5 to 7 times a day.) Give foods that are easily digested such as:

- boiled rice, cassava or matooke
- porridge or posho



Also give fruits that are rich in POTASSIUM (an important salt that is lost when a person has diarrhoea). Examples:

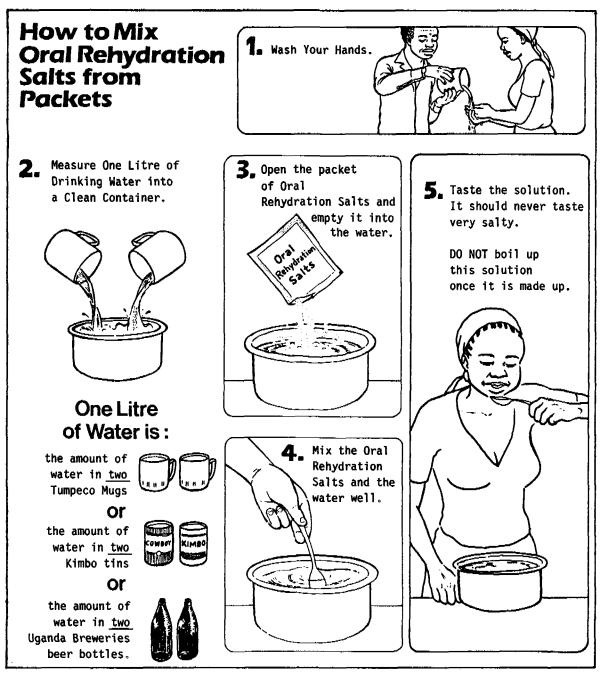
- bananas
- oranges and lemons
- passion fruit

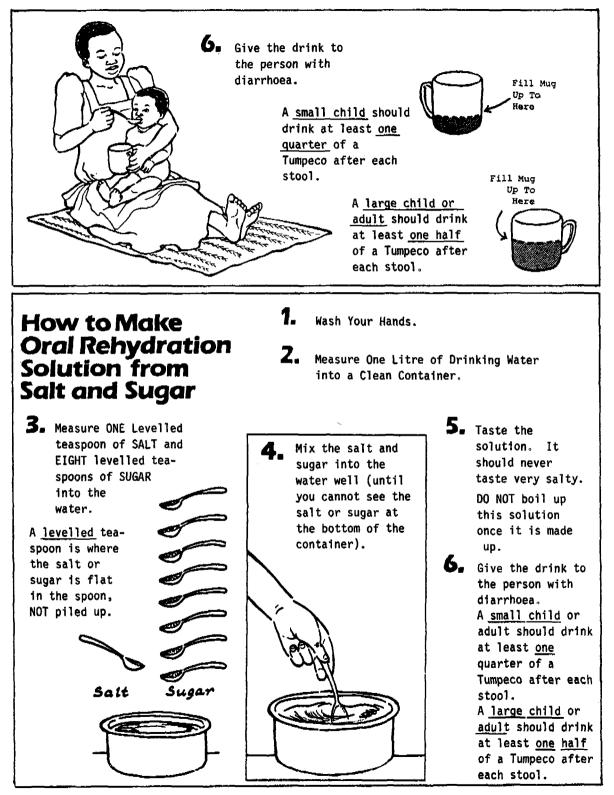
Rule 3 - Watch for signs of dehvdration. If the person with diarrhoea develops these signs it means that they are loosing liquid faster than they are able to replace it. Very young children should be taken to a health center that same day. Older children and adults should try to increase the amount of fluid they are drinking. If they are unable to drink because of vomiting or if they are still showing signs of dehydration by the following day they should also go to the health center.

Rule 4 - If the sick person has blood or mucous in their stool or develops a high fever, they should be seen that same day by a health worker. These are often signs of several serious bacterial or parasitic illnesses that may need specific drug treatment.

ORAL REHYDRATION SOLUTION (ORS)

ORS is a mixture of water, sugar and certain important salts. When properly mixed and administered, ORS can help prevent or treat dehydration in a person who has diarrhoea. The following instructions describe how to mix ORS from pre-packaged satchets (available at health centres) and from salt and sugar (a "home made" solution).





Methods / Activities

The following activities are found in the Uganda Primary School Health Kits on "Water and Sanitation", and "Diarrhoeal Diseases".

THE DIRTY HABITS STORY

Ideally, the following story is to told along with the large be illustrations which are found in Health Kit on "Water the and Sanitation": haven't If you received one of the kits by the time you are teaching this chapter, you can still read the story below and have a discussion about it. We recommend that you change the names of the people in the story so that they are similar to the names of the people in your area. Feel free to add other details about the character's backgrounds make to them more personal.

The Nsubugas are from Kasangati town. They work hard for their food and clothes and things for their home.

Mr. Nsubuga has had diarrhoea lately. Since the diarrhoea comes frequently, he doesn't want to take the time to go home and use the latrine. Instead, he uses the river for a latrine.

A little further down the stream, Mrs. Nsubuga is gathering water for her family to drink. She does not know what her husband has just done up the stream.

Mrs. Nsubuga brings the water home and decides that she doesn't have time to boil it. She gives some to her son who is thirsty.

Soon the son develops diarrhoea and is very ill. He feels quite weak and instead of walking to the latrine he passes his stools behind the house. Many flies soon come to eat the faeces.

Some of the flies from behind the house soon come inside the house and light on some food that has been left uncovered. Shortly, the daughter comes in and eats some of the food.

The next day, the daughter is ill with diarrhoea. also She forgets to wash her hands after she cleans herself. She finds some mangoes and gives one to her Her mother is very hungry mother. and eats the mango without washing or peeling it.

Now the whole family has diarrhoea.

The health visitor from the local clinic hears about the Nsubugas and comes out to visit. After carefully listening to their stories, the health visitor figures out what has happened and gives the family some advice on how to keep this from happening again.

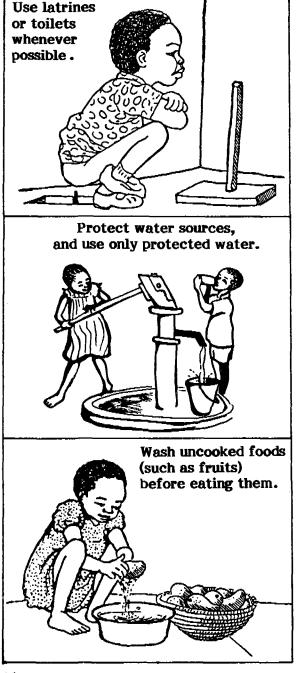
(At this point you might ask the class what advice they would give the Nsubugas. Compare their answers to the following list. If at first they are unable to come up with all six suggestions, go back to the story and give them some clues to help them figure out the rest.)

Here is the health visitor's advice:

- Use latrines to keep faeces from contaminating food and water.
- If there are no latrines nearby, bury your faeces as far from water as possible. Burying them will keep flies from spreading disease.
- Wash your hands after defecating and before handling any food.
- Always drink water from

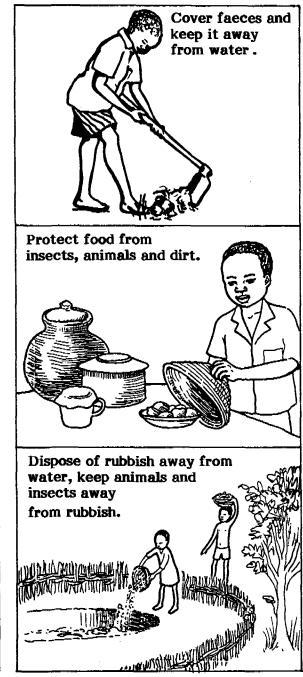
protected pumps, springs, or wells. If you think the water may not be clean, always boil it first and keep it in clean containers.

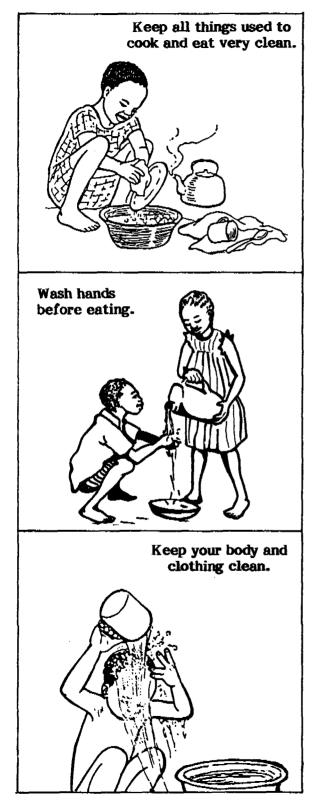
• Cover food from flies. If some



food has been sitting out uncovered, reheat it before eating it.

- Wash or peel uncooked food with clean water before eating it.
- What else can we do?

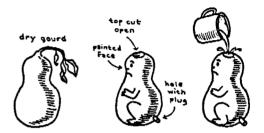


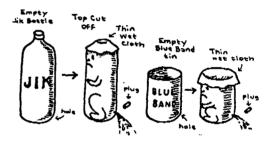


THE WATER BABY

Make a "Water Baby" to demonstrate the principles of dehydration.

- 1 Cut the top off a dry gourd or Jik bottle.
- 2 Fill the gourd or bottle to the top with water.



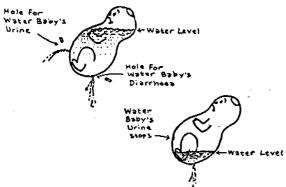


- 3 Cover the top with a thin wet cloth.
- 4 Pull the plug and observe the cloth sink in.



The cloth on the water baby is the baby's "soft spot or fontanelle. Ask the students "Why did the soft spot sink in? What do we need to do to make the soft spot rise again? Do you see why the soft spot in a real baby sinks in when the baby has diarrhoea?" Make different holes in the water baby to understand other effects of dehydration.

- 1 When a baby has enough water, it can urinate.
- 2 When a baby has lost too much it cannot urinate but water. the diarrhoea can continue.



- When a baby has enough water it 1 can cry tears.
- When a baby has lost too much 2 water, tears no longer form.



DEHYDRATING PLANTS AND FRUITS

Demonstrate the process of in plants and fruits. dehydration Have the students bring in flowers or other plants. Put some of the flowers and plants in containers with water and others in containers Let the students with no water. observe and compare the effects of dehydration on the flowers and plants. Discuss the similarities of what they see with the process of dehydration in a human.



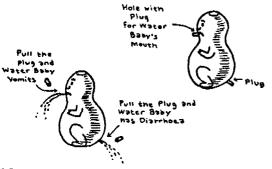


Plant Without Water

Plant with Water



1 When a child vomits in addition to having diarrhoea, it loses water even faster than when it has diarrhoea alone.



Child with Water

This experiment can also be done using fruit such as fresh guavas or passion fruit. Set the fruit in a sunny place and observe the hot, changes that take place from dehydration. Compare the skin of the fruit to the skin of a person who becomes dehydrated.







Unit 5 IMMUNISATION

Immunity and Vaccines

Primary 5, Term 2

Objectives

Having completed this chapter the pupil should be able to :

- 1 List four of the six serious diseases that can be prevented by immunisation.
- 2 Define what is meant by immunity and list three ways that a person aquires it.
- 3 Explain what a vaccine is and know the names of the four vaccines that are used for infants.

Main ideas for the pupils

- 1 Many diseases are caused by the germs called bacteria and viruses.
- 2 The major features of the six immunisable diseases.
- 3 Immunity is acquired in three ways: from mother to infant, from having an illness, and by recieving an immunisation.
- 4 A vaccine is a special medicine made from germs that have been killed or changed so that they don't cause disease but instead cause the body to become immune against specific diseases.
- 5 The four important vaccines for infants are:
 - BCG Helps protect against tuberculosis.
 - DPT- Gives protection against

Diphtheria Pertussis, and Tetanus.

- Polio
- Measles

Behavioural changes

- 1 To encourage the pupils to share knowledge of immunisation with their families and relatives.
- 2 To plant the idea of immunisation so that it is common knowledge by the time of the pupil's adulthood.

SIX IMPORTANT CHILDHOOD DISEASES

Many serious human diseases are caused by the very small organisms called bacteria and viruses. In common language, these harmful bacteria and viruses are also called germs. The germs are so small that we cannot see them. They can contaminate water and even float in the air without being detected. When these germs enter the body of a healthy person, they can cause that person to become The person who is sick is sick. then capable of spreading the germs to other people and making them Following are six sick, too. examples of serious diseases that are caused by bacteria and viruses.

MEASLES

Every 15 seconds a child dies of measles. Two million children die every year. Measles is caused by a virus that is spread mainly in the air from the coughing of affected persons. Common symptoms of measles are painful, red eyes; a cough, fever, and a rash on the body. If the child is already weak from malnutrition or chronic diarrhea it is not uncommon for measles to be fatal. Common complications óf pneumonía measles include (a serious disease of the lungs) and encephalitis (a serious disease of brain). Both of these the complications can be deadly.

TUBERCULOSIS

Tuberculosis affects 10 million adults and children every year. It is caused by bacteria that attack and damage usually the The bacteria are usually lungs. spread through coughing and the infectious mucus that is coughed Other up. symptoms include prolonged fever and loss of weight. Although anyone can catch this disease, persons who are weakened by malnutrition or other diseases such as measles are the most likely to get tuberculosis. Untreated, the disease can easily lead to death.

POLIO

Every year about 275,000 children affected by polio. This are disease is caused by a virus that can cause paralysis or weakness of or more limbs. The virus is one usually spread by an infected person's faeces contaminating water that is then drunk by someone else. The paralysis often lasts for the rest of the person's life and can be a serious handicap for that person.

TETANUS

Tetanus can affect any age group. It is caused by a bacteria that is common1v found in the soil. The bacteria causes the muscles of the body to go into spasms or very tight contractions. Since this includes the muscles we use to breathe, it is often fatal. Tο cause the disease, the bacteria must get deep into the bodv through a cut or wound. One unfortunate example of this disease is in newborn babies who have their umbilical cord cut by a dirty knife or have soil or dung rubbed on the freshlv cut umbilical stump. Children and adults can get this disease from deep, dirty wounds.

PERTUSSIS (WHOOPING COUGH)

Of the 51 million children who get this disease yearly, over 600,000 die from it. The disease consists primarily of a severe cough which can last for months. Sometimes the child can choke, stop breathing and die.

DIPHTHERIA

This is a common disease although it is often not recognized. It is a bacterial disease that causes a fever and a severe sore throat. Sometimes the throat can become so swollen that the person is unable to breathe and dies.



IMMUNITY

Immunity means the body's ability to resist disease. A person gets this resistance in the following ways:

Natural Immunity

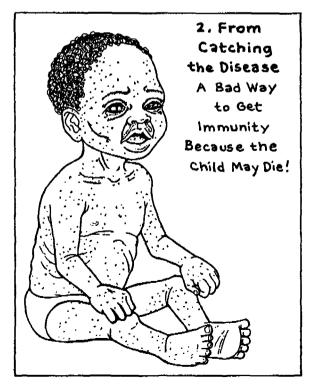
When a person gets a serious illness, the white cells in the blood try to fight the infection by making special substances called antibodies. These antibodies help to kill bacteria and viruses and usually help the person get better. If the person recovers, the antibodies to that specific disease in the blood and usually stav prevent that disease from occuring again in the person. They do not help protect against other diseases.

Maternal/Child Immunity

1. From Mother to Baby A Good Way to Get Immunity But It Does Not Last Long. mother's uterus, antibodies against certain diseases can be transferred the baby from the mother's to blood. For this to happen the mother has to have either had the diseases or been immunised against the diseases. One of the most important examples of this is that mothers who are immunised against tetanus before or during their pregnancies will pass the antibody tetanus to their babies. against This will prevent the child from getting tetanus for the first several months life. Some of antibodies are also given to the baby in the mother's breastmilk.

IMMUNISATION

Immunisation is the technique of using a special medicine that can cause the body to produce antibodies against certain diseases.



When a baby develops in its

These medicines, which are called contain germs that have vaccines. been killed or changed in such a way that they can no longer cause However, the body reacts disease. the vaccine as if it were to actually having the disease and produces the antibodies against When children are that disease. bodies immunised. their form antibodies against that particular disease and there is a very good chance that they will be protected against getting that disease.

In order to get the best possible protection from a vaccine, it must be administered to the child at a life. Some certain time 1 n vaccines must be given more than to get the best possible once protection. A special vaccine is given tο adult women. also especially when they are pregnant. This vaccine causes antibodies to be produced against tetanus. These





antibodies get passed into the baby's blood and protect it against tetanus until it gets its own vaccine at three months.

The Immunisation Schedule

Immunisation is most useful when given at the following ages:

• At Birth -	BCG to protect against tuberculosis
 3 months - and 4 months and 5 months 	DPT and polio vaccine to protect against (Diphtheria, Pertussis,Tetanus) and polio
• 9 months -	<u>Measles</u> vaccine to protect against measles
 Girls and Women (15 to 49 years of age) All Pregnant 	<u>Tetanus Toxoid</u> (TT) (to protect against tetanus)
Women	

Materials needed for the pupils

- Primary School Health Kit on "Immunisation"
- Charts on Immunisation from Ministry of Health

Methods / Activities

teaching about the síx In immunisable diseases and immunisation you can make use of the school health kit prepared for this purpose. If you have not yet received one of these kits, one idea is to have a local nurse come and demonstrate the immunisation cards and answer questions the pupils may have about the six immunisable diseases.

Another interesting idea is τo hold a discussion about some of the used traditional methods for preventing disease that the pupils may have seen at home. Be careful not to be overly critical of these methods. If you teach the section well, most children will be able to grasp the concept of germs causing disease and will understand that many of the traditional methods don't work.

Smoking

Primary 5, Term 3

Objectives

Having completed this chapter, the pupils should be able to:

- 1 Describe the various ways in
 which tobacco is used.
- 2 Explain why people smoke.
- 3 List the harmful effects of smoking on the:
 - individual
 - family and community
- 4 Explain how to avoid or stop smoking.

Main ideas for the pupils

- 1 Although there are many ways of using tobacco, the hazards (dangers) to health are essentially similar.
- 2 Nicotine is a chemical which is found in tobacco and is a drug which leads to dependence.
- 3 Things said about smoking in advertisements are generally They are there to not true. you to smoke and encourage money for the tobacco make You do not have to company. smoke to prove that you are advanced, mature or educated, sophisticated. The body is in healthier without fact tobacco.
- 4 Smoking constantly damages the lungs. This damage keeps the body from working as well as it

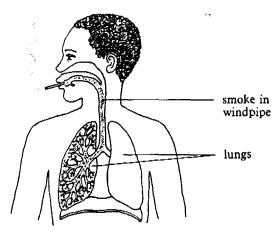
would normally. This is especially noticed in sports or hard work.

- 5 Smoking causes diseases which affect the lungs, throat and mouth, heart and stomach. These diseases cause smokers to die at a younger age than nonsmokers.
- People who do not smoke 6 can still face many of the health hazards same as а result of the others' smoking They are "non-smoking habits. smokers" who live or work around those who do smoke.
- 7 Although it is best to never start smoking at all, smokers who have quit smoking can gradually regain their health.

WHAT SMOKING IS

For the sake of the discussion in this section. smoking will be defined as the regular and frequent use of tobacco. Although the smoke of a cigarette inhaling pipe is by far the most common or form of using tobacco, persons who chew tobacco or use snuff in their nose on a regular basis will also be treated as smokers. This 15 because all forms of tobacco use result in the release of the chemical nicotine, and other poisons, (collectively called "tar"), into the body. The harmful

effects on the body by the prolonged use of all forms of tobacco are similar.



WHY PEOPLE SMOKE

and girls usually start Boys because members of the smoking group to which they belong smoke. They may also start smoking because smoke, they admire those who especially those persons in leadership roles. People are also enticed to start smoking by the numerous and colourful advertisements put out by the tobacco industry describing the "virtues" of smoking. Many of these depict smokers as successful people or people of substance and influence. It is not surprising that students want to try and copy these images. However they start smoking, these people eventually feel they have to smoke in order to:

- relax and feel at ease
- warm up to friends and acquaintances
- concentrate on what they are doing
- feel confident
- kill time
- appear or look sophisticated
- appear or look mature



• be like the rest of the members of the group

DEVELOPING THE HABIT

After smoking for a number of months, for any of the reasons above. described the person gradually develops a physical need to smoke. This is because the nicotine contained in tobacco is an addictive drug. As in all forms of addiction, the individuals pass through a stage of tolerance during which they find they have to and more of their usual use more form of tobacco to achieve the same effect. This amount varies widely between users. Usually people will then settle into a pattern they always smoke at where а certain time or with a certain activity each day, for instance after meals. Some people, however, find they need to smoke almost continuously while they are awake. Once a person has reached the stage of smoking regularly, if they are deprived of their usual supply of tobacco, they commonly feel tense, anxious, and irritable. They are often unable to concentrate well. Sometimes they will feel physically unwell with sweating and nausea.

HARMFUL EFFECTS OF SMOKING

Although some forms of tobacco use are believed to be less harmful than others (e.g. cigar or pipe being less harmful smoking than cigarette smoking), all types of smoking eventually lead to the same, or at least similar, harmful effects. What matters is that all forms of using tobacco release the poisonous chemicals. tar and nicotine into the body. The longer and the more frequently people use tobacco, the greater are their chances of serious illness from these poisons.

Here is a list of the most common illnesses which can be caused or worsened by smoking:

1 Respiratory Diseases -

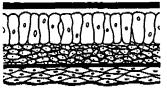
All people who smoke suffer some damage to their lungs. In young people this damage is most noticeable as a decrease in stamina. In other words the person gets "out of breath" more easily when doing common athletic events and hard work. This problem gets worse and worse as the person continues to smoke.

In addition to the decrease in stamina, smoking is a major cause of two serious illnesses of the lungs. <u>Bronchitis</u> is a chronic cough that is caused by tobacco smoke irritating and polluting the lungs. People with bronchitis are more likely to get pneumonia, a potentially

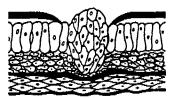
life-threatening infection. Emphysema is a condition where the lung tissue is slowly destroyed by the smoke. Patients with emphysema become gradually more and more short of breath until they literally suffocate and die. The only treatment for these *illnesses* is to stop smoking.

2 Lung Cancer

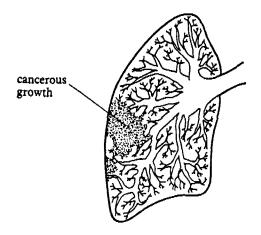
Lung cancer is one of the most serious conditions resulting from smoking for a long time. In this disease the poisonous



normal lining of the lung



lining of lung showing cancerous growth

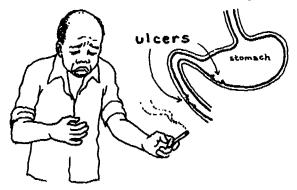


section through a lung

chemicals in tobacco smoke an abnormal growth to cause occur in the lungs. This abnormal tissue grows verv rapidly, destroying the lungs and then spreading to the rest of the body. Once the cancer has started growing there is no cure. Even if the person stops smoking it is to late and these persons almost always die of their disease. The rates of lung cancer in Uganda and the rest of Africa are increasing so fast that they wi11 soon outstrip those of Western Europe and North America. Experts have expressed their fear that there may well be an "epidemic of lung cancer in the third world within a decade" (starting from 1984). This is due to rapid increases in the number of cigarette smokers in the African countries. Ιn western countries there are public massive campaigns of health education to get people to stop smoking. In African countries, the cigarette manufacturers are still spending more money on advertising than the ministries of health are spending on No Smoking campaigns.

- 3 Cancer of the Mouth and Throat Like lung cancer, these are abnormal growths caused bv exposure repeated to tobacco Cancer of the mouth smoke. occurs especially in pipe smokers. and those who smoke cigarettes with the lighted end of the cigarette in the mouth.
- 4 <u>Heart Disease</u> Smoking increases the risk of

some types of heart disease which may result in sudden death (popularly known as a "heart attack" or "coronary").



5 Ulcers

An ulcer is a spontaneously occurring wound of the lining of the stomach and small intestine. Ulcers are often painful and can be the source serious internal bleeding. of Although it is not well understood why, it is known ulcers may be caused that or made worse smoking. An by part important of the treatment is to stop smoking.



FACTS ABOUT SMOKING

• If you smoke for many years, you are likely to become very ill. You can shorten your life by 10-15 years.



• On average, a smoker shortens his life by about 5½ minutes for each cigarette which he smokes.



• People who smoke are more likely to suffer from heart disease. Smoking often makes stomach ulcers worse and can cause them.



• If children begin to smoke, they are affected as much as adults. They get more coughs, colds, and shortness of breath.



• Smoking damages the sense of taste. The hot smoke and other chemicals in smoke affect the taste buds. The sense of smell is also affected.



• Smoking makes teeth go yellow. Clothes, hair, and breath smell of smoke and ash.



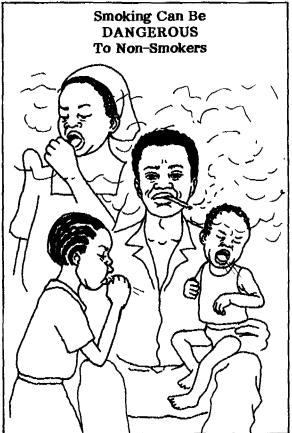
Anyone interested in the health of others should not smoke, and should encourage others not to smoke.

HARMFUL EFFECTS OF SMOKERS ON NON-SMOKERS

In addition to the harm that one does to one's self by smoking, this habit is also harmful to the people one lives and works with. Here are some examples:

1 Passive Smoking

Passive smoking is a term used to describe the situation of a non-smoker forced to breathe air frequently filled with tobacco smoke. There is a lot of evidence to show that "passive" smokers are exposed to some of the same health hazards as those who actually smoke. These include primarily



the respiratory diseases described previously as well as the risk of lung cancer. In particular, children, the elderly, and patients with heart disease, asthma, or hypertension are most likely to be affected by tobacco smoke in their environment.

2 <u>Health Hazards to the Unborn</u> Baby

If a pregnant woman smokes she the risk of having runs а premature baby or baby that is underweight. Premature and underweight babies have а higher chance of becoming ill and dying than do babies of normal birthweight and maturity.





HOW TO AVOID SMOKING

The decision to smoke or not to smoke is ultimately a personal one. Each student has the responsibility to decide what his or her own behaviour will be. Adults' role in this decision is primarily limited to providing an appropriate model providing objective and information. Parents probably play the most crucial role in this decision by their own smoking behaviour. It is very difficult to convince a child that smoking is unwise if the parents exhibit this behaviour daily, Teachers play their role by objectively presenting the facts about smoking. They must avoid the common trap of resorting to subjective criticism i.e. calling smoking bad, stupid, or dirty. It is appropriate, however, to point out to students misleading the nature of



advertisements professing the "virtues" of tobacco.

If you are already a smoker and you want to stop smoking, the best thing is to decide on the day you Tell your want to kick the habit. family and close friends about your plan so that they can help support go through vou as you the withdrawal symptoms. Give away or destroy everything connected with smoking - the remaining cigarettes, the lighter, ashtrays etc. And when the day comes - STOP.

Materials needed for the pupils

- 1 Copies of advertisements of tobacco products from papers and magazines.
- 2 Ministry of Health charts and posters on the hazards of smoking.

Methods / Activities

GUEST SPEAKERS

Where possible, a health worker (Medical Officer, Medical Assistant, or Nurse) can come and talk to the class about the health hazards associated with smoking.

GROUP DISCUSSIONS

Discussion topics:

- Should smoking be against the law?
- Do you think the government should put very high taxes on tobacco products?
- What ideas do you (the students) have about how to persuade people to avoid / quit smoking?
- Do people really enjoy doing these things?

Smoking makes us look





- Do they like doing it the first time? If not, why do they persist? Is it to prove to themselves and others that they are really grown up? How in your society do people mark the change from childhood to adulthood? Are traditional customs fading?
- Do they want to impress other people? Do they want to do what their friends do to be "in"? Do they want to seem important?
- Have they been persuaded by advertisements?
- Should smoking be forbidden in all public places?

pupils speak for Let two two minutes for and against the motion. them work out Encourage to carefully what they will say pupils beforehand. Let other It is probably best if also speak. you. the teacher, act as chairperson. Listen to the points which they make. Summarise what they say. Help them to distinguish valid points.

THE ROLE OF ADVERTISEMENTS

An advertisement tries to persuade people to buy certain products.

Collect advertisements for Ask the students to cigarettes. Make up a collection find some. for the whole class. Get pupils to make а note of radio advertisements. Can they make a list of the different ways in which advertisers smoking make look. attractive? What kind of people are in advertisements? Why do tobacco companies often sponsor sports events? In what ways are some of the advertisements dishonest?

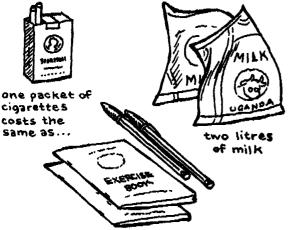
Have the pupils themselves design advertisements for newspapers or magazines or posters to illustrate for example:



- how much a smoker spends per year.
- the dirty aspects of smoking (smell, ash, teeth stains)
- the ill health which is caused by smoking
- the fires caused by smoking

THE COST OF SMOKING

• Ask pupils to find out the cost of a packet of cigarettes. From this they can calculate how much They could ask adult one costs. smokers how many cigarettes they smoke in one day, and from this calculate how many they smoke in How much does it cost a week. them each week? Collect as much information as possible from the Can they calculate from class. information how much an this smoker spends ÓП average cigarettes each week? Can they suggest what else they could buy for this amount of money? (Food, clothes, a bicycle for example).



two exercise books and two biros

 Can they estimate how many people in the community smoke? What is the total amount of money spent on cigarettes each week (using average which they have the above)? What is the calculated a vear? What total cost in could the community do with this amount of money? Is tobacco grown locally? Could

the pupils find out about this? How much do farmers sell the crop for? Would they get more money if they grew other crops?

ROLE PLAY

Introduce role-play on "Learning to say no". Many people who smoke get the habit when they are children. The most powerful pressure to smoke often comes from friends. Teachers can help pupils to be aware of this pressure. They can help them to say "no". Role-plays can be effective. Here is an idea for a situation which pupils could act:

• Five pupils arrange to meet at their favourite meeting place. One of them produces some cigarettes and offers them to the One of them says "No, others. thank you. I don't smoke". The others ask "Why not?" What does he sav? The others try to persuade him. How does he deal with this pressure?



Discuss with the class how the person who did not wish to smoke might react. What things might he do and say? Here are some suggestions:

- walk away
- argue with the others
- suggest something else to do
- ask the others why they smoke
- point out that smoking wastes money
- tell the others what a filthy habit it is
- make excuses
- find new friends
- tell them how it will damage their health

MAKING POSTERS

Good Posters should be:

- "eye catching" (attractive)
- They are advertisements for good health (you want people to notice and read them)
- A good poster has a good caption. For example: "Smoking can kill you" "When you get the habit, the habit gets you" Can the pupils think of their captions? own Ŭse the information which the students have collected about the costs and dangers of smoking. Can they make posters for people who cannot read? When you have some posters from the class, good visit the health centre or

hospital. Ask them if they would like to display the posters which the pupils have made.

Many people decide not to smoke. But many others do. Later in their lives, smokers may want to stop but find it very hard to give up the habit.

Let pupils work in pairs to list:

- the benefits of being a nonsmoker
- what you can do to help stop smoking

Combine the lists to make a poster. Write the ideas on a big sheet of paper. Put up the poster in the classroom or use it at a school health meeting.

Anti-social Behaviour and Delinquency

Primary 5, Term 3

Objectives

Having completed this chapter, the pupils should be able to:

- 1 Define anti-social behaviour and name some of these acts
- 2 Define "delinquency" as used in this chapter
- 3 Describe some of the causes of anti-social behaviour
- 4 List the harmful effects that anti-social behaviour has on the individual, the family and society
- 5 List the benefits that correct social behaviour has for the individual, the family and society
- 6 Explain ways that help to prevent anti-social behaviour

Main ideas for the pupils

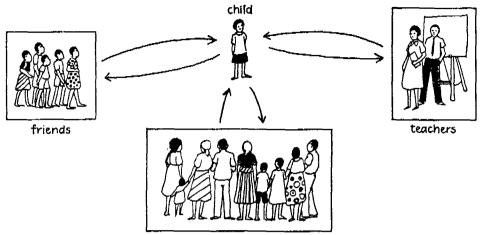
- 1 We all belong to different social groups in our life. Each group has rules about the correct way to behave so that we are accepted and contribute to the group.
- 2 Anti-social means "against society" thus anti-social behaviour is when people do something which the group they belong to thinks is wrong.
- 3 Small acts of anti-social behaviour every once in a while are a way children have of

testing their place in a group, and are a normal part of growing up. Anti-social behaviour becomes a problem when the individual's behaviour causes harm and cannot be controlled.

- 4 "Delinguency" is defined in this chapter as a legal name for wrong behaviour on the part of a young person which can be punished by the law. Delinquents are persons judged by the law as knowing the difference between right and wrong and legally responsible for what they have done wrong.
- 5 Anti-social behaviour is caused by the person's own personality combined with family problems and/or poor social controls.
- 6 Breakdown of family and social controls causes anti-social behaviour. Anti-social behaviour causes breakdowns of family and social controls.
- 7 Strengthening family bonds and social controls helps to promote good behaviour, and each person's good behaviour strengthens family bonds and social controls.

Behavioural changes

1 Pupils should try to understand their own role in each group to



family and relations

which they belong (family, school, community) and the importance of their behaviour within the group.

2 Pupils should learn that their behaviour is based on decisions they make about right and wrong, that decisions are often hard to make but that they are important to make to continue to belong to their groups.

SOCIAL GROUPS

We all belong to different groups of people in our life. We are members of our family, school and Our family is made up community. of parents, brothers, sisters, other relatives and friends of the family. In this group of people we are someone's child, brother. sister, niece, nephew or other relative. When we get older we go to school. School is made up of students, teachers, headmasters and other members of the school administration. In this group we are the student, classmate or friend to the other people. We may have social activities in or outside the school for which we

come together as social groups, teams or clubs. In these groups we may be team leader, captain, senior or junior member.

As we learn about the rest of the community we find that there are shopkeepers, village elders, health workers. mechanics, police. soldiers, priests, political leaders and others. In this group we are the customer, the child of our parents, the students of а certain school, the mosque or church goer, citizen or other member of the community. Each of the different groups we belong to expects us to do certain things and behave in a certain way towards it. The way you act towards your parents may be different to the way you act towards your brothers and sisters and your friends. The way you act towards the shopkeeper may be different to the way you act towards the policeman or the religious leader. the Even if behaviour is not explained to you, as we grow up we know that family, school and community each expects to behave in certain ways; and that certain behaviour is wrong whereas some other kind of behaviour is right or correct.

ANTI-SOCIAL BEHAVIOUR

Anti-social behaviour is any way that a person acts which is not approved of by the group to which he belongs. Since the group itself determines what is or is not acceptable, what may be correct in one group may be regarded as antisocial or wrong in another group. In general, however, most groups think that the following types of behaviour are wrong, and these are the things we shall consider as anti-social behaviour for the purpose of this chapter:

- Lying
- Avoiding School (Truancy, school refusal)
- Stealing
- Violence (Aggressive Behaviour)
- Arson (Fire Setting)
- Alcohol/Drug Abuse (See P6, Term 2, Alcoholism)
- Running away from Home (Wandering)
- Sex Offences/Pregnancy/Abortions
- l Lying

Lying is unusual before four Ιt is usually years. а compensation for loneliness. insecurity and lack of affection (love). It stops as soon as these are corrected and child has the no need to compensate for them. It is to important remember that make-believe is an essential part of thinking in childhood, though it may easily be mistaken for lying in young children. abnormal, But persistent, and apparently motiveless lying is a feature of delinguency where there is a disturbance of severe personality.

2 Avoiding School (Truancy, School Refusal)

This is simply defined as avoiding school. Children who play truant leave home to go to school but never reach school. They usually make sure to come back home at the time they would be expected to if they had actually been to school. They may wander around alone or join their friends with whom they may engage in gang delinguent behaviour e.g. stealing or fighting.

There may be many reasons for this type of behaviour. These may include:

- anti-authority attitudes;
- learning difficulties (a high proportion of truants have severe reading and writing difficulties;
- bullying by other children or by staff;
- bad teaching
- overcrowded classes
- boredom
- various attractions from outside school.

Truancy should be differen-School phobia tiated from which is caused by anxiety over leaving home. School phobia is commoner in girls than boys, and more frequently found in younger children (5-6 years) in older than ones. The children are usually overdependant on their mothers who may be over-protective. There often severe emotional are difficulties between the parents. The children are anxious about leaving very their mothers. Away from home, they develop acute fears about may be happening at home what in their absence, often afraid

that their parents will die or will not be there on their return.

2 Stealing

Stealing is one of the socalled comforting offences in the sense that children who steal derive some comfort or consolation from the act of stealing. At first. the children steal small amounts of and food from their monev or a loved mother mothersubstitute such as favourite aunt. Gradually the stealing beyond the home. extends Usually the children have no close friends, though they may have many acquaintances, and they use the stolen money or stolen objects to try and "buy friendship". The stealing or the stolen things are thus a substitute for love or affection and security.

This type of delinquent behaviour is usually associated profound difficulties with between the children and their parents, especially the mother. Broken marriages with stepparents are particularly The family puts too common. much value on money and material possessions; and the parents may spend so much of their time accumulating wealth that they have no time for the Also, one or both child! parents are usually overauthoritarian. The parents feel and behave as though material possessions were а substitute for love or affection. Early emotional deprivation with separation from the mother may also be an important factor.

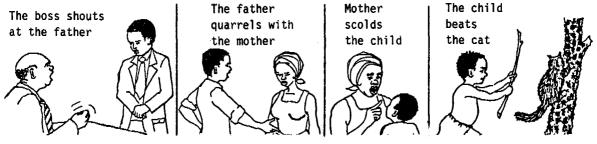
- 4 Violence / Aggressive Behaviour
 - By aggression is meant violent, attacking, and destructive behaviour that results in pain to the victim. It is closely related to increased tension that and rage (anger) states result from frustration. Frustration occurs when individuals are prevented from, or are for any reason unable to obtain what he want or to achieve their goals. It occurs when one's goal-seeking behaviour blocked. is Aggression can be direct or displaced.
 - Direct Aggression is that aggression that is directed against the individual or object that is the source of the frustration. In ordinary play situations. when one child takes a toy or some other valued object from another child, the second child is likely to attack the first one in an attempt to regain that which was taken. Even with adults, the victim of a slighting remark is likely to reply in kind though for many adults the mav Ъe verbal aggression rather than physical. The anger produced by blocking one's goal-seeking activity tends to find expression in some form of direct attack. In experiments with children. a barrier or some form of obstacle is used as the blocking mechanism. the source of the frustration. In these experiments, the children's first attempt at solving the problem is to get

action

over the barrier or remove Aggression of this kind it. is not necessarily hostile; it may be a learned way of solving a problem. When the obstacle is another person. the first tendency is to attack that individual. treating the person as a barrier. But this may not be the only way in which the problem of frustration is. solved through aggression.

Displaced Aggression is another way of dealing with frustration. Frequently, frustrated persons cannot satisfactorily express their aggression against the source of the frustration. Sometimes individuals do not know the source of their frustration because the source is vague and intangible. Thev are then not sure as to what to attack. Since they are angry, they seek something else to attack. At other times. the individuals responsible for the frustration are so powerful that to attack them would be dangerous. When conditions block direct attack on the cause of the frustration, the result is what is known as displaced aggression.

Displaced aggression can be defined as an aggressive



against an innocent or object person rather than the actual or intangible of the cause frustration. People who are harrassed at work by their bosses or superiors may take their unexpressed out resentment on their spouse or children. Children who are school by the punished at take out their teacher may anger on their unexpressed younger sister or brother at home, or may damage school property when no one 18 looking. Children who are not getting along well with their playmates may come home and pull the kitten's tail or the sister's hair.

Just what kinds of objects individuals will or be attacked in displaced aggression? If there is no fear of retaliation, the more similar they are to the objects or of persons а direct aggressive attack. the more likely they are to be attacked. However, if the aggression is being displaced because of fear of punishment or retaliation some distance is required; the object (individual) of displaced aggression must not be too similar to (too much alike) the object of direct aggression. Thus youngsters

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who are punished at school will not take out their anger on their parents but on their younger brother or sister who are unlikely to retaliate.

problem of human The cruelty is a puzzling one. but the history of human behaviour is full of manimposed suffering on other men. Although there is an evolutionary basis for man's potential aggressiveness, such an evolutionary history is no more a justification aggression than for our hunger is a justification for stealing just because a fox steals chickens when hungry.

It is sometimes difficult tell the difference to between aggressive behaviour that is merely behaviour in the service of another motive and aggressive behaviour that motive serves the of the aggression. that is. intent to injure or hurt another. Normal foodgathering on the part of a meat-eating animal 15 but necessarily aggressive, necessarily this does not serve an aggressive motive. Animals that appear to enjoy each other (e.g. fighting fighting cocks) seem tο demonstrate pure aggression, though in the wild this behaviour probably serves other motives. such as sex rights over the females.

If we look at the question of the development of aggression in children, we find that the true motive of aggression develops late, and is not directly related to the experiences of very early infancy. The sorts of aggression shown bv the infant directed are at removing obstacles. Although these activities may appear violent or strenuous, they reallv oriented are not toward a goal response of inflicting pain upon another individual or object.

Because slow ٥f its development, aggression tends be closely related to to later parental encouragement of, or punishment for. it Where aggressive behaviour is rewarded by parents, the amount of aggression increases. Although appropriate punishment tends to decrease the amount of aggression in children. excessive punishment tends to have the opposite effect.

Irrespective of how aggression develops, some children and some adults end up with strong tendencies to injure themselves or other people. The extreme forms of these tendencies have been given names:

- SADISM: for the extreme aggressive motive to harm others, and
- MASOCHISM: for the extreme aggressive motive to inflict pain upon oneself.
- Factors Associated with Violence - Aggressive behaviour or violence is much commoner in boys than girls. It is also more of a gang behaviour than an individual delinquent behviour. It

therefore tends to be more in children from frequent lower social classes (lower income groups) where the is compounded problem by poverty, homes, broken cruelty and rejection on the part of parents. It is also common in communities where there is a high tolerance for (aggressive behaviour). it Where violence is the order of the day, or where those who engage in violent behaviour are seen to get away with it or even to be rewarded for it, there is a fertile breeding ground for violence among adolescents and adults alike.

5 Arson (Fire Setting)

Fire setting is commoner in boys than girls. It may occur as an impulsive behaviour, and may be a feature of a minor mental illness known as obsessional neurosis. Ιt is usually associated with other delinquent behaviour. It is commonest in late childhood and early adolescence in children from disturbed home backgrounds. Occaisionally, it may be associated with lying stealing in children who and have had asthma or soiling the anti-social behaviour starting as the other symptoms subside.

6 <u>Running Away From Home</u> (Wandering)

Wandering is commonly found in the early history of delinquent children, and is associated with neglect at home. It usually commences between three and five years. It may be "to get away" from home, but more often it is done to seek an "ideal place", where "everything is nice". The child feels tense and restless, the tension being relieved by the wandering. Running away may occur in older children, in which case it is either to seek adventure, or more often to escape from difficulties at home. Occasionally it may be a sign of a major mental illness. However, children may run away from home as an act of revenge against their parents and to gain attention by bringing in the police or their relatives.

7 Sex Offences/Pregnancy

/Abortions

Apart from the more dramatic sex offences which always hit the headlines like rape and bestiality, there are other more common sex offences among adolescents which may have more pernicious consequences for the individual, the family and the community.

Sexual relations between minors or between an adult and a minor are usually frowned upon by most societies. However, with the breakdown of traditional family values and customs, the greater opportunities for contact between boys and girls or between adults and young girls, the lack of appropriate sex education and the older age at which people get married there has been a tremendous increase in the number and frequency of sexual relations, pregnancies unwanted and abortions involving school children and other youngsters below the age of 18.

pregnancies The unwanted usually in abortions. end Since many of these girls have no access to legal abortions, they resort to criminal abortions which carry great risks of infection, injury or even death for the girls concerned.

Even when the pregnancy is allowed to go to term. the problems do not end there. The girl herself usually is expelled from school or, at best, loses a year or so of schooling. Since the girl is likely to be biologically and emotionally immature to bear children, she may have а difficult labour which mav result in a lot of damage being reproductive done to her system, in her death. in the death of the baby, or in the death of both baby and mother. If she has a normal delivery, the baby that is born may still have a bleak future since the mother may be too young to look after him properly or may not have the material resources to bring the child up.

By engaging in sexual intercourse young people expose themselves to the sexually transmitted diseases, including the dreaded AIDS, which may ruin their lives or end their lives prematurely.

• Child Prostitution -This problem appears to be on the be increase. It may associated with poverty at home, broken homes, lack of control by the parents, the need to run away from home and seek adventure. The mother may have been or may still be a prostitute.

Small acts of anti-social behaviour are a normal part of growing up whereby young people discover what their parents. friends, teachers and other members of society will or will not permit. This often happens during the change between being a baby and being a child whilst learning the rules of right and wrong, and between being a child and being an adult whilst challenging authority and becoming more independent. For example, children may lie or steal or be disobedient at some time, but this is usually only a temporary phase in their development. If, while growing up, children are taught the difference between right wrong behaviour, and and this behaviour is consistently rewarded or punished they will stop the anti-social behaviour.

DELINQUENCY

In Uganda, when a person becomes 18 years old. they are considered to be an adult, that is. fully developed and completely responsible for their own behaviour. adults have done some anti-When social act which is against the laws of the country, we call them criminals.

Before a person becomes 18 years old, they are considered to be children, that is, still growing and learning and not completely responsible for own behaviour. This is because they are still supposed to be in the care of their families. When young people have done some anti-social act which is against the laws of the country, we call them delinguents.

Delinquency is thus a legal and social term which we use to make a

difference between how much an adult and a child are responsible for what they do against the laws of our country.

CAUSES OF ANTI-SOCIAL BEHAVIOUR

As we grow up we learn the rules of each group of which we are a We also learn the rewards part. and punishments for acting correctly and incorrectly. For example, in a family if children fight with older brothers may be scolded by fathers; if they take care of their baby sister they may be praised by their families. In the classroom pupils might forget to do their homework and receive low marks for the term; but if they excel in school work they may school receive а prize or eventually graduate. Rewards and punishments are given for much of our behaviour, especially when we are young, so as to teach us the difference between social and anti-social behaviour.

Problems arise when a person cannot meet the rules of behaviour because the standards (rules) are:

- too high (in reality or in imagination people may feel they cannot be good enough, clever enough, strong enough to do what is asked of them they do not try to do what is correct).
- too low (the person may feel that the way others behave in example are not good enough, so they do not feel the others are qualified to teach them what to do; or they are not taught the correct thing).
- inconsistent (if behaviour is punished on one occasion, ignored the next, and perhaps rewarded on a different occasion they may become confused as to the rules).

• conflicting (if one group's rewards are better than another -- for example it may be more satisfying to a child to be a member of a gang of friends than to have their parents approval, then the person may chose behaviour that gives the better reward).

If standards are too high, too low, inconsistent or conflicting, a person may develop anti-social behaviour. These problems in confused standards usually arise from:

- Disturbed homes: The importance of the home environment and from parents cannot guidance be over-emphasised. The first five to six years are of vital in child's importance а personality development. If there is а poor home atmosphere (parental criminal behaviour. fighting, alcoholism, drug abuse), parental rejection from disorder or other personality psychological problems on the part of the parent(s); separation from parents (through death, divorce, separation, absenteeism) parental neglect (from illness, alcoholism, cruelty,) or a child mav not have the necessarv guidance to form correct social behaviour. Many delinguents and young persons who engage in antisocial behaviour come from disturbed homes.
 - Poor social environments: Children are also influenced by the groups beyond their family - in the neighbourhood, town, school or government. What they are taught outside the home may reinforce or conflict with what they learn from their parents. If there is no school

(through poverty or neglect), a lot of gangs in the area of youths with no (groups criminal elements employment), alcoholics. (known thieves, drug abusers, violent people who abuse the law), extreme poverty or wealth (leading to desperation or boredom) correct standards for social behaviour will not be taught to the child.

there are many factors Thus, cause anti-social which may and/or behaviour delinguent These include any of activities. the following: Confusion on the part of the child as to what is right or wrong; frustration; poor lack of schools; teaching or inappropriate inadequate or guidance from those who should be bad influence from providing it: peers; poor home backgrounds or poor neighbourhoods; a poor sense values on the part of the of parents or community (e.g. placing

A poor home atmosphere can lead to anti-social behaviour.



undue emphasison the accumulation of wealth or the aquisition of power and prestige to the exclusion of giving love and attention to the children and inappropriate handling or lack of appreciation of the normal conflicts associated with the transition from childhood to adulthood.

EFFECTS OF ANTI-SOCIAL BEHAVIOUR

As the long list of the types of behaviour anti-social and delinquency suggests, the harmful effects are many and varied. It is not intended to discuss all of them here as many of them are suggested by the title of the type of It will delinguent behaviour. be sufficient to highlight a few of the harmful effects here to give an idea of the wide range of effects that result from delinquency.

- 1 As stated above, as many as 10 percent of delinquent children become adult criminals.
- 2 The child who is repeatedly truant (plays truant) cannot benefit from schooling, and eventually ends by dropping out of school.
- 3 Stealing causes shame and sometimes pain (emotional pain) to the parents; it of course, causes loss of property and inconvenience to the person from whom things are stolen.
- 4 The harmful effects of alcoholism and other forms of drug abuse are in many ways similar to those found in though the effects adults, on the individual tend to be more serious: (see the sections on Alcoholism, smoking and Drug Abuse).

- 5 Social or gang delinquent behaviour results in a lot of harm the damage and to community, the family or the individual victims of the gang's activities especially where these involve aggression; wanton, senseless destruction, or stealing.
 - 6 The victim of aggression suffers pain, injury, or even death.
 - 7 Fire setting results in destruction of property which may be a great loss to the individual, the family or the community.
 - 8 Sex offences may result in sexually transmitted diseases; unwanted pregnancies; criminal abortions; permanent damage to the mother, or death of the mother, the child or of both mother and child.

9 The individual himself may suffer pain, injury or even death while carrying out his anti-social behaviour; he may end up in remand homes.

In summary, anti-social behaviour as listed in this chapter causes harm to the individual, family and community. Individual anti-social behaviour may lead to the breakdown of families and societies. Antisocial behaviour weakens the customs and organisation of a civilised way of life.

PREVENTION OF ANTI-SOCIAL BEHAVIOUR

A lot can be done to prevent the development of anti-social behaviour or delinquency. The following are suggestions of how this may be achieved:



A stable family, where love and affection are shown is the best way to avoid anti-social behaviour



- A stable family where love and a11 affection are shown to members of the family including children; and where rejection, excessive over-protection. punishment are avoided is the the best way to prevent development anti-social of behaviour.
- Too high standards of behaviour should be avoided.
- Consistency in reward and punishment should be aimed at by the parents and teachers.
- Broken homes or the one-parent families should be discouraged.
- Closely related to a stable family is a stable community or society with good, clearly understood moral and social values, rules and regulations which are consistently enforced and observed.
- Children should organize or join youth and sports clubs and societies.
- There is a good case for adequate and appropriate sex education for



children. This can be done at school, at home or both.

- Attempts should be made to reduce frustration to a bare minimum, or to that level which is consistent with growth and development for the individual, the family, and the community. These attempts should be made at home, at school, and in the community or society at large.
- Children, and particularly adolescents, should make every effort to obey their teachers, parents, and religious leaders who, in turn, should show good examples.
- Young people or children should avoid bad company and bad places.
- Children should keep away from alcohol, drugs of dependence and tobacco (smoking).
- Schools or other organisations concearned with children should provide counselling services for children and all parents with emotional, social and/or scholastic (educational) problems.

Note to the Teacher

Most pupils understand the idea of right and wrong behaviour and the problems bad behaviour causes. In many cases however, they do not have control over behaviour of parents, their home their environment, their neighbourhood situation, their friends or other groups to which belong. they Therefore to teach a child that their parents should have a good marriage and not be alcoholics, or to teach that they should avoid being poor, unemployed, overcrowded or uneducated does little to help them avoid anti-social behaviour. The best way to teach this session is to allow students to examine the reasons for social behaviour, to them to understand their get ability to choose what they do and how they react to choices, so that when they do have influence over a situation they understand the need to strengthen social bonds.

Methods / Activities

GROUP DISCUSSION

Review the list of anti-social behaviour with pupils. For each behaviour have them name the harm each behaviour may have on self, family, friendships, and other relationships. For example, put up the word "lying" and ask

- What does it mean to lie?
- What harm can it do to the person who lies? To their parents? Their friends? Their teachers? Other people?
- What makes a person lie? Is it ever right to lie?
- Why is lying called anti-social behaviour?

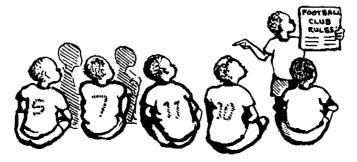
Ask questions about each antisocial behaviour so that students debate among themselves as to what is and what is not acceptable behaviour.

BELONGING TO GROUPS

Ask pupils to think about what groups they belong to. For example they may say:

- family
- school
- church/mosque/other religious group
- guides/scouts
- football club

What are the rules for each of these groups? Can the rules Ъe listed as "do's" and "don'ts"? Why do people belong to groups? What responsibilities do they have to the group? What happens if the group expects us to do something which we know is wrong? What are the rewards for correct behaviour? Which group is more important than another?



MAKING DECISIONS

As children get older, they have to learn to make decisions about social behaviour. Sometimes, these decisions can be very hard to make. Help pupils to act some little plays where decisions are hard. You might like to discuss suitable situations with your fellow teachers. Here are some ideas:

• One pupil plays the big tough boy at school. Another two students are friends. The big tough boy begins to bully one of the friends. What should the other friend do? If he helps his friend he may get hurt himself. Do they take the easy way out and do nothing or do they help the smaller boy?





- Three girls are friends. One friend goes away and leaves her schoolbag behind. One of the two remaining steals something from the absent friend's bag. What does the other girl do?
- A girl is late coming home because she has been playing with her friend. Her mother is angry. What happens? Does she lie or tell the truth?
- A boy is offered a cigarette by his friend. He does not want to smoke, but he does not want to seem like a coward. What does he do?
- A girl has come to see her friend. She tells her that she has run way from home and is not going back. What do they do?

It is most important to discuss the plays with the pupils so that they understand the points of them. It is important that they realise that the most difficult thing is making the decision. Find out what pupils think about their duty to to friends, to teachers parents. and others. How do they expect parents, friends and teachers to act toward them? Can anti-social behaviour in one group become social behaviour in another?

Human Reproduction

Primary 5, Term 3

Objectives

Having completed this chapter the pupils should be able to:

- 1 Describe the changes in puberty which occur for males and for females.
- 2 Identify the major parts of the human male and female reproductive systems.
- 3 Describe the major events in the human reproductive process.
- 4 Explain the responsibility every person has to control sexual behaviour in order to prevent pregnancy outside of marriage and to prevent the spread of sexually transmitted diseases.

Main ideas for the pupils

- Puberty is a time of physical 1 and mental changes in both males and females. It is the time in which they become functionally capable of reproduction through natural development of their reproductive organs.
- 2 When a male and female have reached puberty and engage in the act of sexual mating, they can start the process of making a baby.
- 3 Having a baby is a big responsibility which must be

considered whenever a male and female have sex.

4 In addition to beginning a pregnancy, sexually transmitted diseases can also be passed on during the act of sexual mating. This is another important consideration to be made prior to enaging in sex.

Behavioural changes

- 1 To have pupils understand how pregnancy begins and to take responsibility for their sexual behaviour and its consequences.
- 2 To have pupils understand that although they may be biologically ready to reproduce when they reach puberty they may not be mentally, socially or financially ready to do so, and that engaging in sex at too early an age can seriously hinder lifelong goals.

Note to the Teacher

It is important to teach this section human reproduction on before you go on to teach about sexually transmitted diseases. The aim of this chapter is to provide adequate material and methods for teaching pupils about the risks and responsibilities of sex before they become sexually active. This knowledge can become an important

weapon, not only in fighting the AIDS epidemic, but also in decreasing pregnancies out of marriage, schoolgirl pregnancies and other problems associated with sexually irresponsible behaviour.

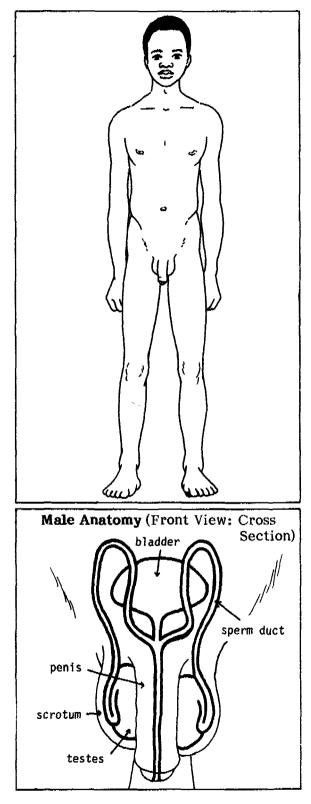
You may wish to divide your pupils by sex and have a senior woman teacher teach girls and have senior man teacher teach а bovs human reproduction. Ιf about possible. invite students of your own sex to come to see you for personal sessions should they be reluctant to ask some questions during class.

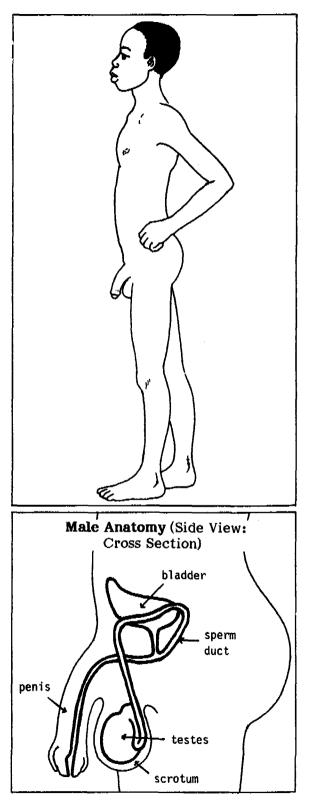
The important thing to remember, no matter what method of teaching you use, is to:

- teach all facts clearly using the correct vocabulary
- teach with the knowledge and support of colleagues, parents and influential religious or community groups.

CHANGES AT PUBERTY FOR MALES

Puberty refers to the period of the course of time during in which the adolescence body becomes sexually mature. During this time of growth and development. many changes are The occuring in the body. characteristics primary sex are those changes involving the sexual organs to prepare them for their function in reproduction. The two most obvious changes are that the penis and testicles enlarge. As the testicles enlarge they begin to sperm. the male produce sex cells. The boy will notice that at times the sperm, contained in a slippery, milky fluid called semen, will come out of his penis at night while he is sleeping. This is a





normal part of growing up, and if a pupil asks you about this he should be re-assured that he does not have a disease.

The secondary sex characteristics are those other body changes which occur in response to elevated levels. of the male hormone. testosterone, which is also made by the testis. These changes include the growth of hair under the arms, on the chest and face, and on the pubes (hence the name puberty) and lower abdomen, more active sweat glands. changes in voice and general heavier development of skeletal and muscular structure.

CHANGES AT PUBERTY FOR FEMALES

In girls the primary sex characteristics are the development of the uterus and ovaries. These changes are unnoticed until the commencement of the menstrual cycle, which usually has started occurring by the age of twelve to fourteen.

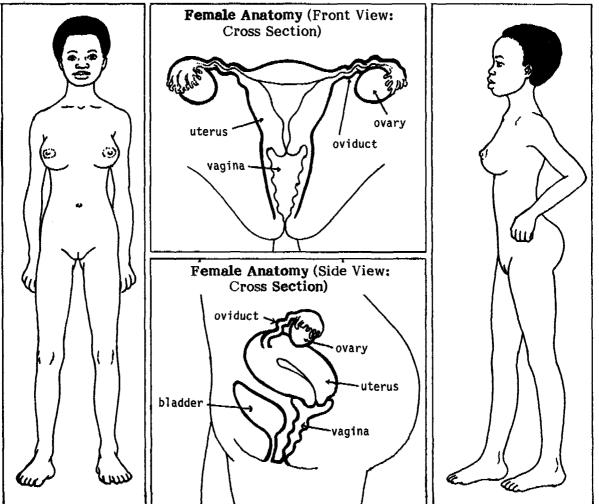
Two important events happen during each menstrual cycle. 0ne is that an egg cell is released from one of the ovaries and travels toward the uterus in a special tube called the oviduct. The second is that the lining of uterus becomes thickened and filled with blood. This happens in order to prepare the uterus to nourish the embryo in case the woman should become If the woman does not pregnant. become pregnant, the extra blood is passed out of the uterus through the vagina. This is called the menstrual period. It usually lasts three to five days. In young girls it is common that periods may occur very irregularly, sometimes with

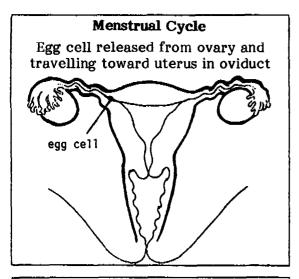
several months between them. As the girl grows up the periods usually come regularly, occurring about once a month. Some girls may have cramps in their lower abdomen during the period. Usually these are mild and need no treatment; in fact it is felt that the best treatment is for the girl to try and continue her normal activities.

Understandably, the occurence of a girl's first periods can be a cause of fear, especially if she hasn't been taught about what they are and what to expect. As a teacher, you may be in a position to provide answers and emotional support for a girl in this situation.

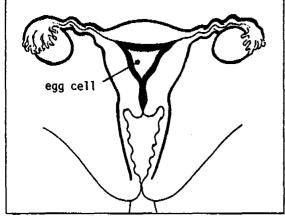
In some tribes in Uganda, a girl's first menstrual cycle is celebrated. She is informed that she is now able to become pregnant and safeguards to protect her from becoming pregnant before she is married are increased.

Secondary sex characteristics in females are the development of breasts, enlarging of hips, growth of hair under the arms and on the pubes, more active sweat glands and general heavier development of skeletal and muscular structure.

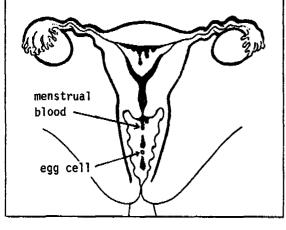




Lining of uterus thickened with blood: egg cell waiting to be fertilised



No fertilisation: egg cell and blood pass out of uterus through vagina



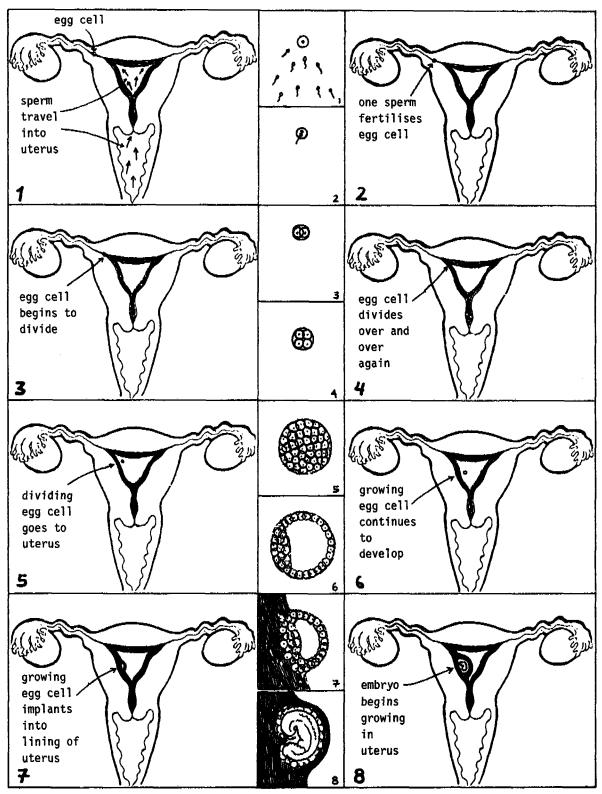
CONCEPTION AND STAGES OF PREGNANCY

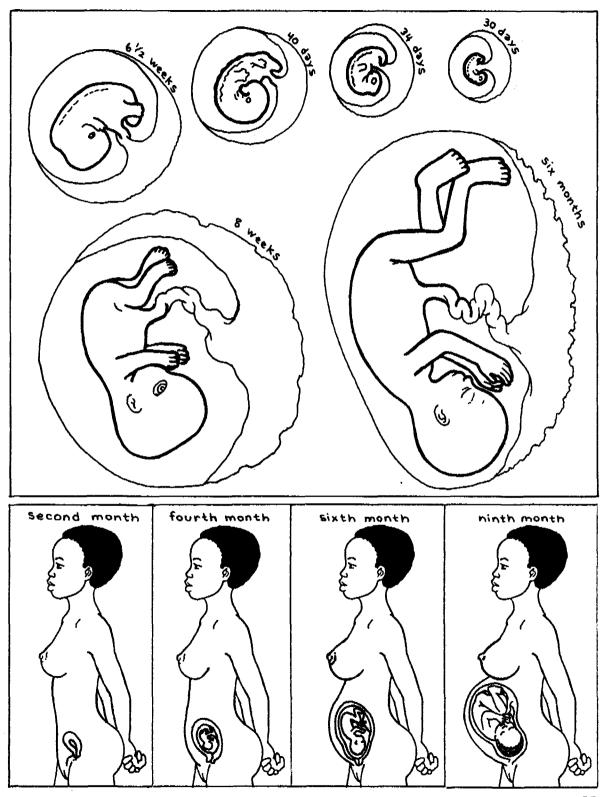
When a male and female have reached puberty they are physically capable of reproduction. Ideally, the act of sexual mating should take place between mature, married adults who both understand the responsibilities involved. In the process of mating, the male sex organ (penis) is put into the female sex organ (vagina). Sperm comes from the male sex organ into the female sex organ.

It important for pupils to is know that when the male sex organ touches the female sex organ, sexually transmitted diseases can be passed from the infected person the uninfected person. to They should also understand that as soon as sperm are released inside the female sex organ, conception can begin.

After mating, the sperm released inside the female sex organ travel up into the uterus. If it is the right time in the menstrual cycle, an egg will be coming to the uterus from the ovaries. When an egg and sperm meet they are able to unite into one special cell. When this happens it is called fertilization or conception.

fertilized egg begins The to divide over and over again, growing all the time. This early stage in a baby's growth is the embryo. It attaches to the uterus and gets its nutrition from the mother's blood. The time while the baby is developing is called pregnancy and lasts about nine months. At the end of pregnancy, the uterus, which is a strong muscular organ, begins to contract and slowly squeezes the baby out through the woman's vagina in the process of giving birth.





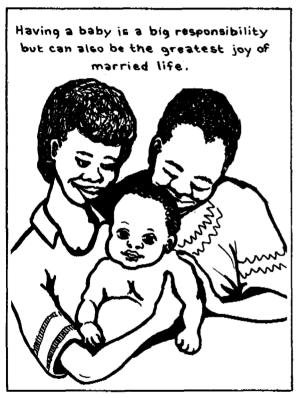
During pregnancy it is verv important that the woman have a good diet in order to provide all the nutrition needed by the growing Unit 2 FOOD AND baby. (see NUTRITION Primary 6, Term 1 - Food Pregnant Women" and for Their Unborn Children). She must also avoid using alcohol, tobacco, and certain drugs since these can harm the baby as it develops. It is best that the woman see a midwife

or health worker skilled in caring for pregnant women. These people can help advise the woman about the things she can do to help her have a healthy baby, including obtaining Tetanus Toxoid (TT) immunisations. doses of TT Two immunisation prevent the killer disease Tetanus in the unborn child. All pregnant women and women of child bearing age (15 to 49 years old) should get TT immunisations.



SEXUAL RESPONSIBILITY

matter how knowledgeable an No adolescent is about the biological facts of reproduction, if he or she does not act responsibily, the value of the lesson is lost. The act of sexual mating should therefore be taught closely with the responsibilities and joys of married life, raising children and commitment to family and community.



Pupils should also know the dangers of unwanted pregnancy, the problems of young mothers and fathers and the serious consequences of sexually transmitted diseases. Only by giving pupils honest and accurate facts about all of these subjects (contained in this guide) can we expect pupils make morally correct decisions as they mature biologically.

VOCABULARY

- adolescence the period of life in which a boy or girl is between being a child and being an adult.
- AIDS / Acquired Immune Deficiency <u>Syndrome</u> - a fatal disease caused by a virus and most commonly passed from person to person through mating.
- conceive become pregnant.
- embryo name for a developing baby between the time of conception and eight weeks.
- fertilise develop a new individual by introducing male reproductive material (sperm) to female reproductive material (egg).
- foetus name for a developing baby after eight weeks and before birth.
- <u>genital</u> external organs of reproduction.
- mating the sexual union of male and female partners.
- menses flow of blood from lining of womb occuring in females approximately once a month.
- ovary female reproductive organ in which ova (eggs) are produced.
- oviduct tube in female reproductive organs through which ova (eggs) pass from ovary into uterus.
- <u>penis</u> the male organ which is used for mating. The urine also passes through this organ.
- <u>placenta</u> a structure in the uterus wall where the foetus is attached by the umbilical cord.
- <u>puberty</u> the time in life in which a boy or girl becomes able to reproduce.

pubes - lower part of the abdomen.

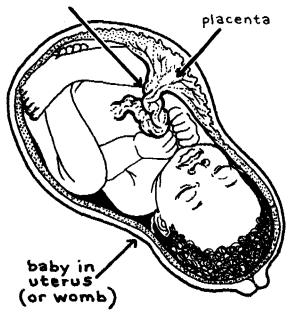
reproduce - produce offspring of oneself; produce further members of the same species by natural means. scrotum - bag of skin containing
testes.

semen - male reproductive fluid which contains the sperm.

sperm - male reproductive seed contained in semen.

STD / Sexually Transmitted Disease a disease which can be spread by sexual contact. Used to be called "venereal disease.

umbilical cord



Materials needed for the pupils

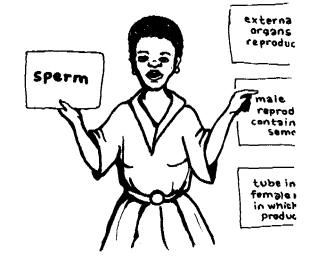
 Charts on sexual anatomy and the reproductive cycle (Note: If these materials are not available, draw diagrams on blackboard).

Methods / Activities

SEXUAL ANATOMY AND REPRODUCTION

Use the anatomy charts to review the names and functions of all the basic sex organs. It is important to get the pupils involved in order to help dispel the embarassment that frequently accompanies these instance, subjects. For after teaching the vocabulary, erase or cover up the words and definitions and then quiz the class on them. Another idea is to set up a game of matching vocabularly words with definitions. Do not worry if there is a certain amount of laughing at first. This will decrease as the pupils get used to these words.

- testes male reproductive organs that contain sperm and semen.
- umbilical cord ropelike structure containing blood vessels which attaches the foetus to placenta. It carries oxygen and nutrition to the growing baby.
- uterus also called the "womb"; a large muscular female organ in which a baby is conceived and develops.
- vagina passage between the uterus and the outside of a woman's body.
- womb also called "uterus".



THE STORY OF HARRIET

Tell pupils the following story and ask questions about the boy and the girl in it afterwards. Read of the story the outline to yourself ahead of time and fill in the details about the dialogue as you wish. perhaps changing the names to favourite local names. You may wish to change the meeting place to a local favourite spot. Keep in mind that this story relates to what you have taught about human reproduction.

Harriet's Story

Harriet and John knew each other from school and also attended the same church on Sundays. They became very interested in each other and since they knew that their parents did not watch for them after services, they began to meet secretly on Sundays after John convinced Harriet church. that he loved her and wanted to marry her; even though they were both very young. Harriet was 15





and John was 17 years old. Harriet soon got pregnant since she and John were having sex frequently. John heard the news, When he realised that he was not so serious about Harriet after all. John disowned the child and deserted Harriet. so the poor girl had to bear all the trouble herself. She stopped going to school and could no longer hold her head up in church.

When Harriet's baby was born, the baby was given to her grandmother to raise and was forgotten by the whole family because of the shame it brought. Harriet was now a problem to her parents because no good family would have her and she was considered unmarriageable. The years went by and Harriet was quite depressed because she couldn't have а husband and a family. She seriously thought about killing herself but her relatives talked her out of it. Finally, they found a husband for her - a man who was too poor to pay a proper dowry and who was considered by most of the village girls to be quite a

foolish, irresponsible and lazy person. At this point Harriet could not say no. She felt she was such a burden to her parents that she couldn't refuse and so she married a man she did not even like.



Harriet is now in very sad а Her new husband is position. abusive towards her because he has no respect for such a "discounted bride". Harriet's family stays away from her because her husband does not respect them as all other in-laws and he is always badly dressed.

The people in the village feel Harriet was lucky to get a husband at all considering how foolish she was in her youth.

Questions about "Harriet's Story"

Ask the pupils questions about Harriet and John and what happened in the story such as:

- Why did Harriet agree to have sex with John? Why did she get pregnant?
- Who was at fault for what happened? Was it just Harriet or John, or both of them?
- Did Harriet and John have any other alternatives instead of having sex to show how much they liked each other?
- Did Harriet's parents do the right thing?
- What have you learned from this story?
- Do you think you could get into this situation? Why or why not?

Unit 6 COMMON DISEASES

AIDS Primary 5, Term 3

Objectives

Having completed this chapter the pupils should be able to:

- 1 Explain what is meant by AIDS and explain its major consequences.
- 2 Explain how AIDS is usually spread from person to person.
- 3 Describe other ways by which AIDS can be transmitted in addition to sexually.
- 4 Explain how the spread of AIDS can be prevented.

Main ideas for the pupils

- 1 AIDS is a disease that is usually spread through the act of sexual mating.
- 2 The virus that causes AIDS can live in a person's body for a long time without any sign of the disease. During this time it can be passed to another man or woman sexually.
- 3 There is no known cure for AIDS. It appears to be fatal in the large majority of cases.
- 4 You can avoid the risk of getting AIDS by choosing to have only lifelong sexual partners.
- 5 You can decrease the risks of getting AIDS by using a condom correctly, but it is not a guarantee against the disease.

- 6 AIDS patients should be cared for like any other sick person. There is no reason to fear catching the disease by caring for these sick persons.
- 7 Primary school girls should be warned that men have been known to come to schools to have "safe sex with virgins" in an attempt to avoid experienced women of their own age who may have AIDS. Girls should beware of men who pretend to be helping them but who are only interested in sex.

Behavioural changes

- 1 To have pupils understand how AIDS is acquired and to take responsibility for their sexual behaviour and its consequences.
- 2 To impress on the pupils that AIDS is an extremely serious problem. They can help their country overcome this problem both by protecting themselves and through their actions in publicizing the issue in their communities.

Note to the Teacher

It is important to teach the section on human reproduction before this one since it builds on

the knowledge presented in that section. It is recognized that pupils at this level can varv widely in age as well as degree of sexual development. While some are clearly still children, others may experimenting already be in activities which can have serious The potential consequences. seriousness of the disease, AIDS, and its impact the young people of this country dictate that a special section covering AIDS be added at this relatively early age. The aim this chapter is to of provide adequate material and methods for teaching pupils about the risks and responsibilities of sex before they active. sexually This become knowledge can become an important weapon in fighting the AIDS epidemic.

You as a teacher have a moral responsibility to ensure every pupil understands the subject by:

- learning as much as you can about AIDS (which scientists are learning more about every day).
- teaching all the facts clearly using the correct vocabulary (leaving out parts or teaching

myths is dangerous).

 teaching with the knowledge and support of colleagues, parents influential religious and or community groups (these groups can assist you in your teaching especially if vou share information with them and explain whv vou are teaching the subject).

You may wish to divide your pupils by sex and have a senior woman teacher teach girls and have a senior man teacher teach boys. Although this is not necessary, it may be more acceptable in the area in which you teach. If possible, the male and female teachers should invite pupils to come and see them for personal sessions should they be reluctant to ask questions in public.

(The material, methods and activities for this chapter are presented in the AIDS section of "Sexually Transmitted Diseases" in Unit 6 COMMON DISEASES, Primary 7, Term 3.)

Skeletal and Muscular Injuries/Poisoning

Primary 5, Term 3

Objectives

Having completed this chapter the pupil should be able to:

- 1 Describe the basic structure and function of bones, joints, and muscles.
- 2 Define the words fracture and sprain and describe their main symptoms.
- 3 Explain the proper first aid procedures for fractures and sprains.
- 4 List three common causes of fractures and sprains and some practical ways to prevent them.
- 5 List three common causes of poisoning in the home.
- 6 List the two types of chemical poisonings for which you should NOT induce vomiting.

Main ideas for the pupils

- 1 The skeleton is the frame of the human body which 15 of many composed different bones. Bones are made of living cells and contain high amounts of the elements calcium and phosphorus.
- 2 There are different types of joints connect the bones. Ligaments hold bones together at a joint.
- 3 Muscles are special tissues

that contract and provide the force to move our bodies.

- 4 Fractures and sprains are two common injuries of the bones and joints. Severe pain and inability to use the injured part are the most important signs of these injuries.
- 5 First aid for fractures and severe sprains is to apply a splint and to transport the injured person to see a health worker.
- 6 Poisoning usually occurs in young children who will often try to eat or drink the drugs and chemicals which we use in everyday life.
- 7 The treatment for most types of poisoning is to make the person vomit and quickly get them to a health worker. Persons who are poisoned with bleaches or petrochemicals i.e. paraffin, petrol, etc., should NOT be made to vomit.

Behavioural changes

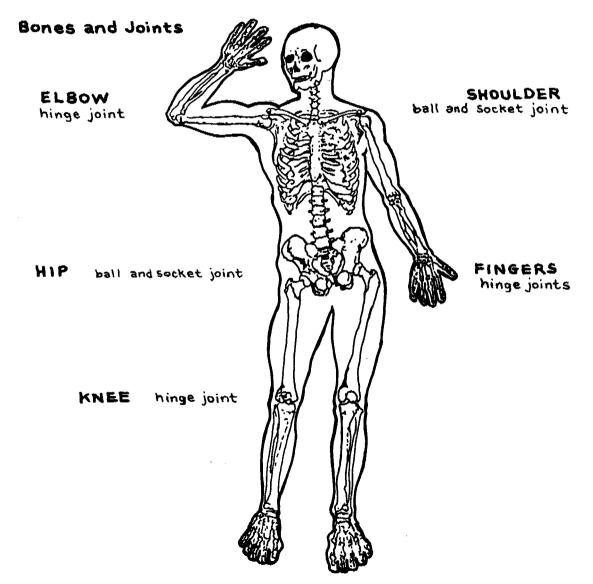
- 1 To enable the pupil to administer basic first aid to the types of injuries covered.
- 2 To increase the pupil's awareness of those situations where accidents are likely to happen.
- 3 To encourage the pupils to keep accidents from happening

in the first place.

4 To encourage the pupils to share these principles with their younger siblings.

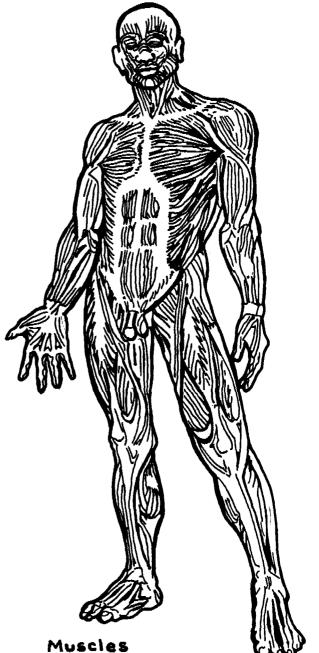
BONES AND MUSCLES

The outer structure of the human body is composed of two major types of tissue, bone and muscle. Bones make up the rigid frame called the skeleton which supports the body. Besides supporting the body. the bones also provide protection for the inner organs of the body. Bone made primarily of chemical is compounds containing the elements calcium and phosphorous. Living cells within the bone are constantly destroying old bone and replacing it with пеw bone. Through this process bones are able to grow and to repair themselves if they are broken.



The place where two bones meet is called a joint. At a joint, the bones are held together by tough bands of tissue called ligaments. The ends of most bones are covered a very strong but slippery by substance called cartilage. This allows the two bones to move easily against one another. There are several different types of joints in the body. Some joints, like the knees and elbows are called hinge joints because they move in only one direction like the hinge of a door. Other joints are called ball and socket joints and are able to move in many different directions. Still others are a combination of these two types. A few joints, such as those between the bones of skull or the pelvis. are the essentially fused and barely move at all.

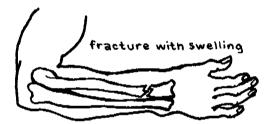
Muscles are special tissues that have the ability to contract. In addition to the ligaments, bones are connected to each other by muscles. When a muscle contracts causes the bones which it it connects to move. In order to different perform a11 its movements. the skeleton is connected by many different muscles connected at different points of bones. The muscles of its the skeleton contract in response to signals sent by the nerves coming from the brain and spinal cord. In addition to the skeletal muscles. there are also muscles which make up some of the internal organs, for instance the heart. stomach, and intestine. These muscles are sometimes called involuntary since ordinarily perform thev their functions without the conscious decision of the person.

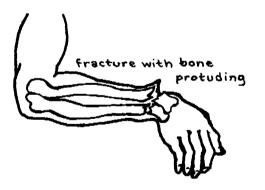


COMMON INJURIES AND FIRST AID

Fractures

The medical term for a broken bone Fractures usually is a fracture. abnormal occur when a sudden. stress is applied to a bone. Common causes of fractured bones include auto accidents, falls, and The main symptom of a fights. fractured bone is severe pain at the site of the fracture. If the fracture occurs in one of large bones of the arms or legs. the person is usually unable to use limb because of the pain. that

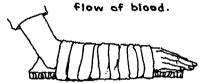




Anytime an injured person complains of severe pain or is unable to use a limb, you should suspect a broken bone. Sometimes, there is just a crack through the bone; in this case there may be swelling but no other deformity at the site of the fracture. In more severe fractures the bone may be visibly bent or even protruding through the skin.



Make a **SPLINT** by binding the injured part to a stiff piece of wood. Do not wrap <u>too</u> tightly as this will stop the



First aid for a broken bone is to keep it from moving. NEVER try to put a badly broken bone back in place - you can cause more harm A good way to keep a than good. broken bone from moving is by using splint. A splint is made by а binding the injured part to a stiff piece of material like a flat piece The injured person should of wood. then be taken to a health care worker as quickly as possible.

Sprains

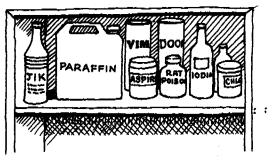
When the ligaments which hold a joint together are stretched or torn it is called a sprain. The same types of accidents which cause fractures can also cause sprains. The main signs of a sprain are pain swelling of the joint that and is Sprains can be mild or sprained. For instance, a person severe. could twist an their ankle while running or playing. If the person still able to walk and bear is weight on the injured ankle, it is unlikely to be a serious injury. However, if the injury produces so much pain that the person is unable to walk, the person giving first aid must assume that it is either a severe sprain or possibly the bone is fractured near the joint.



First aid for all sprains is to the injured part in cold soak This can help reduce the water. amount of swelling that occurs. If the sprain is mild, the only treatment is that the person should avoid those activities which increase the amount of pain. The sprained ligament will gradually heal on its own. If it is a severe sprain it should be treated the same as a fracture. A splint should be applied to keep the joint from moving and the injured person should be helped to the nearest health worker.

POISONING

Poisoning is a common accident which usually occurs among young children. The most common cause for poisoning is that adults or older children are careless about leaving commonly used chemicals laying around the home. Young children are naturally inquisitive and normally will try to taste things to learn more about them.



The most common cases of poisoning occur with the following chemicals:

- Household bleach (Jik) or other liquid cleaners
- Paraffin, petrol, or diesel
- Poisons used for rats or insects
- Common drugs such as aspirin, iron, and chloroquine

First aid for poisoning is to get the person to a health worker as soon as possible. If you cannot get the person to the health worker in less than half an hour use the following rule:

For poisoning with paraffin, petrol, or bleach (Jik):

- DO NOT MAKE THE PERSON VOMIT. This can cause more damage to the throat or lungs.
- Make the person drink at least several cupfuls of milk, juice, or water to help dilute the poison.
- Take the person to see the health worker as soon as possible.



For paraffin, petrol or bleach poisoning give plonty to drink DO NOT MAKE VICTIM VOMIT For any other type of poisoning:

- MAKE THE PERSON VOMIT. You can do this by putting your finger in their throat or by making the person drink some water with soap or a lot of soap.
- Take the person to see the health worker as quickly as possble.

For any type of poisoning other than parrafin, petrol or bleach MAKE VICTIM VOMIT

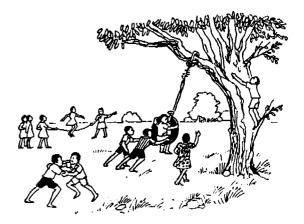




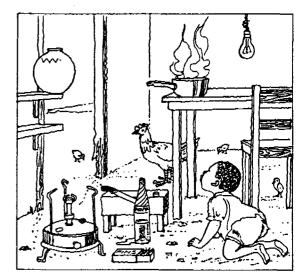
PREVENTION OF ACCIDENTS

Just as important as first aid, is our effort to keep accidents from happening in the first place. Many accidents can be prevented by making everyone aware of those

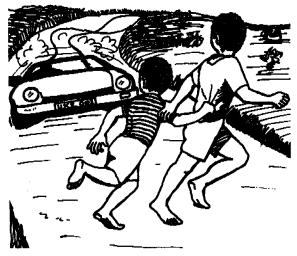
situations which are likely to result in accidents. These situations can include such simple things as tools left lying carelessly around. holes left uncovered or unmarked, and trying to climb too high without a proper ladder. These situations are sometimes called hazards which means a source of danger.



The most common cause of poisoning is for adults or older children to leave household cleaners, drugs, or agricultural chemicals lying about where young children can get at them.



One of the most common places where serious accidents happen is The combination of on the road. fast moving automobiles, heavily laden bicycles and carts, animals, many people walking and makes accidents very likely to happen. Young children are especially at risk since they don't vet understand the dangers. One of the worst problems is that some people drink alcohol while driving. These people endanger both themselves as well as all the other innocent people in their path.



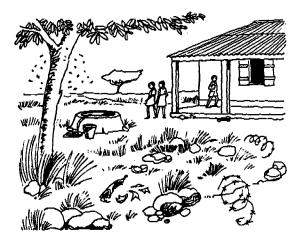
Older children must learn not only to be careful for themselves but to help keep young children from playing on or near busy roads.

Methods / Activities

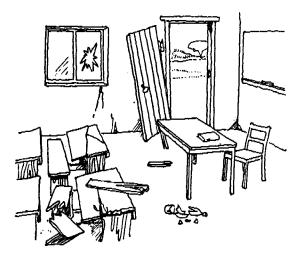
SPOT THE HAZARD

Get pupils to look around the classroom and school compound and list anything which is not safe. Ask pupils

- What accidents might happen here?
- Where can fractures/sprains/ poisoning happen?
- What other injuries might result?



 How can we make the classroom and school compound a safer place?



PICTURE STORIES

Get pupils to draw their own picture stories to show hazards at home or school. Put the good ones on the wall and let other pupils discuss them. You could suggest a series of pictures like this:

- mother is filling a Fanta bottle with paraffin.
- visitor comes to the house and mother goes to the door.
- small child picks up the Fanta bottle and drinks from it.

ROLE PLAY ON ACCIDENTS

Let the pupils make up a play about an accident. Assign different pupils to each role in a story where a child is knocked down by a car at a busy street. The police are called and many people become angry. The driver of the car says it was not his fault. The child is taken to hospital and the parents meet to decide what to do.

Have pupils discuss -

- What caused the accident?
- How could it have been prevented?
- Was the child at fault, or the driver, or both?
- What can the parents do to prevent this from happening again?

Unit 6 OUR HEALTH

Primary Health Care

Primary 5, Term 3

Objectives

Having completed this chapter the pupil should be able to:

- 1 Explain what is meant by Primary Health Care and Essential Health Care.
- 2 List activities the individual, the family and the community can do to promote Primary Health Care.
- 3 Explain how a Primary Health Care Committee is organised and what their functions are.

Main ideas for the pupils

- Health Care is 1 Primary а programme which includes essential health care for which the people themselves are responsible and in which individuals. families and communities make decisions about. and participate in. their own health care.
- 2 Primary Health Care includes activities which individuals, families and communities can do themselves relating for to the essential health care services of health education. and child health, maternal family planning, nutrition. immunisation, water and

sanitation, first aid, essential drugs, oral health, mental health and disease control.

Primary Health Care Committees 3 should he made of people selected from the community by community. The PHC the actively plans, Committee ensures that promotes and essential health care services are available to the people in the community.

Behavioural changes

- 1 Pupils should understand their own role in their own health care. their responsibility to and future their present family's health their and responsibility towards community health in order to become agents of their own and country's development their instead of passive of government beneficiaries aid.
- 2 Pupils should seek ways to gain more knowledge about preventive, curative and rehabilitate health care and actively pass this information on to friends who do not attend school and to younger siblings and to parents. (The CHILD-tochild idea).

ESSENTIAL HEALTH CARE

Health is a state of physical, well-being. mental and social Essential Health Care is made of those services usually provided bv dispensaries and health centres. They are the minimum level of that should be health care available to the majority of the population and are sometimes called "basic health care" or "primary health services". Essential Health includes special care for Care women and children because they are the largest "high-risk" groups.



Essential Health Care includes:

- 1 Diagnosis and management of common and minor illnesses/injuries and referal of serious problems to hospital.
- 2 Community health education on prevention of common diseases and use of health services.
- 3 Maternal and Child Health (MCH) services such as immunization, control of diarrhoeal diseases, nutrition, ante-natal/postnatal care, etc.
- 4 Environmental health services such as food and water hygiene, vector control, etc.
- 5 Communicable disease control.
- 6 Collection of basic statistical data.
- 7 Public health nursing and home visiting.

PRIMARY HEALTH CARE (PHC)

Primary Health Care is essential health care where families and communities work to solve their own health problems. PHC is different from other health care programmes in that it has its emphasis on

- equal care for everyone
- decentralisation (community based)
- participation from all parts of the community with the idea that health is a part of social development
- reorientation of health services to support community action

There are a number of ways to become active in Primary Health Care:

- 1 Understanding Health Problems -All members of a community should get health education as regards to personal, family and community health, especially local problems peculiar to the area and share what information they know with each other.
- 2 Prevention of Health Problems -Recognition of the advantages of preventive measures like immunisation, oral rehydration, ante-natal care, good nutrition in pregnancy and childhood. avoidance of smoking, protection of water, use of latrines and other measures are useful for all people to maintain individual, family and community health.
- 3 Establishment of Curative Services - While it is better to prevent a disease before it occurs, it is the responsibility of all community members to work to establish their own curative services (including provision of essential drugs) for themselves

by working with government and non-governmental organisations.



Establishment of Rehabilitative Services - In the same way that curative and preventive services are set up in а community, people can do a lot themselves to for set up rehabilitation services for the disabled, including ways to limit the and spread complication of disease. This means early identification of disease, giving early treatment, physio-therapy after illness. training for alternative employment and education, education for the non-disabled to assist the disabled and other activities that can be done by and for the people in the community.

THE INDIVIDUAL AND PHC

All individuals are responsible for their own health and can do many things to help themselves. In order to promote their own health individuals can practice good habits which include the following:

1 Health Education - Every person should know the value of good health and how to maintain it. and the problems of diseases and how to prevent and cure They should study ways them. to preserve health and practice what thev know. Health education bridges the gap between health information and health practices. It is needed to promote the proper use of health services which results attainment fn the of recommended standards of healthy living. For example, while scientists have discovered vaccines to prevent diseases, they are of no value unless people have learnt their value and use vaccination services.



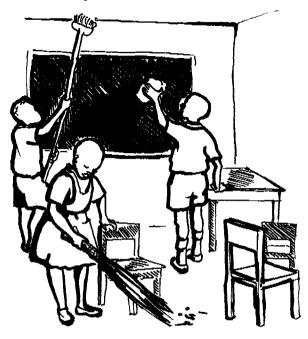
- 2 <u>Personal Hygiene</u> Individuals should be responsible for the care of their own bodies in order to prevent illness. This means
 - proper washing of the body, and face (at least once a day)
 - washing hands (especially before meals and after using a latrine)
 - brushing of the teeth (after each meal if possible but at least in the morning and at bed time)

Pupils are responsible for their own grooming as a part of PHC.



- cleaning the eyes
- grooming nails
- cleaning clothing and bedding
- using latrines whenever possible.
- 3 <u>Healthy Lifestyle</u> Each person should live in a way that helps reduce the risk of contracting disease or health problems by

- eating good food (see Primary 6, Term 1, Unit 2, Food and Nutrition)
- getting adequate exercise
- maintaining good posture
- getting adequate rest
- avoiding smoking
- avoiding the use of drugs whenever possible
- using alcohol in moderation
- getting periodic health examinations
- using health services when needed (such as consulting a qualified health worker when ill or going to ante-natal clinic when pregnant).
- Healthy Environment As well as keeping their own bodies clean, each person should keep the place they live, study, work and play in as free of sickness and dangers to health as possible by
 - protecting food and water from contamination
 - keeping home, school and compounds clean.





Individuals can do things to help others maintain or recover good health too:

- a11 Health Education - Not 1 individuals in the same community have the same amount of knowledge as regards to Ιt 18 the health. of those who responsibility have some knowledge to pass it on to others. For example:
 - Older children can participate in teaching younger ones basic health skills
 - Pupils can spread the news and initiate parents to take younger brothers and sisters for immunisation or tell them about prevention of dehydration or growth monitoring.
 - Parents can share health information among themselves.
- 2 Caring for Others - Individuals can help others who may be unable to care for their own completely (small health children. pregnant women, the elderly, rehabilitating patients, sick. the the physically mentally or disabled). Individuals can care for others by
 - feeding them

- bathing them
- playing with them
- keeping them company
- teaching them.
- 3 <u>Reporting Health Problems</u> Individuals should report to health authorities if there is a disease outbreak of unusual or serious illness in order to protect themselves, families and community.

THE FAMILY AND PHC

The family, which consists of parents or guardians, children and other people related to them, has responsibility for itself. Each member of the family can help the other or the family collectively can help members who have special needs, for example the pregnant mother. the baby or elderly grandparents. The family can promote its own health through:

Health Education - Every family 1 member should share what they know about disease prevention, first aid and hygiene. Those of who are in positions child authority (elder to younger, parent to child. husband to wife) should be good examples to others so as to teach through action as well as statement.

- 2 <u>Family Hygiene</u> Every family should ensure that they follow the same practices in cleanliness to ensure that disease does not spread among its members. They should
 - have a family latrine, use and maintain it
 - use sanitary practices in handling food and water.
- 3 <u>Healthy Family Lifestyle</u> -Family members can help each other towards good health by
 - preparing good food for others
 - avoiding smoking thus keeping others from breathing secondary smoke (see Primary 5, Term 3, Family Health and Social Problems: "Smoking")
 - avoiding alcoholism and drug dependance and their ill effects on family life. (See primary 6, Term 2, "Alcoholism").
 - assisting each other to see qualified health care workers whenever needed (for example encouraging a pregnant woman to go to antenatal clinic).
 - maintaining good relations between members of the family.

THE COMMUNITY AND PHC

A community is a group of people

living within the same geographical locality. This could be a village, a trading centre or a town.

Like the individual and the family. the community also has responsibility for its own health. By working together the individuals and families who form the community achieve goals which would can be difficult for one person or one family alone. The community can promote health by:

- 1 Organising Self-Help Projects
 - If health facilities of anv are needed in the tvpe community, the people could co-operate to find ways and of planning. means raising funds constructing, for, operating or maintaining
 - a health centre
 - a protected spring, well or borehole
 - community latrines
 - community rubbish pits
 - road repair (to prevent accidents)
 - rehabilitation centres for the disabled
- 2 Organising Community Health <u>Committees</u> - Each community can start a Health Committee made up of local people whose responsibility could be to work on
 - disease control (such as malaria by organising work





groups to destroy mosquito breeding places)

- immunisation (by working with DMO's and other immunization authorities to establish immunization centres).
- training people to become community health workers (every community should have an adequate number of trained community health workers). The Health Committee could select and send local people for training.
- village cleaning sessions.

SELECTION OF A COMMUNITY HEALTH COMMITTEE

community should have a Everv Health Committee which is with integrated Resistance Committees or Parent Teacher Associations. Selection of 1ts members should be made of people known in the community who feel strongly about health, who are hard working and desire change.

The Committee should comprise of members including seven а Treasurer, Chairperson, а а Secretary and four Members. Membership of the entire Committee should be at least half women with good representation of different age groups. All members should be permanent residents of the community. They should be

- respected and influential
- professional workers (for example health workers, teachers, field extension workers or other responsible members such as elders, TBA's, etc.)

The Health Committee should maintain four strong links within the community:

- 1 A link with the community as an entity. The Committee represents the community, discusses its problems and helps it solve its problems with available resources.
- 2 link with Community Α the (CHWs) Health Workers and Traditional Birth Attendants (TBAs) who report problems they in the community. see
- 3 A link with promoters/facilitators who may be from the ministries or local non-governmental organisations. The Committee keeps in touch with the people who have introduced PHC to the community to work out ways of community development.
- 4 A link with the village Resistance Committees as all initiatives of PHC must be politically acceptable and supported at village level.

Methods / Activities

HEALTH PARADES

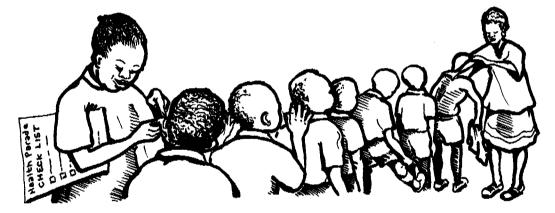
Organise and examine the pupils regular (daily or 3 times a week). Make sure that the head, eyes, teeth, ears, skin, nails and the body together with clothing are clean and free from defects. Organise to refer pupils found with health and related problems for appropriate solutions.

SCHOOL GARDEN

Organise pupils to grow crops which promote good nutrition (see Primary 6, Term 1, Unit 2 Food and Nutrition). Use this garden to demonstrate proper soil conservation techniques and land management with the assistance of your local agricultural extension worker.

SCHOOL HEALTH COMMITTEE

Organise pupils and colleagues to a health committee which may form draw up school health rules. prepare health campaigns (antismoking. promotion of ORS, immunisation advocacy. etc). organise sub-groups to clean up school grounds, fix up latrines, organise hand washing facilities, invite health workers as guest lecturers, raise money for a first aid kit, inspect food vendors for hygiene practices, etc. The school health committee could be made of pupils, teachers, community health workers and interested parents.



Feeding and Foods for Vulnerable Groups

Primary 6, Term 1

Objectives

Having completed this chapter, the pupils should be able to:

- 1 Name five reasons why we eat and drink (the five H's)
- 2 Explain the reason for food taboos and what we should do about them.
- 3 Name the six food groups and give examples of balanced meals using these groups.
- 4 Explain at least eight advantages of breastfeeding over bottle feeding for mother and for child.
- 5 Name the five Vulnerable Groups of people and why their nutrition is important.
- 6 Name extra foods needed by mothers during pregnancy and their benefits for mother and unborn child.
- 7 List extra foods needed by the breastfeeding mother and reasons for extra foods.
- 8 Explain the importance of frequent feeding for small children.
- 9 Give examples of good food plans for the sick and the elderly and explain the importance of good nutrition for these people.

Main ideas for the pupils

1 All human beings need to eat to

live, but what we eat is controlled by more than scientific knowledge of what is good for us.

- 2 All human beings need to eat a variety of different foods. Variety is just as important as quantity.
- 3 A pregnant woman needs to eat more food than she usually does (enough for herself and enough for her unborn child) and different types of food (for the different materials needed to build the child's body).
- 4 Breastfeeding is better for the child as well as the mother than bottle feeding with cow's milk.
- 5 For the first three to four months of a child's life, breast milk is all that the child needs.
- 6 From four to six months old babies begin to need a variety of foods in addition to breast milk.
- 7 Small children have small stomachs and need many meals throughout the day to get the proper amount of food.
- 8 When people are sick, they need good food and extra fluids to help their bodies fight sickness.
- 9 Elderly people may have special food needs due to increases in health problems (lack of teeth, digestive problems).

Behavioural changes

- Pupils should be aware that there are certain people who need more or special food than the usual diet and help these people get this food whenever they can. (For example, a weaning sibling (young sister or brother) might be given small fruits or other snacks throughout the day).
- 2 Pupils should be able to make the correct choices about food so that when they become a pregnant/breastfeeding woman or care for one, or care for a child, the sick or the elderly they are able to help protect these vulnerable groups.
- 3 Pupils should understand why they observe certain food taboos and learn to enjoy a variety of good foods where it does not conflict with taboos that cannot be broken.

FEEDING

If people do not eat anything, they die. If they do not eat enough they become sick and thin. If children have not had enough food, we say that they are undernourished. Throughout the world, one out of every three children is undernourished.

In some countries, two out of every three children are undernourished. If children are undernourished, their mental and physical growth and development are handicapped. Thus. knowledge about food and nutrition is important. It is knowledge which can save life and directly affects the health and happiness of the people.

Food plays a central part in

beliefs of people about life and health. Food is a powerful force in society. Food habits and beliefs about properties and qualities of food have a profound influence on nutritional status. There are many reasons why people eat and drink. Some reasons may be the five 'H's':

- because our stomachs feel empty (Hunger)
- because it is the time of day when we normally eat (Habit)
- because we know that we need food and drink in order to live (Health)
- because we enjoy eating certain foods (Happiness)
- because we have guests and it is a custom to offer them food and drink (Hospitality)



FOOD BELIEFS, HABITS AND TABOOS

There are many customs associated with eating and drinking. Some people use chopsticks. Some people use a knife and fork. Some people use their fingers.

Many eating and drinking habits are social or religious. Sometimes we do not eat or drink certain foods or we fast because of religious or social taboos.

The word taboo means forbidden, so that if a food is taboo, it is not allowed to be eaten.

Sometimes a taboo is for certain groups of people only (for example pregnant women may not be allowed to eat chicken in some societies) or the taboo may be for everyone at certain times of the year (for example some Christians do not eat meat during Lent) or a taboo may be for all people all the time (for example, Muslims never eat pork.) Some food taboos may do little harm for example "men should not eat lungs of animals and women should not eat the colon." These taboos harmless because there are are nutritious parts of other the animal to choose from. But others can result in serious nutritional deficiencies. For example, if most protein rich foods (eggs, meat, chicken) are taboo to young children. it may be easy for the to develop kwashiorkor children (severe undernourishment caused by not eating enough protein). If there are other foods which can substitute for the taboo food (for groundnut example beans and or for meat and eggs) simsim the substitute foods should be studied and promoted. If the harmful taboo is not very strong, food variety (eating mixed vegetable and animal protein) should be explained and



promoted so that people choose for themselves what they can eat to stay healthy.

Often we eat particular foods because they are cheap and easily available. But sometimes people waste money and risk their health on expensive foods and drinks which are not good for them. These are called 'junk' foods such as prepackaged snacks, sweets and drinks. They are high in sugar and starch and low in real nutrient value. Alcoholic drinks, too, result in family problems and malnourished children. They can cause drunkenness and misery. Thus harmful feeding habits should be examined and questioned. Where

it is possible, change habits through knowledge of adequate amounts of different foods.



BREASTFEEDING

Every mammal is provided with milk especially created to fit the nutritional needs of its species. Human breastmilk has the proper balance of carbohydrates, proteins, vitamins and minerals needed for the growth of the human brain and Sometimes cow's milk (which body. is especially evolved to fit the nutritional needs of a calf brain and body) is adapted for human use in bottle feeds. But no amount of so-called "humanising" of the milk of another animal will human child give а as good nutrition as mother's own milk.



Here are some of the good things about breastfeeding:

- 1 Breastmilk is a complete balanced diet for the newborn baby.
- 2 Breastmilk has some antibodies in it which help protect babies against diarrhoea and other infections.
- 3 Breastmilk is always clean and ready to feed the baby without preparation.
- 4 The act of breastfeeding creates a love bond between mother and child.
- 5 Breastfeeding on demand can delay the mother's next pregnancy thus providing natural child spacing.

- 6 Breastfeeding is cheap to the nation and the family because no bottles, baby foods or equipment for cooking are required.
- 7 Breastfeeding is time saving, convenient and available whenever baby needs it, even at night.
- 8 Breastfeeding improves the health of the mother and her child as it is very digestible, natural and most suitable food for the young infant.

Discourage Bottle Feeding as improperly cleaned bottles are usually a source of sickness.



Here are some problems with bottle feeding with cow's milk:

- 1 Cow's milk does not provide a
 complete balanced diet for
 human babies.
- 2 Bottles are difficult to clean properly causing germs to grow, milk contamination and sickness in the child.
- 3 Cow's milk is expensive which may cause mothers to give less milk than needed for good nourishment.
- 4 Bottle feeds are time consuming and difficult to prepare properly.
- 5 Many human babies find cows milk difficult to digest or are allergic to it (cow's milk).

FOOD FOR EVERYONE

Every person, young and old, male and female and in every condition needs a proper amount of a balanced diet. By balanced diet we mean days meals which contain all the essential nutrients in the optimum or right proportions for each individual requirement. A balanced diet prevents deficiency diseases and sustains a healthy and vigorous life.

- Staple Food this is also called one's main food. It is the basic food that is cheap and usually eaten most often by everyone. Depending on which area you live in in Uganda this may be: matoke, maize meal, millet, sorghum, cassava or potatoes.
- Carbohydrates and Fats (also 2 known as energy or "Go" foods) are foods These that have bulk and high amounts of energy in them and are used by the body as petrol is used in a car -- to run and move. Foods high in carbohydrates are starchy or sweet foods such as: millet. matoke, potatoes. maize, rice, wheat flour, yams, and sugar. Foods high in fats

are cooking oil, butter, ghee, fatty meat, groundnuts, and avacados.

- 3 Proteins (sometimes called body-building or "Grow" foods) These are the nutrients which are used by the body to grow muscle, skin, and brain and to replace or repair body cells that are constantly being worn out and replaced. Protein are found mainly foods t n animal products, legumes and nuts (meat, chicken, fish, milk, beans, eggs, groundnuts, simsim, white ants, nsenene and cashew nuts).
- 4 Vitamins and Minerals (which could be called "Glow" foods since they help keep many parts of the body functioning smoothly) These nutrients are required for certain special tasks in the body. Vitamins and minerals are found in fruits. vegetables and animal products (paw paw, mango, pineapple, oranges. grapefruit, passion fruit. guava, lemons. jackfruit, tomatoes, dark green leafy vegetables, carrots, onions, green leaves, cabbage, eggs, milk. meat. fish. chicken).



There are many important vitamins and minerals in protective foods but these are the most important ones: Vitamin A is found in the following foods: dark green leafy vegetables, fruits and vegetables coloured red and yellow (carrots and papaya and red palm oil for example). In some places, people suffer from а lack of it. If this continues for a long time, they become blind, or they cannot see well in dim light. This condition is called night blindness. The vitamin is needed for the sensitive cells of the eye upon which light falls (the retina). An early sign or symptom of vitamin A deficiency is night blindness. That is, the person cannot see well in the dark. Later the eyes become dry, and change so much that the person becomes blind.



Vitamin B complex includes different several vitamins. for Vitamin Bl is essential proper growth and the functioning of the nervous system. Severe deficiency causes the disease, beriberi, and certain nervous disorders. Vitamin B2 is needed for growth in children and to maintain healthy skin and eyes. Women need extra Vitamin B2 during pregnancy and breastfeeding to ensure adequate supplies for the child. Severe deficiency causes ratarded growth in children and sore tongue, nose, chin, groin and mouth.

<u>Vitamin B12</u> – is necessary for protection against pernicious anaemia. Deficiency causes anaemia.

Nicotinic Acid -lack of this vitamin causes symptoms such as a sore tongue and diarrhoea. sunburn-like lesions on the skin. mental confusion and depression. The deficiency disease is called pellagra. Death can occur if there is an infection.

Folic Acid - A lack of this can also cause anaemia. More of it is required during pregnancy and by the elderly. Folic acid is found in liver, meat, fish, yeast, milk, spinach, brown rice. sorghum, wheat (brown flour), maize and millet. White rice and plain flour contain less vitamins so they are not so healthy.



Vitamin C is found in oranges, lemons, guavas, grapefruit, passion fruit, and green vegetables. Lack of vitamin C causes a range of symptoms and diseases. Wounds are slow to heal and scar tissue does not form properly. Bleeding from the mouth and gums occurs. If people eat plenty of fruit and green vegetables, lack of Vitamin C is unlikely to be a problem.

Vitamin D is made in people's skin through the action of sunlight. We also get this vitamin from milk. Ιt 18 necessary for the proper formation of bones. People may lack vitamin D if they live in communities where they have to stay indoors. They may also lack it if they have to cover their skin with clothes so that the sun does not reach the skin. This can occur with women in some Muslim communities.



<u>Iron</u> is necessary to form the the red chemical in the blood called haemoglobin. Haemoglobin transports oxygen from the lungs to the rest of the body. A lack of red blood cells and haemoglobin is called anaemia which condition makes people tired and weak. Beans, green vegetables, eggs, liver, fish and peas are rich in iron.

Iodine is used by the thyroid gland which is in the neck. If the thyroid gland does not get enough iodine, it swells up giving lump in the neck а region. This condition 15 called a goitre. Iodine is found in sea fish and in salt which has iodine added to it.



Goitre can be prevented with iodised salt.

- 5 - Water Water is needed throughout our bodies to sustain life as we are made up mostly of water. Water makes up most of our blood and body secretions and assists in the digestion, absorption, and metabolism of food. Water assists in the excretion of waste from kidneys and bladder, and helps to regulate the body temperature. Lack of water causes dehydration (see Primary 5, Term 1 "Dehydration").
- 6 - this is Roughage the indigestible material eaten in food (mostly cellulose from plant matter) to stimulate the the intestines. action of Though roughage isn't а nutrient it is necessary in the process of digestion and also stimulates the normal evacuation of the colon. Lack roughage cause of can constipation.

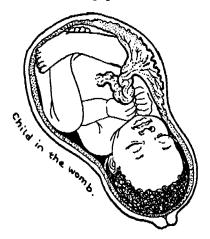
FOOD FOR VULNERABLE GROUPS

Though all people need enough good food, certain groups of people are easily harmed by not having enough food or enough different types of food. We call these groups vulnerable (easily harmed).

The Vulnerable Groups are

- pregnant women and their unborn children
- breastfeeding women and their breastfed children
- weaning children
- sick people
- elderly

The unborn child is easily harmed by poor nutrition.



Pregnant Women and Their Unborn Children

A pregnant woman needs to eat foods that will be enough for herself and for the baby growing in her uterus. If she eats less food or only some of the foods she and her baby needs, she will grow thin and weak and her baby will also not develop well.



Pregnant women need more staple food, proteins, carbohydrates, vitamins and minerals to keep up their own strength and to build the child's body. The important things that pregnant women usually need more of are

- Proteins to build the tissues of the baby growing inside her uterus and maintain her own cells which wear out.
- Carbohydrates to give her enough energy to carry the baby around in her womb and to do her other jobs.
- Iron (to build haemoglobin in her own and her baby's body) found in green vegetables, meat, liver, kidney, heart, blood and eggs.
- Calcium (to build strong bones and teeth) found in milk, small dried fish, pounded eggshells.
- Vitamins to protect her and her unborn baby from catching infections.

Breastfeeding Women and Their Breastfed Children

A breastfeeding mother needs to eat foods and drink fluids that will help her body produce enough milk for her child. If she does not eat and drink enough, she will not make enough milk for the child and both will grow thin and weak. Breastmilk is the only food and fluid that a child needs for the first three to four months of life. It does not even need water at this time.

A breastfeeding woman needs extra food from all the food groups but the two important things she needs most of are

• Fluids (to stimulate the production of more milk in her breasts) such as clean water, milk, fruit, juice, tea.



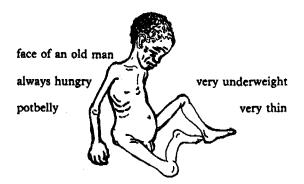
• <u>Calcium</u> (to replace the calcium in her body that the child is taking in breastmilk) found in milk, small dried fish, pounded eggshells.

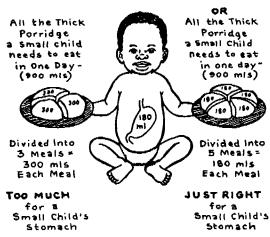


Weaning Children

To wean means to accustom a child to food other than milk. It is а of gradually Way teaching breastfeeding children about other foods. The exact time to start other foods depends on the individual child, but nearly all can grow well on mother's milk alone until four months of age. By six months all babies need food in addition to breastmilk or they will become undernourishd (their growth will stop and they become thin and This condition is called weak). marasmus.

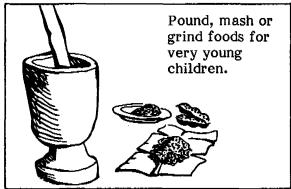
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Weaning children need different foods from all the food groups, but the important thing to remember is:

- <u>Start with semi-liquid foods</u> e.g. porridge thinned down with milk. Remember, babies don't have many teeth and foods that require chewing could cause the baby to choke.
- Introduce one type of food at a time till the baby gets used to it. Avoid strong spices.
- Frequent Feeding (small children have small stomachs and between six months to two years old need many small meals a day) of foods like porridge, mashed fruit, mashed family foods. Each food in all groups can be prepared so that a young child can eat it easily.



Sick People

When people are sick they often do not want to eat because they are weak, in pain or in a bad mood. But it is very important at this time that a person does eat good foods and drink extra fluids in order to help the body fight Lack of food and fluid sickness. for a sick person (especially one is losing food and fluid in who diarrhoea, sweat and vomiting) can lead to a worsening of the disease and other health problems (dehydration, undernourishment).

A sick person needs foods from all of the food groups but the important things to remember are

- Proteins to repair the broken down cells.
- <u>Vitamins and Minerals</u> the most important are Vitamin C, calcium, and iron.
- Fluids (to prevent dehydration and because fluids are usually easiest for a sick person to take) such as clean water, fruit juices, tea, broth (clear soup from meat, chicken or fish).
- Frequent Feeding (sick people may not be able to eat very much at one time). They should be fed frequent meals of easy to eat foods.



Small Children Have Small Stomachs

Elderly People

When people grow old quite often they begin to have more health problems which may effect their ability to eat (such as loss of teeth, stomach problems, loneliness, weakness, general mental problems). Some elderly people are active and can eat normal foods as before, but for those who have health problems the important things to remember are to give:

 Foods which are easy to eat (in case of missing or broken teeth, other mouth problems) gum and such as fish without bones, or minced meat scraped and mashed fruits, chicken. vegetables and eggs.



• Frequent Feeding (elderly people may not be able to eat very much at one time). Give foods which the individual likes and which do not cause stomach problems for that person.

Materials needed for the pupils

- Actual foods from each of the food groups
- Cards showing pictures of different foods

Methods / Activities

SPECIAL FOODS AND FOOD TABOOS

Pupils should review the reasons why we eat: the five "H's" then think of situations 1n which certain foods are eaten. Have pupils draw up food plans (menus) for an ordinary dinner at home, food for an important guest, food for a wedding, food for a special holiday (Id el Fitri, Christmas). Get pupils to prepare food taboo lists for certain people (for example is alcohol allowed to be drunk by small children?), for certain days of the year (for example do any students fast during the year?) or are there taboos for certain foods all the time for everyone? (for example is anyone in the class a vegeterian?) Discuss these food plans and taboos to see if there are any times in which what is eaten or not eaten makes the diet unbalanced.



FOOD PLANS

Have students make surveys of food available in. their own in the market, in the shambas. Prepare a list in class of shops. all the foods eaten by students and their families. Have students tear out or cut out small cards or pieces of paper (about 4 cm x 5 cm) and put the name of one of the foods and a drawing of it on each Sort the foods of the cards. bv carbohydrates. food group: proteins, vitamins and minerals. Note that some foods such as milk or eggs could be in many different

categories. Now have students make food plans for different people at different times picking one food for each food group. For example what would students give a pregnant woman? What would be a good cold lunch for a woman to carry with her to her farm? For a sick child? Then explain how the food would be cooked and prepared.

SCHOOL FARM

If the school has its own shamba examine foods grown there. Are there enough foods to make balanced diets? What needs to be added?

Electrical Injuries

Primary 6, Term 1

Objectives

After studying this chapter the pupils should be able to:

- 1 Give a basic description of what electricity is.
- 2 List two common ways in which electricity is used.
- 3 List two effects of electricity on the body.
- 4 Explain basic first aid for an electric shock.
- 5 List two common causes of electric shocks and how to prevent them.

Main ideas for the pupils

- 1 Electricity is a form of energy that has many uses.
- 2 Electricity is dangerous to the human body. It causes a sudden, painful contraction of the muscles called a shock. If the shock is strong enough, it can cause death.
- 3 Electricity can also cause burns of the skin and internal tissues.
- 4 If the person who was shocked has any evidence of burns or other illness they should be seen by the health worker.
- 5 Electric shocks are prevented by making sure that wires in the home are properly

insulated, leaving electric repairs to qualified people, and keeping young children from playing with electrical wires or appliances.

Behavioural changes

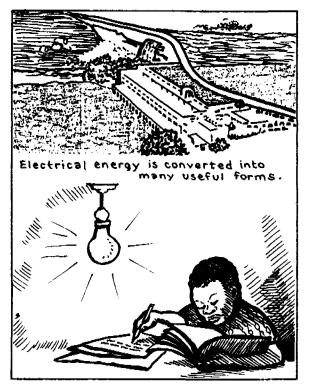
To enable students to practice the basic techniques of first aid for electrical injuries and recognize common sources of this type of accident.

ELECTRICITY

Electricity, 1ike fire. 15 extremely useful when it is used properly but can be very dangerous when 1t carelessly. used Electricity is a form of energy which travels as an invisible flow or movement of electrons. This flow is usually called a current. Electric current is created in a special machine called a generator. In Uganda, most of the electricity generated at the Owen Falls Dam is in Jinja. Electricity flows best through certain metals. Metal are wires used to the carry electrical current from the generator to the towns and then to people's homes and factories where it is used.

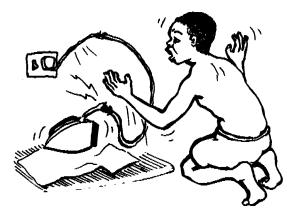
Electricity can be used to do many useful things. In a cooker or

water heater the а electrical energy is converted into heat. Light bulbs convert electricity into light. In an electrical motor, the energy is converted into the work done by the motor. In a radio the electricity is converted into the sound that we hear.



ELECTRICAL INJURIES

If a person touches a wire which is electricity carrying or an electrical appliance which is not in good repair there are two things that can happen. The most common reaction of the body is called an electric shock. This is a sudden, painful contraction of the muscles as the electrical current flows through them. Usually. our reaction to а shock is to immediately pull away from the source of the electricity and this ends the painful feeling.



If the with contact the electrical current is prolonged or if it is a very strong current, such as from a large outdoor wire, results can be much the more serious. Α serious shock can paralyze some or all the muscles of the body. If this includes the heart or the muscles that assist in breathing, the person can die. The possibility is that other the electrical current can burn the victim. Sometimes this burn can be seen at the site where the electrical current entered the but sometimes the burn body. is internal. There may be no sign of injury except for pain. This type of injury can be very dangerous since it can damage the muscles, and sometimes even the nerves. internal organs.

FIRST AID FOR ELECTRICAL INJURIES

Fortunately, most electric shocks cause no injury and all that is usually necessary is to reassure the person who was shocked. It is best for them to lay down for a short while. Carefully examine the part of the body that was shocked for any signs of redness, blistering, or swelling. If there

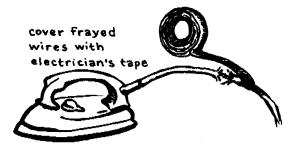
is a burn on the person's skin it should immediately be put under cold water for 10 to 15 minutes, then covered with a clean cloth.



If the person who received the shock complains of continuing pain in the limb that was shocked it may mean that electric current caused a burn inside the body. All persons with burns or persistent pain be seen as quickly should as possible by a health care worker. If the person has anv other continuing symptoms such as headache, dizziness, or vomiting they also need to be seen by a health worker. In the worst cases of electric shock, the victim may have stopped breathing and you may have to breathe for the person. (See Unit 8, Primary 7, Term 2 -"How to Do Mouth-to-Mouth Breathing")

PREVENTION OF ELECTRICAL SHOCK

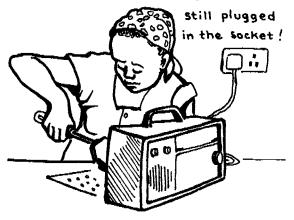
The best way to prevent electric shocks and burns is to understand the situations in which they are likely to occur. All electrical wires that are used about the home should be covered with a thin covering of plastic or rubber. This covering, called insulation, doesn't allow the electric current to pass through it. The insulation enables the person who is using the electric appliance to touch the wire without getting shocked. If the insulation is damaged so that bare metal is seen underneath, a person could get a shock from touching the wire at this place.

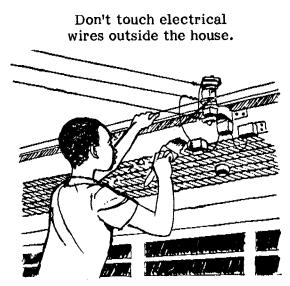


Another common occurence of shocks is when people try to fix electrical appliances without sufficient knowledge about them. If they are not repaired properly, the electricity may be conducted through the outside of the appliance that anyone so who touches it is shocked.

As with many types of accidents, young children are at increased risk because they don't understand the dangers of electricity. Care must be taken to prevent them from playing with electrical wires and appliances.

DO NOT repair anything when it is





Methods / Activities

Depending on the location of your school, you, the teacher, will have to decide how relevant this chapter is to your pupils. If there is very little use of electricity among the population you teach, it may be more important to teach more on other areas of First Aid.

It is difficult to teach about electricity without special teaching equipment and this is beyond the scope of this chapter. Several suggested activities to illustrate the ideas in the chapter Don't touch electrical appliances when your hands are wet.



include:

- List all the different ways in which electricity is used in the community.
- Have the pupils draw pictures of common household electrical hazards. (We suggest combining this with other household hazards so as not to single out those pupils whose homes do not have electricity.)
- Use the pictures the pupils have drawn to have a discussion about ways of preventing household accidents.

Unit 7 FAMILY HEALTH AND SOCIAL PROBLEMS

Care of Pregnant Women

Primary 6, Term 2

Objectives

Having completed this chapter the pupils should be able to:

- 1 List things they can do to help pregnant women
- 2 List the requirements of a woman during pregnancy
- 3 Explain problems likely to occur in pregnancy and solutions to overcome or cope with these problems
- 4 Name the danger signs in pregnancy and explain what must be done if they occur
- 5 Explain preparations pregnant women should make for her baby prior to its birth

Main ideas for the pupils

- 1 Pregnancy is a normal condition but it can add more burdens to a women's usual workload and can make her susceptible to health problems if she is not cared for properly.
- 2 The whole family can and should give a pregnant woman the extra care and attention she needs.
- 3 Where possible, every pregnant woman should, at best, attend ante-natal clinic regularly, or at least consult a Trained Birth Attendant during pregnancy.
- 4 There are many minor problems

which are likely to occur to a woman as a normal part of pregnancy, but she and her family can help her to overcome or cope with these problems.

5 There are some problems which are very dangerous to a pregnant woman and her unborn baby which everyone should be. taught to recognise and which should be referred for professional treatment immediately.

Behavioural changes

Pupils should actively use health educatiion learned in school to assist pregnant women both in relieving their workload and giving them health advice.

THE PREGNANT WOMAN AND HER, FAMILY

Pregnancy is a normal condition causes many physical that and emotional changes in а woman. Pregnant women require extra care and support. All members of а pregnant woman's family, as well as the herself. Woman have а responsibility to ensure the proper development and birth of its next member. the unborn child. Each family member. the husband. parents, in-laws and children can provide physical help (relieve the woman of some housework or farming

chores), psychological encouragement (express pride, understanding, sympathy, kindness) and take an active interest in getting the pregnant woman health care (giving advice, taking her to the antenatal clinic, etc.). The birth of each baby should be a family project.

REQUIREMENTS OF A

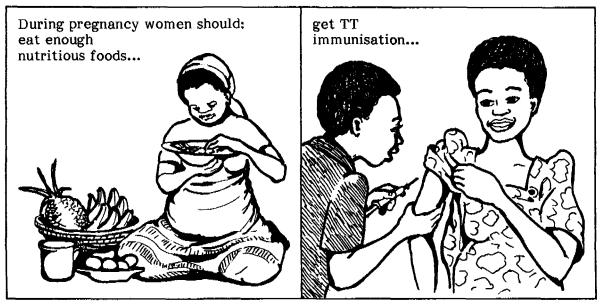
PREGNANT WOMAN

During pregnancy a woman requires more than the usual care for herself and the child she is carrying. As soon as she knows she is pregnant she should begin:

1 Ante-natal Care - A pregnant woman should get special care preferably at an ante-natal clinic near her home or from a "Ante" means trained midwife. before and "natal" means birth. government and private Many clinics ante-natal have These specialise in clinics. diagnosing and treating with problems associated

This includes pregnancy. teaching pregnant women how to maintain good health and how to care for their newborns. Thev provide hygienic and modern facilities delivery with trained birth attendants. Ante-natal clinics also provide tetanus toxoid immunizations to pregnant women, which prevent the killer disease, tetanus, in the newborn baby.

- 2 Good Nutrition - During pregnancy a woman should eat more food and better food than usual to maintain her own health, provide needs of the developing baby and to encourage successful breastfeeding. Nutritional needs of a pregnant woman are explained in detail in Primary 6. Term 1. Unit 2 Food and Nutrition: Food for Vulnerable Groups.
- 3 Exercise A pregnant woman should continue to do her usual work unless it involves lifting or carrying heavy weights or



constant standing. Moderate exercise like walking should be taken.

- 4 Adequate Rest and Sleep A pregnant woman should be encouraged to get extra rest daily.
- 5 Personal Hygiene A pregnant woman needs to keep up a good standard of personal cleanliness throughout birth and during pregnancy, breastfeeding. This hygiene a daily bath includes and change of clothing and other good grooming habits.
- 6 Appropriate Clothing - A pregnant woman should dress as comfortably as possible in easy to clean non-constricting garments, promote good to circulation. If her breasts need extra support she can wear a simple bodice or a brassiere. Low heeled shoes may make it easier for her to balance herself in advanced pregnancy and help alleviate backache.

PROBLEMS LIKELY TO OCCUR IN In PREGNANCY

During pregnancy a woman's body undergoes many physical changes which may cause minor problems. These problems are not unusual, but if they are very disturbing to a pregnant woman she can go to a trained health worker for advice:

- 1 Morning Sickness this is a feeling of nausea some women experience in the early part of their pregnancy. The woman should try getting up slowly in the morning after having a cup of sweetened tea with dry or toasted bread or a roasted slice of cassava to ease the morning sickness.
- 2 <u>Heartburn</u> this is a feeling of burning in the upper abdomen. It may help the woman to avoid eating spicy or oily foods and to eat small amounts of food frequently.
- 3 <u>Constipation</u> this is a problem of irregular or difficult defecation. It may



help the woman to increase her intake of water, take exercise and increase the amount of fruit and vegetables in her diet.

- 4 Backache this is when the pregnant woman feels mild pain or strain in her lower back, especially in the last few months of pregnancy. The woman should try sitting down or down to relieve the lying It may help her to backache. wear low comfortable shoes.
- 5 Varicose Veins these are swollen veins in the legs that often itch or burn. A pregnant woman should rest often during the day with her feet raised, or she can wrap her legs with bandages to give the veins support and reduce the pain.
- 6 <u>Itching Skin</u> mild itching of the abdomen and breasts may occur in pregnancy. A woman should try to wear clothing that does not further irritate the skin.

Anaemia To check for anaemia

Pale palms, inner eyelids, tongue, lips and gums. 7 Anaemia - this is a lack of iron which causes weakness and tiredness, pale lips and a pale tongue. A pregnant woman must eat more body building and protective foods throughout pregnancy to avoid anaemia. If anaemia is not treated early, it can become a serious problem in pregnancy.

DANGER SIGNS DURING PREGNANCY

The following problems during pregnancy mean the woman needs immediate attention from qualified health care workers:



- vomiting a lot and often (more than morning sickness)
- bleeding or coloured discharge from the vagina
- severe tiredness or weakness (prolonged anaemia)
- severe swelling of the legs, face and hands
- severe headache or difficulty in seeing
- hard or severely painful abdomen

PREPARING FOR THE DELIVERY/CARE OF BABY AND MOTHER

Towards the end of pregnancy the pregnant woman and her family should assemble the following items in preparation for delivery:

- 1 Things for the Baby have ready clean clothing, bedding and cot and sterilised delivery equipment as directed by the midwife or birth attendant.
- 2 <u>Things for the Mother</u> have ready a clean delivery area and mat or bedding, towels and cloth for home delivery or a

bag packed with necessary money for transport, clean clothing and bedding and material for personal hygiene if a clinic/hospital delivery is planned.

Things for the Family 3 - keep enough water and dry foods in stock for domestic use, have the house thoroughly cleaned in advance and if possible in a person to help bring around the house for some time after delivery. The birth of a child is an important family in which the whole affair family should assist.

Make the birth of each baby an important family event





Methods / Activities

A VISIT TO THE ANTE-NATAL CLINIC

If possible, plan a trip to the nearest ante-natal clinic where the nurse / midwife / birth attendant explains what services are available to pregnant women. Have the health worker explain what the pupils can do for women in their family (their mothers, older sisters, aunts, and later, their wives or themselves) to contribute to ante-natal care.

ROLE PLAY

After visiting an ante-natal clinic or explaining its services, have pupils play the parts of a midwife or health worker and pregnant women. Have pupils act out problems in pregnancy and treatment including how the family can relieve a mother's burdens by taking on her additional work.

MAKING POSTERS

Have pupils make posters giving advice to pregnant women (for example advising them to attend ante-natal clinic regularly, get TT Immunization, eat more and better foods) and posters about how they can help care for a pregnant woman (for example helping more around the house, bringing the woman tea in the morning, reminding her of ante-natal clinic days). You may be able to arrange a display of these posters at a local ante-natal clinic or during a health parade for the school.

Medical Drugs

Primary 6, Term 2

Objectives

Having completed this chapter, the pupils should be able to:

- 1 Name the four principal items which make a medical drug an "Essential Drug".
- 2 Name four things we can do to prevent most illnesses and keep from having to use drugs.
- 3 Explain the differences between laboratory manufactured drugs and traditional drugs.
- 4 Name at least four advantages for drug prescriptions.
- 5 Describe the proper storage of drugs in the home and in places where drugs and vaccines are obtained.
- 6 Describe several ways to prevent accidental poisoning by drugs.
- 7 Explain what is meant by "Expiry Date" of drugs and vaccines.
- 8 Explain the difference between a useful, a useless and a harmful drug and give examples.

Main ideas for the pupils

1 All drugs and vaccines are potentially dangerous to our health unless they are used in their proper state (not damaged or old), amount and course, for the correct health problem and administered in their proper form.

- 2 Most health problems can be cured without drugs. All that is needed in many cases is rest, good food, good hygiene, and extra fluids.
- 3 Prevention is Better Than Cure. If people learned to have all children immunised against disease and learned to live healthier lives (by keeping clean. getting plenty of exercise and rest, eating well, avoiding smoking, taking moderate amounts of alcohol and avoiding drug abuse), thev would have less health problems and less need for drugs.
- 4 In the case of serious illness when drugs are needed, drugs not the only important are element in health care: 1t is the body which overcomes the illness, the medicine only helps. Cleanliness, rest and good food are still important.
- 5 Drugs by prescription from qualified medical persons ensure that the right drug for the right problem is given in the correct dosage and form, and that instructions are given on how to take them correctly.
- 6 Although not all traditional drugs are harmful, it is often safer to treat very serious illnesses with modern

manufactured drugs with the advice of a health worker.

Behavioural changes

- 1 Pupils should always question the need for any drug they should take. They ask themselves and the persons giving them drugs. "Do Τ really need this or can I do other become things to healthy?"
- 2 Pupils should understand their responsibility to protect their younger siblings from accidental drug poisoning and see that drugs are always kept out of the reach of children in their homes.
- 3 Pupils should understand the difference between manufactured and traditional drugs and only use drugs that are known to be useful.
- 4 Pupils should know what is meant by a "useless" drug and avoid wasting money on them.
- 5 Pupils should lead a healthier life in order to avoid the need for drugs.

In most cases, to help your body overcome sickness, often all that is needed is to:



Кеер	Drink	Get	Eat
Clean	Extra Fluids	Plenty of rest	Well

ESSENTIAL DRUGS

Medical drugs and vaccines are medicinal substances which are dangerous if misused. They are made from living and non-living things and are used to

- prevent diseases
- cure diseases and

• reduce symptoms of diseases.

- Essential Drugs are those which:
 - 1 Meet people's common health
 needs,
- 2 have important curative value
- 3 are safe if used correctly and
- 4 give satisfactory value for money.

In order to make Essential Drugs available, the Ministry of Health has set up the Essential Drugs Management Programme. This programme imports high quality drugs from manufacturers at the lowest world price and distributes them to health centres around Uganda.

LABORATORY MANUFACTURED DRUGS AND TRADITIONAL DRUGS

Laboratory manufactured drugs are usually made carefully and tested so that their strength, purity are known stability and and are the same for each quantity made. They have usually been tested so that their effect on human health is known. They are usually also packaged so that the drug is sterile and protected and labelled to show the name. safety warnings, strength. directions and expiry date of the drug.

The expiry date is the date that the drug "expires" or becomes too old to use any more. Some drugs become useless at their expiry dates but some become poisonous. All drugs should be destroyed after their expiry date.

Traditional drugs are those which are part of the local culture and were used before the application of science to health matters. Thev are usually made of plants and herbs whose strength, stability and purity changes from each quantity In many cases their effects made. on human health are not known but they continue to be used because of cultural habit. They are usually not packaged under clean conditions so are easily contaminated. They are rarely labelled with their name, strength, safety warnings directions or expiry date.

USEFUL, USELESS AND HARMFUL DRUGS

Both laboratory manufactured drugs and traditional drugs can be classified as

- <u>useful</u> they help the body overcome sickness
- <u>useless</u> they do no good but they do no harm
- <u>harmful</u> they do no good and can cause harm.

useful An example of а manufactured drug is aspirin as it can help the body overcome fever. An examples of a useful traditional drug is enkejje (a compound of small dried fish boiled with herbs) given to children with measles as it can help provide good nutrition to help the body survive measles.

Examples of useless manufactured drugs are "cold tablets" as nothing but rest, good food, extra fluids and good hygiene will cure the common cold. An example of useless traditional drug are medicine filled pouches hung by cords around the neck or waist of a child to prevent sickness.

Examples of harmful "lung manufactured drugs are tonics" which can be bought in almost all small shops, as persons with serious lung problems mav getting proper treatment delav while they waste time and money on these drugs that do them no good. Another example of а harmful traditional drug is the use of with cow's medicine made faeces to treat a baby's newborn umbilical cord. This treatment can cause serious infection, especially the killer. tetanus.

CONSULTATION AND PRESCRIPTIONS

A prescription is a health worker's written directions for the use of a drug.

Though many drugs can be obtained without prescription it is always a good idea to see a health worker for advice on the right drug, its dosage and duration of treatment. This will prevent underdosage (which can lead to the disease not being cured, or worse, allowing the disease germs to become resistant to the drug); and overdosage (this can lead to a wastage of money and drugs as they are taken for no reason, or worse, can lead to further health poisoning and problems or death).

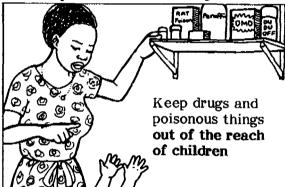
Every prescription should be used only for the person for whom the drug was prescribed because the person's illness, age, weight and reaction to the drug are considered when the drug is prescribed. These things may be different for another person and could lead to under or overdosage.

PROPER STORAGE OF DRUGS

Drugs and vaccines need to be protected from

- moisture
 physical damage
- sunlight
 heat
- dirt

They should be stored in as cool a place as possible in the dark, and protected from pests (such as insects, rats and mice). The containers which drugs are kept in should be tightly sealed and not left open so that moisture, dirt and pests can damage them.



"Out of the reach of children" means in a locked cupboard or on a high shelf or in a container a small child cannot open.

Materials needed for the pupils

- Traditional drugs used in your area
- Drugs available in local shops
- Different types of drug containers (envelopes, boxes, jars, bottles)

Methods / Activities

DRUGS WE KNOW

As you get pupils to be aware of what drugs are, they should observe where they find them and in

what condition they find them in their home, in local shops and in health centres. Get pupils to name any drugs they know, manufactured and traditional. Find out if they need a prescription to obtain the drug. Tell what they are used for then determine if they are useful. harmful useless or and whv. Research some drugs yourself and show samples to students of useful. useless and harmful manufactured and traditional drugs from the area.

DRUGS IN THE HOME

Ask pupils to go home and make a list of drugs they find there. List these drugs and observe where they were obtained (prescription from health worker, bought from shop, bought herbalist), if they were from labelled correctly (is the name. dosage, person's name, expiry date on label) and if they were stored properly (out of the reach of children, away from heat, moisture, sun, dirt, etc). Get students to think of ways to keep drugs properly in their own homes and to move the drugs to the proper place with parent's permission.

DRUGS IN THE COMMUNITY

Arrange field trips with students to visit the local health centre, a shop that sells drugs and an herbalist. When they return to class list the types of drugs available, purpose, whether they were stored correctly, if they were labelled well. If field trips are not possible, have a health worker come to class to talk about drug use and abuse and the purpose of prescriptions.

Drugs of Dependence

Primary 6, Term 2

Objectives

Having completed this chapter, the pupils should be able to:

- 1 Explain what drug dependence and drug abuse are.
- 2 Name drugs that are commonly abused in Uganda.
- 3 List reasons why people become dependent on drugs or become drug abusers.
- 4 List the harmful effects of drug dependence / drug abuse.
- 5 Explain ways to avoid drug abuse.

Main ideas for the pupils

- 1 Drug dependence occurs when people take drugs regularly, their bodies get used to having the drug and then their body does not feel normal without the drug.
- 2 Drug abuse is when drugs are used wrongly, whether they are legal or illegal drugs.
- 3 People take drugs for many reasons: to forget their problems, to imitate or impress their friends, or simply for enjoyment.
- 4 Drug abuse is dangerous not only because of the harm that can be done to the body but also because of the psychological and social problems it can cause.

5 Drug dependence is a very difficult problem to overcome. It is best to teach young people about the problems associated with drugs and to help them learn how to say "no".

DRUG ABUSE AND DEPENDENCE

The term "drug abuse" can have different meanings depending on the context it is used in. Since the use of drugs varies widely between cultures as well as between individuals so does the definition of abuse. In a legal sense "drug abuse" means any use of drugs that have been classified as illegal in given country or community. а Medically, "drug abuse" means the use of any drug in a way that is harmful to the body. This harm can be either immediate or long-term. Socially, "drug abuse" connotes the effects of the drug being that used interfere with the person's social network.

Drug addiction or dependence is a result of drug abuse. Traditionally it is defined as a condition which results from prolonged use of a drug and is characterised by:

- A strong desire, compulsion, or need to continue taking the drug.
- development of tolerance, the

tendency to increase the dose (to take more and more of the drug) to achieve the same desired effects.

• occurence of withdrawal symptoms, which can be physical, psychological or both when the person either stops using the drug or decreases the dose of the drug that their body has become accustomed to.

WHY PEOPLE ABUSE DRUGS

There are many and varied reasons why persons abuse drugs. These factors can be divided into three main groups:

- Pharmacological the biological effects of the drugs.
- Individual the personal reasons and personality types of those who use drugs.
- Social the effects of groups and of social class and culture on drug use.

PHARMACOLOGICAL FACTORS IN DRUG ABUSE

Drugs which are abused are usually those which produce some noticeable the effects on subjective individual within a short time of taking them. Depending on the type and dose of a drug, these effects may be relaxing and sedative or exciting and stimulating. Some types of drugs have a marked effect on the senses: perception of pain, pleasure, time, distance, colour and sound can become distorted or altered and even hallucinations can (a hallucination being a occur perception in the absence of Many of these drugs, stimulus). when used in the right setting can very useful medically be and pleasant socially. However, almost all of these drugs also have properties that can be dangerously toxic in the short run and can result in dependence when they are used frequently over a period of time.

FACTORS INFLUENCING INDIVIDUALS WHO ABUSE DRUGS

Individuals desire the effects of drugs for many different reasons: to sleep, to stay awake. to inspire, to forget, to relieve pain and anxiety, to enhance pleasure. In the words of those who use these kinds of drugs, "the drugs make us feel good". All of this can change though when a person becomes addicted to a drug. Though they may have started using the drug for any of the above reasons, the drug dependent person often feels compelled to continue using the to avoid the unpleasant (and drug sometimes dangerous) symptoms of withdrawal. Their emotional structure may be so damaged by the effects of the drugs that they find themselves unable to cope with life without them.

There is no special personality disorder that is found among persons who abuse drugs. Though it is true that many drug abusers do

Abuse of drugs can be associated with emotional instability.



personality disorders exhibit characterized bv emotional instability. and impulsiveness. these personality problems are also quite common among non-drug abusing generally individuals. It is acknowledged that these personality or traits do increase problems liability to abuse drugs. However it is also true to sav that a number of drug dependent persons were previously normal. stable. well-adjusted persons.

SOCIAL FACTORS INVOLVED IN DRUG ABUSE

People commonly seek companionship in using drugs. Anytime drugs are being used by several members a group, especially among of adolescents, there is very strong peer pressure for the others in the group to participate as well. This is a very common cause for abusing drugs. If only one or two members of a group are using large amounts a drug, the others will often of try to "keep up". This occurs either out of desire for companionship or fear of rejection.

Persons who abuse drugs come from all social classes. races. and countries. However, there tend to be wide differences in both the prevalence and type of drug abuse on local cost and based availability. as well as social class and cultural mores (values and beliefs). For example:

- In cities, poor "street children" are commonly found sniffing petrol and related products to become intoxicated. The main reason for using this drug is that it is common and cheap (i.e. usually stolen).
- Muslims, in general refrain from drinking alcohol but in many countries accept the consumption of hashish (marihuana).
- Doctors, nurses, and chemists are prone to abuse the sedative and narcotic drugs that they often have easy access to.
- Long-distance truck drivers and others who often stay awake for long periods of time will frequently abuse stimulant drugs like miraa or khat.



COMMONLY ABUSED DRUGS

There are certain classes of drugs because of their effect on that, the human brain, are frequently abused. In addition to their immediate effect, many of these drugs possess the pharmacological properties that can induce addiction. These are known as drugs of dependence. In Uganda some of these drugs are legal and some are illegal. Others have certain restrictions such as requiring a physician's prescription to buy them from a chemist. The two most commonly used drugs of dependence in Uganda are alcohol tobacco. and These drugs are studied in detail in their respective chapters of Unit 7.

Prescription drugs that can easily become addicting the are barbiturates, other types of sleeping pills and drugs used to treat anxiety. This problem is often caused by health care workers who prescribe these drugs for too long periods or for the wrong reasons. Other types of drugs that can become addicting are any of the pain-killing narcotics related to opium. Although these drugs can be extremely useful for treatment of extreme pain, if they are used for too long the patient will become addicted.

Two illegal drugs that are commonly used in Uganda (and many other countries) can also cause dependence. They are:

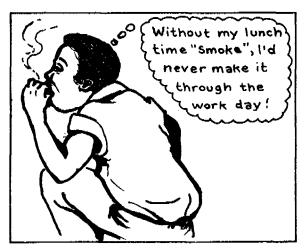
<u>Cannabis</u> - Other names for this drug are marihuana, *bhang*, and in Uganda - njaga. The leaves of the plant are dried and smoked to obtain the effects of the drug. As with many drugs the effects can be variable depending on the person's



state of mind and the environment in which the drug is taken. In moderate doses the drug often acts relieve anxiety, relax, to and stimulate the imagination. Some individuals claim that it increases their appreciation of ordinary pleasures, in particular sexual pleasure.

Similar to alcohol, smoking large amounts of the drug will have a marked depressant effect on the brain, slowing reaction times and interfering with rational decision making skills. Other effects that sometimes occur at higher doses are:

- An irrational feeling of power or knowledge.
- Distortions of time, space, and body image.
- Profound sleepiness.



with many drugs, cannabis is As certainly capable of endangering someone who is trying to drive a vehicle or operate any kind of Frequent use is also machinery. likely to interfere with a person's family and job responsibilities, Prolonged use of cannabis often leads strong emotional to а dependence on the drug. The compulsive desire to continue using it can be as powerful as physical dependence would create, though physical dependance as such does not occur with cannabis.

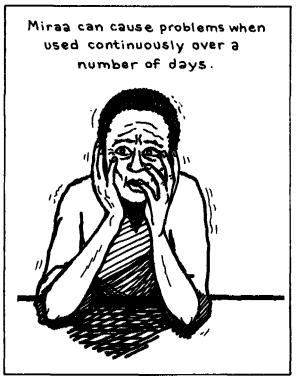
Although there are laws in Uganda against the growing of the plant, and the possession and smoking or chewing of the drug, these laws are generally not enforced.



Miraa - Other names for this drug are khat or mirungi. The leaves of the plant are chewed in order to obtain the drug's effects. This drug is primarily a stimulant with effects similar to the drug called It is often used by amphetamine. people who want to stay awake for long periods of time like long distance truck drivers. In addition its stimulant effect it also to produces a mild euphoria (pleasant feeling).

Problems with this drug occur when people use it continuously over a number of days. They can suffer the following symptoms:

- Loss of appetite (anorexia) with consequent weight loss, weakness, and susceptibility to illness.
- Nervousness, irritability, and inability to concentrate.
- Insomnia (the inability to fall asleep.)
- Shaking or tremors.



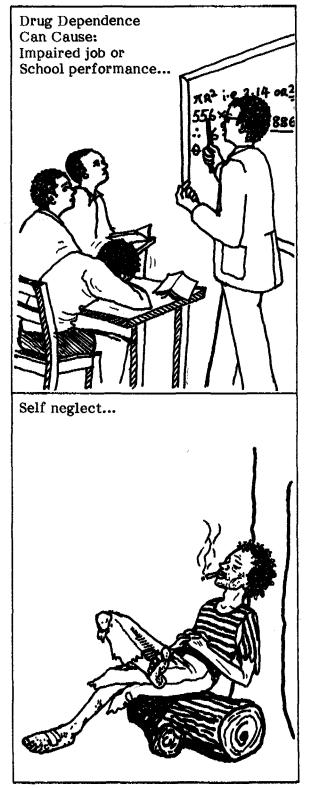
 Psychotic illness usually marked by paranoia - irrational fear of being persecuted or harmed.

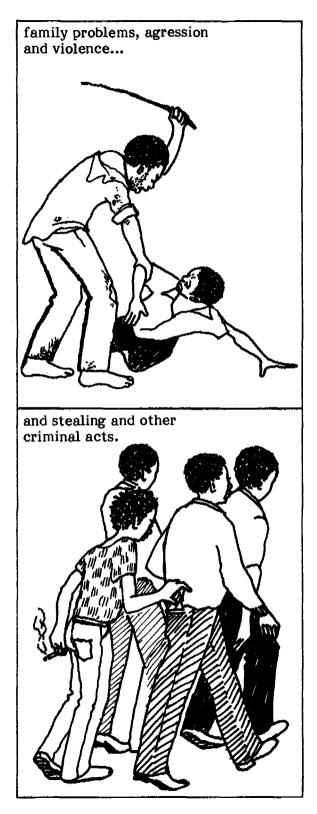
When this drug is used repeatedly over a number of weeks and months, a physical dependence develops. If the dependent individuals run out of their supply of miraa they become very sleepy and apathetic, hence the danger to those using the drug to stay awake while driving long distances. When they run out of their drug they may fall asleep while driving and cause accidents.

GENERAL PROBLEMS CAUSED BY DRUG DEPENDENCE

In addition to the specific effects of the various drugs of dependence, there are a number of characteristics which are common to many people who are dependent on these drugs:

- Impaired school or job performance - Although people may begin using drugs at times when they are not at school or work, frequently they need to use the drugs more and more often. Most drugs will have а negative effect on а person's ability to perform mental and physical tasks efficiently. Not infrequently this leads to dismissal.
- Drug Self-neglect dependent may neglect persons personal concerns such as nutrition. clothing, and personal hygiene. Obviously, these problems can lead to illness. In some cases this neglect is the result of the apathy caused by chronic intoxication. It is also caused by a lack of money since they their money on spend drugs rather than on food and clothes.





- Family Problems - Since their concern is to obtain primary drugs òf dependence, these individuals tend to neglect their families and fail to provide them with the necessary economic and emotional support. This may lead to break-up of the family and is also associated with higher rates of drug abuse and other forms of delinquency in their children.
- Aggression and Violence Drug persons may exhibit dependent aggressive behavior either as a result of a given drug's effect result of the or as а irritability common to early withdrawal. The violence is often unpredictable and frequently directed at family well members and friends as complete strangers.
- Stealing and Other Criminal Acts dependent person Α drug may resort to stealing or other in order to obtain the crimes necessary to money buy an adequate supply of drugs.

HOW TO AVOID DRUG DEPENDENCE

The decision whether or not to use drugs is a personal one. It should be made with full knowledge of the risks involved. The risk of becoming drug dependent is very as witnessed by the fact that real millions of people are many drugs world addicted to wide. Therefore, each individual who does not want to be dependent on drugs to learn to rely on himself. has The following suggestions can be helpful in avoiding the temptation to abuse drugs:

• Acquire as much relevant information as possible about the

effects of various drugs. This will help in developing a correct attitude towards drug usage.

- Be wary of "friends" whose friendship depends on one's use of drugs. True friendship <u>never</u> relies on drugs.
- If one has personal or family problems, seek assistance from the right people - friends, relatives, health workers, mental health specialists, career or vocational guidance people.
- Seek out activities to occupy free time. Whether thev be religious sports. music. or community service groups. engaging in these activities will make it difficult or unnecessary for one to start abusing drugs.

Methods / Activities

GUEST SPEAKER

Where possible, ask a doctor, medical assistant, nurse or community health worker to come and talk about drugs of dependence.

GROUP DISCUSSION

- Make a list of those drugs that the pupils recognize as being used around their community. Remember that alcohol and tobacco are drugs!
- To the above list add the pupils' impressions of the effects of these drugs on those who use them.
- Have a discussion about the effects of drugs on the person, family, and community.

ROLE PLAY ON DRUG ABUSE

Introduce role-playing on "learning to say no" in the same way as shown in Activities for the Chapter on Smoking in this guide, but substitute one of the other drugs for tobacco. Dramatize the behaviour of drug-dependent а family member. Have pupils act out how drug-dependence impairs school performance, leads to self and family neglect and can possibly go on to aggression, violence, theft and other criminal acts. Show how the drug dependent person gets off drugs, or what happens if they are unable to do so.

Primary 6, Term 2 Alcohol and Alcoholism

Objectives

Having completed this chapter the pupils should be able to:

- 1 Define alcohol; describe two
 ways of producing it; and name
 at least two common forms of
 locally produced alcohol.
- 2 List three immediate effects of drinking alcohol on the body.
- 3 List three long-term effects of drinking alcohol on the body.
- 4 Describe the symptoms of alcoholism, including two that affect the individual, two that affect the family, and two that affect the community.
- 5 Explain a helpful approach towards those with a drinking problem.

Main ideas for the pupils

- 1 Ethyl alcohol is a drug that. is commonly produced and used in Uganda and the rest of the world.
- People drink alcohol 2 for the effects it produces; however. alcohol in excess is. а poison with widespread harmful effects on the body. Driving under the influence of alcohol is a major cause of motor vehicle accidents, injury, and death.
- 3 Contamination of home-distilled alcohol with methyl alcohol is

the most common cause of blindness in users of alcohol in the country.

- 4 Though drinking alcohol in moderation may not give rise to harmful effects on the body, chronic use of alcohol often leads to alcoholism.
- 5 Alcoholism is a disease where the affected person is dependent on alcohol. In other words, they cannot function normally without drinking it. The definition of alcoholism also implies that the affected person's relationships with their family and community are impaired.
- 6 The chronic use of alcohol has harmful effects on every system in the body. Its most serious harmful effects are on the liver, the digestive system (particularly the stomach and pancreas), and the brain.
- 7 There are adequate laws in Uganda governing the preparation, sale and consumption of alcohol. All that is needed is their enforcement.
- 8 Alcoholism is a life-long illness that is difficult to control. People can be helped to break their dependence on alcohol. The most difficult step in helping alcoholics is helping them to realize that they have a serious problem and

must decide for themselves to stop drinking.

Behavioural changes

- Pupils should understand that alcoholism is a disease which can be controlled but not cured and that if they have a family member (such as a parent) who is an alcoholic they should:
 - support alcoholics who wish to control their problem using guidelines under "Overcoming Alcoholism".
 - get support for themselves by finding someone in whom to confide about the alcoholic problem in the family.
 - realise that they are susceptible to being an alcoholic themselves and try from a young age to abstain from alcohol use or control it carefully.
- 2 Pupils should understand how serious alcohol abuse is and learn to say "no" to drinking when it is only to be accepted as part of the group, or to try to look mature. An understanding of the myths about alcohol

in this chapter will help with this behaviour.

ALCOHOL AND HOW IT IS MADE

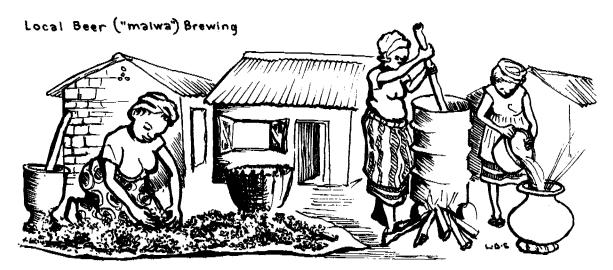
Alcohols are a family of chemical substances which have certain similar characteristics. Two common alcohols are: methyl alcohol and ethyl alcohol.

Methyl alcohol is sometimes used in medicine to sterilize instruments. It is also used as a fuel because it burns easily. Methyl alcohol is very poisonous, causing blindness and death.

Ethyl alcohol can also be used as a disinfectant and a fuel, but it is most commonly known as the drug that is contained in all alcoholic drinks. When we speak of alcohol in this chapter, we will always be referring to ethyl alcohol.

There are two principal ways of producing alcohol:

Fermentation is the name given to the process of turning sugar and water into alcohol. This chemical reaction is done for us by the tiny one-celled organisms called yeasts. Like bacteria, yeasts are so small



that we can not see them without a They are found almost microscope. everywhere, one common place being on the outside of most plants. To make alcohol, you first need a source of sugar. Almost all plants have at least some sugar in them. plant is first ground or The mashed, then mixed with water. The naturally occuring yeast on the outside of the plant is usually enough to start the fermentation. After 3 to 5 days the sugar has been turned into alcohol by the many of you have yeast. As probably seen this is commonly done Ugandan homes. For many in example:

- "mwenge" from bananas
- "malwa" from millet
- "kwete" from maize or corn.

There are different names for the drinks that are made from different Wine is usually types of plants. produced by fermenting the juice of a fruit called a grape but can also be made from other fruits such as pineapples and pawpaws. Beer is usually produced by fermenting malt (sprouted grains of barley). Other beers are made from sorghum, rice. millet. wheat, corn, and sugar cane.

Drinks that are produced by fermentation usually have between 2 and 12 % alcohol in them. They can never contain more than 18 % alcohol because at this concentration the alcohol kills the yeast.

To obtain drinks containing more alcohol than can be produced by called fermentation а process distillation used. Whereas is boils 100 degrees water at Centigrade (at sea level), alcohol boils only 78 degrees at Centigrade. If we boil a fermented drink containing alcohol (wine.

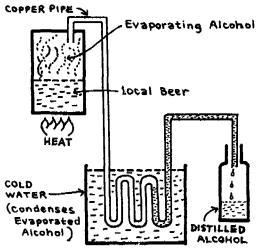
beer) the steam that escapes first will consist of mostly alcohol, for has barely started the water Various ways can be boiling yet. to collect and cool the used alcohol vapours, for escaping example by a coil of tubing The immersed in cold water. resulting liquid will contain а large amount of alcohol. The amount of alcohol may vary from 30 to more than 50 % of the volume of the drink.

In Uganda, some of the home distilled drinks with a high concentration of alcohol are:

- corn alcohol (*kwete*) obtained by distilling corn beer
- pineapple alcohol (munanansi)
- home made enguli (waragi) made by distilling millet beer (malwa), banana beer (mwenge), or maize beer (kwete), sugar and other ingredients.





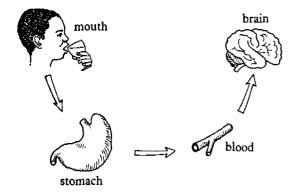


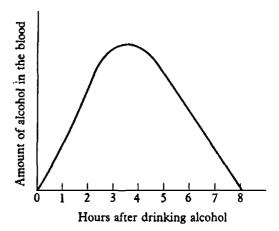
Although home distilled drinks are very popular, many people are unaware of the potential danger of drinking them. Because the distillation process is often poorly controlled, it is not uncommon for certain poisons, including methyl alcohol, to become included in the drink. If taken in sufficient quantities these contaminated drinks can cause blindness and even death.

In Uganda, waraqi is also commercially. It produced \mathbf{is} adequately purified and does not pose the danger of the homemade alcohols. In other parts of the world there are many other distilled types of alcohol. these gin, include: whisky, rum, and vodka.

THE IMMEDIATE EFFECTS OF ALCOHOL ON THE BODY

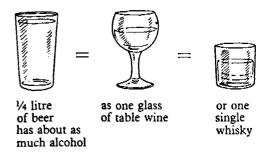
When a person drinks an alcoholic the alcohol is rapidly beverage. absorbed from the digestive tract into the blood. Five minutes after taking alcohol, there is already some alcohol in the blood. The the blood reaches amount in its peak 1-2 hours after one has If finished drinking. the individual does not continue to





drink, the alcohol level drops slowly.

In the body the alcohol in the blood flows through the liver where it is slowly changed. The liver alcohol into transforms water. carbon dioxide, and sometimes fat. The speed with which the liver can do this is limited: in one hour the liver of an average size adult man can break down the quantity of alcohol in a large glass of beer or very small glass of waraqi а

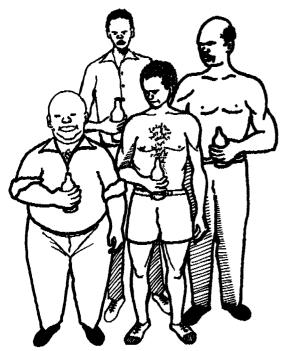


(Remember that distilled drinks to 10 contain 5 times as much alcohol as the same amount of а fermented drink). If the person more than this drinks amount of in one hour, alcohol the liver change it fast enough cannot and the amount of alcohol in the blood starts rise. The faster to thev the faster the amount drink, of

alcohol in their blood begins to rise.

There are, of course, individual variations. For instance, smaller people generally have smaller livers that don't work as fast as a larger liver. Therefore it takes their liver a longer time to change the same amount of alcohol. This means that, compared to a large person, the same amount of alcohol when drunk by a small person will produce a higher level of alcohol in their blood.

> People of different sizes process alcohol in their bodies at different rates.



While the liver is "in charge" of the business of breaking down the alcohol, none of this is noticed by the person drinking. What is noticed is the immediate effect of alcohol on the brain. The brain is the organ that enables us to think, to make decisions, and to act. It commands our muscles and controls our movements. All these functions will be affected by alcohol.

The action of alcohol on the brain depends on the level of alcohol in the blood. And as we have seen earlier on, the level of alcohol in the blood depends on both the amount and the type of alcoholic drink consumed, as well as the rate at which the alcoholic drink is consumed.

Generally speaking, the effects of the various levels of alcohol are as follows:

- 1 Low levels of alcohol in the blood(e.g. an average size man drinking 1 to 2 bottles of beer in an hour) The effect of this amount of alcohol is often described as a feeling of wellbeing and relaxation. People often find that they are more bold. talkative, and selfassured. alcohol also The produces the illusion that the body is functioning completely normally, sometimes even better than normally. In fact, this is Even with small not true. amounts of alcohol in the blood, the person's movements less precise and their are reactions slightly slowed. This is what is called the depressant action of alcohol on the brain. Alcohol slows the brain down.
- 2 High levels of alcohol in the blood (3 to 6 bottles of beer in an hour.) When a person drinks this much alcohol all the effects mentioned previously become exaggerated. A person will often act loud, obnoxious or foolish. They may become easily angered and violent, sometimes with their family and friends. They often

forgetful and make poor become judgements. Crimes are often committed by people who have been drinking because they lose for laws and the fear respect of the consequences of their crime. Their reactions are markedly slowed, their speech slurred and their actions clumsy. These people often continue to have the illusion that thev are functioning normally. This now becomes quite dangerous.

The most common example of this danger is when the person who has been drinking attempts to operate a motor vehicle. Thev risks will often take great without even realising it, driving fast and recklessly and often breaking traffic rules. Studies have shown that between 40% and 60% (sometimes more) of all car accidents are caused by people who have been drinking alcohol. Each year thousands innocent people are killed of in these accidents.

In Uganda and in many other countries around the world there are laws against operating any car or truck when a person has been drinking. For instance in Sweden, the police can take your driving permit away if they find you have been drinking and driving. In some parts of the United States you can even be sent to jail for this crime.

3 Very high levels of alcohol

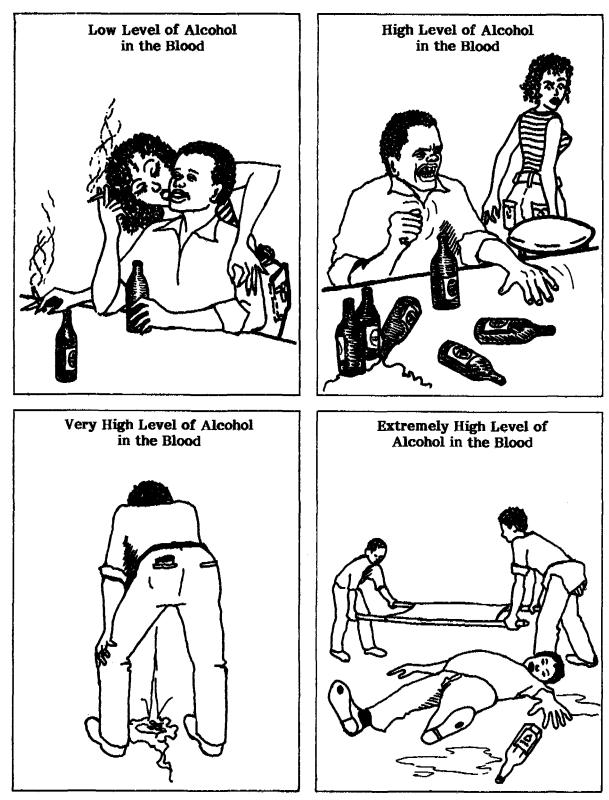
(more than six bottles of beer in an hour.) When people have drunk this much alcohol they often become unable to function at all. If they try to walk, they fall. They are often unable to speak clearly, except for mumbling. They cannot see clearly. Vomiting is common. Usually, the person just sleeps very soundly.

4 Extremely high alcohol levels (for example, after drinking a whole bottle of waragi in a short period of time, the person runs a very high risk of dying. The brain becomes so depressed or slowed that the person stops breathing and then dies.

WHY PEOPLE DRINK AND MYTHS ABOUT ALCOHOL

People drink alcohol for many They drink because they reasons. are happy, they drink because they are sad. They drink because they with friends. they are drink because they are lonely. They drink to their successes and they drink to drown their failures. The young drink to act mature, the old drink to feel young. No matter what the people will find situation. а reason to drink. Some of these reasons are based on very mistaken beliefs about the drug they are using - alcohol. Let us examine some of these myths:

• "Small doses of alcohol improve mental performance". One often hears people say, "Let us have a drink, it will help us to see thing more clearly". This is not true at all. There is a lot of scientific evidence to show that the abilities to concentrate, reason and remember are rapidly diminished or decreased by alcohol.





- "Alcohol makes you forget your troubles" - Although this is true in a way, in the long run it even more causes problems. Drinking large quantities of alcohol can make you forget troubles as long as you keep drinking. But it does not solve problems! In fact, the problems often become worse while the person is drinking.
- "Alcohol is necessary for the growth and functioning of the body" - This is not true. Although the body uses alcohol much like it uses sugar i. e. for energy, there is nothing about alcohol that makes it in any way special or necessary for the bodv. If a person drinks large amounts of alcohol frequently, they will lose their appetite for the other types of food necessary for good nutrition.

"Alcohol quenches the thirst" -In fact it has the opposite effect. Alcohol increases the volume of urine; you urinate more than you drink so that in the end you are thirstier. As you lose water in the urine more vou dehydrated. become This is particularly so with hard liquor.



• "Those who cannot drink alcohol are not strong. Fruit juices and sodas are for 'weaklings'." -This, again, is not true. Great athletes, international champions never drink or drink only very little alcohol with their meals. How can it be said that these champions are not strong because they do not drink?



"Alcohol increases sexual performance" - As Shakespeare. the poet and playwright, rightly said of alcohol and sex, alcohol increases the desire but takes away the performance. It is well known that heavy drinkers sexually become impotent (cannot get an erection) and that their impotence gets better as their alcohol intake is stopped.

ALCOHOLISM - THE EFFECT OF DRINKING A LOT OF ALCOHOL FOR A LONG TIME

Whatever the underlying reason for drinking, one who drinks alcohol daily will eventually notice that one drink is no longer enough to produce the feeling of well-being that they are used to. Over a matter of months to years they will need two, three, or even more drinks to achieve the same effect. This is what is known as tolerance.

As a person develops tolerance to alcohol they will also find that they need to drink just to function normally. Without drinking they will feel anxious, unable to concentrate. and even develop shaking (tremors) of the hands and arms. They will have developed a dependence on alcohol. Their body now needs a large amount of alcohol just to carry on their everyday activities. A person who is dependent on alcohol is called an alcoholic. Alcoholics can have many serious problems, both with their own health as well as their relationships with their family and community.

The chronic use of large quantities of alcohol will have the following harmful effects on the body:

- Liver Disease The most common effect of drinking large quantities of alcohol on the liver is that its cells are slowly killed. The dead liver is slowly replaced by non functioning scar tissue. 0ne of the problems that occurs from having a damaged liver is bleeding from the digestive tract. This can often be fatal.
- Diseases of the Digestive System Large amounts of alcohol irritate the stomach leading to abdominal pains, loss of appetite, nausea and vomiting. The irritation can progress to cause an ulcer, actual wound on the inside an Many of these of the stomach. will bleed, especially ulcers person who also has some in a liver damage as well.

The pancreas, an important organ in the digestive system is also damaged by alcohol. The symptoms of inflammation of the pancreas are intense pain in the abdomen, vomiting, and appetite. If the loss of person does not stop drinking at this point, the illness easily kill them. can



Brain Damage - Earlier, we explained the immediate effects of alcohol on the brain. Τn drinking people who are not regularly, these effects stop after the alcohol has been removed from the blood by the liver. However, in an alcoholic who is drinking daily the brain gradually damaged by the ís constant exposure to alcohol. The most common signs of this are progessive brain damage forgetfulness, an inability to concentrate on a given task, and trouble thinking and speaking clearly. They often become apathetic, losing interest in appearance. their personal hygiene, and relationships with others. They may also become mentally deranged, developing hallucinations, delusions and other mental symptoms.

ALCOHOLICS AND THEIR FAMILIES

Alcoholics are commonly a source of problems for their families. In part fact. of the functional definition of alcoholism is that the person's drinking behavior has a negative effect on their family Here are some relationships. of the ways that a person's abuse of alcohol affects their family:

• Neglect- Alcoholics sooner or later neglect their families. As their lives become dominated by the obsession, "How can I get my next drink of alcohol today?", they lose interest in spending time with their families. They from either away home are else drinking drinking or at home. Sometimes the latter is the worse of the two.



- Child and Spouse Abuse Alcoholics may not only fail to give the necessary emotional support to their families, thev may actually assault them. both verbally and physically. Verv often there is no rationale for attacks. The alcoholic is these making prone to rash and incorrect judgements and then to impulsively and often act violently.
- Loss of Income- As more and more their money is spent of on alcohol, the alcoholics have less and less money to spare for their families. Food, clothes, and shelter all lose their importance compared to alcohol. The problem made even worse if is the alcoholics lose their jobs - a frequent occurence because of an alcoholic's frequent lack of a sense of responsibility.

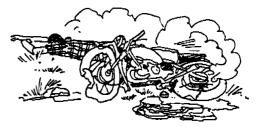
 Problems of the Children - The children of alcoholic parents are more likely than the children of non-alcoholic parents to have problems at school and in the community. Some of these children will commit delinquent acts just to receive the attention they have been denied at home. Children of alcoholic parents run a greater risk than also other children of becoming alcoholics themselves.

ALCOHOLICS AND THE COMMUNITY

Ideally, a community is a group of people living and working to each other's mutual benefit. Alcoholics not only neglect their own welfare but also disrupt the community in which they live. Here are some examples:



- Job Neglect/Unemployment- Because of the effects of alcohol on alcoholics are their brains, often unable to do good work. They make mistakes, have accidents, and are absent more frequently than workers unaffected by alcohol. All of these factors translate into decreased productivity. If they are self employed they will lose money. If they are employed by a company they will often lose their jobs.
- Accidents- Alcoholics are much



more likely than non-alcoholics to be involved in traffic accidents. Obviously, this endangers other motorists and pedestrians well. Αn as intoxicated person driving a car is a real threat to the people of a community.

• Criminal Behaviour- Many criminal acts are commited by people while under the influence of alcohol. This is related to the effect of alcohol in interfering with people's ability to make good decisions. People who are drunk will often not think ahead of the consequences of their actions.

DRINKING AND THE LAW IN UGANDA

There are laws on the statute books which govern the preparation, sale and drinking of alcohol in Uganda. Here are some examples of the major laws:

- All forms of home-distillation are forbidden as well as possession, transport and sale of distilled beverages. One reason for this is that homemade enguli or waragi can be very dangerous if made improperly.
- Bars, where it is allowed to sell alcohol to customers on the premises, are required to maintain certain standards laid down under public health laws. There are also limits as to how late a bar may stay open.
- Off-licence places are allowed to

sell alcoholic drinks but customers are not allowed to drink on or near those premises.

- Persons under the age of 18 are not allowed to drink alcoholic beverages in public places like bars.
- It is also illegal to drive a motor vehicle if your blood alcohol level is 80 or more mg per 100 ml of blood. This is the level of alcohol most people would have in their blood if they drank three beers in an hour.

Unfortunately most of these laws are either not enforced or only enforced half-heartedly or erratically. Thus enguli or waragi continues to be prepared. sold. and drunk openly. Offlicenced places serve alcohol to their customers who then proceed to drink it on the premises at any time during the day and night. Minors can and do drink in public places. Drunken persons drive motor vehicles on the highways with impunity.

This situation is unfortunate but extremely difficult to change. Through these laws, the government is trying to protect people from the dangers of alcohol, both those who drink as well as the innocent bystanders whose rights are jeopardized by the acts of people intoxicated. who are This situation will probably not change until the attitudes of the general population towards drinking change.

OVERCOMING ALCOHOLISM

Alcoholism is a lifelong illness. It cannot be cured, only controlled. With self-determination and the help of others, an alcoholic can stop drinking and

a healthy life-style; resume few alcoholics achieve this. Once people have reached the point where their bodies and minds are dependent on alcohol, thev can never again drink small amounts of alcohol without risking becoming alcohol dependent again.

In order to stop drinking, the alcoholic must make the decision to do so. This is the single most important element of overcoming the addiction. No one else can do this for the alcoholic. No matter how much the alcoholic's family and friends want to change the alcoholic's behavior, their efforts are useless until the affected person decides to seek help. The main thing that family and friends can do is to be supportive of this Here are some good ways decision. of showing the necessary support:

- Talk to alcoholics. Tell them that you are worried about their problem. Typical alcoholics will often deny that they have a problem. Do not let this denial stop your persistence in expressing your concern.
- Encourage other family members and friends to also talk to the affected person. Many of these people may be either afraid, embarassed, or just not know what to say. The more people that confront alcoholics, the more likely they are to stop drinking.
- Refuse to become involved in the alcoholic's drinking behaviour. All drug dependent persons like company. By refusing to drink with or even be with alcoholics when drinking you are removing support for this behavior and giving support to the decision to stop.
- Accept alcoholics as people in spite of their drinking problems.



Once alcoholics have decided to stop drinking, they will often need professional help. They may even have to be hospitalized for а period of time as their bodies withdraw from alcohol. After this initial phase, it is often helpful for alcoholics to see a counselor who is skilled in dealing with the problems of recovery from addiction. Family and friends also need to work hard to encourage and show their to acceptance of recovering alcoholics. This is often difficult since the typical alcoholic has often been most abusive to those very people who must now give the most support.



LIVING WITH THE ALCOHOLIC

As we have mentioned, alcoholism affects the entire family of the person who is drinking. Although not suffering the physical effects of the drug themselves, the spouse, children, relatives, and friends are frequently the victims of the alcoholic's unpredictable and often abusive behaviour. Clearly, the best solution to these problems is for the person to stop drinking. It remains a fact, though, that in spite of everyone's good

intentions, many alcoholics never recover and hence, their families continue to suffer. It must not be forgotten that the family members themselves are often in need of help. The pupils should be encouraged that if one of them personally or one of their friends or relatives are the victim of an alcoholic the best thing to do is to find someone to share their problem with. This can be another family member, friend, teacher, or religious leader. The most important thing is that it is someone that they can trust. Since the pupil will often feel helpless and unable to confront the alcoholic parent, they need someone who understands their problem and somewhere to go if the situation at home becomes too unbearable.

Materials needed for the pupils

- Posters, illustrations or charts on alcoholism from the Health Education Division of the Ministry of Health.
- Diagrams or pictures of accidents arising from drunken driving.

Note to the Teacher

The day or so before this topic is taught, in addition to reading what is contained in this section, teachers should collect the other materials they need to teach the subject. These should include the listed learning aids. When teaching the topic, teachers can use the question-and-answer method at first, to draw out information from the pupils which

they already have, before writing

out a summary for them.

Methods / Activities

GUEST SPEAKERS

Where possible, a Medical Assistant, Nurse or other health personnel can be asked to teach some aspects of this topic, if the teacher prefers it that way. Also, you could ask someone from the police or legal profession to come and discuss the laws relating to drinking in Uganda.

GROUP DISCUSSIONS

- Name different types of alcohol made locally by fermentation and distillation.
- Describe how and when the various types of locally made alcohol are used.
- Find out how much local alcoholic drinks cost. Make up a chart comparing these costs to the costs of nutritionally important foods.
- Make up a true / false quiz for the pupils concerning common myths and misconceptions about alcohol.
- Debate you can use any topic related to alcohol and the problems it brings to the individual, the family and the community. The following are examples of the kinds of motions that can be debated:

- Selling alcohol does more harm than good to the family and the community.
- The government should not concern itself with people's private activities like distilling alcohol.

Let two pupils speak for two minutes each, for and against the motion. Encourage them to work out and carefully consider what they will say beforehand. Let the other pupils also raise points for and against the motion. As chairperson, the teacher can help summarize their points and help them distinguish which points are valid.

MAKING POSTERS

Have pupils make posters about the dangers of alcohol abuse. Use guidelines as shown in activities for the Smoking Chapter.

ROLE PLAY

Assign pupils roles of family members and stage a drama about a family with an alcoholic father, mother or teenager. Show the problems of job or school neglect, self and family neglect, accidents and possibly disease that severe alcoholism can lead to.

Constructive Use of Leisure Time

Primary 6, Term 2

Objectives

Having completed this chapter the pupil should be able to:

- 1 Explain what is meant by leisure time.
- 2 Name ways that leisure time can be spent constructively.

Main ideas for the pupils

- 1 Leisure time is free time that each person has at their disposal to do what they wish.
- 2 Everybody needs leisure time in order to rest their minds or engage themselves in stimulating and enjoyable ways that contribute to balanced mental and physical health.
- 3 If work time is planned well there is a possibility of more leisure time, and if leisure time is planned well it can contribute to the individual's, family's, and community's well being.

Behavioural changes

Pupils should be able to strike a balance between work, rest and leisure and know of ways to enjoy their leisure time.

THE IMPORTANCE OF LEISURE TIME

If the whole day is spent in doing

demanding jobs, household chores or school work, a sense of frustration, boredom and hardship may develop as jobs pile up and only the bare essentials get done each day. Leisure means relaxation; but is not the same as it rest. Leisure time is the time you have to do what is not scheduled; what may be called "private practice". Rest is the time you take off to do nothing. Usually when people are doing leisure work, they tend to be quiet deeply and involved. Sometimes they are misunderstood to be resting. Whereas resting involves sitting or lying down, leisure involve may walking. talking, digging, etc. As the saying goes, "All work and no play makes Jack a dull boy, but all play and no work makes no iack." ("Jack" is a slang word For "money")

The ability to make good use of leisure time can Ъe developed through involvement with activities which encourage thinking and self Time, like money, can discipline. be made to meet needs and desires if its expenditure is planned. The "IF YOU popular slogan; HAVE NOTHING TO DO, DON'T DO IT HERE" illustrates the point. Leisure should not result in idleness and doing nothing. If carefully planned, leisure time should be as active and as enjoyable or even

more valuable than regular working hours.

person should strike a Every balance between work, rest and leisure. Just how much one has for one's each wi11 depend on circumstances. Young people usually have only light demands on their time, although they may take longer to do tasks than the more experienced older people. So younger people should develop a system of work so as to ensure that they will know how to cope with heavier demands of the future.

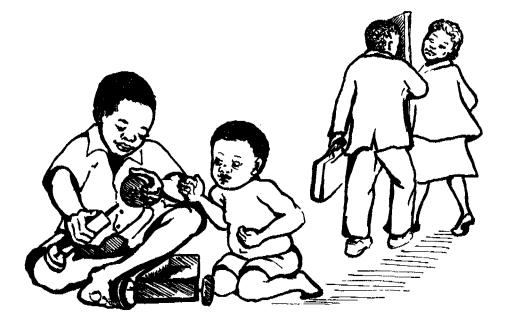
BALANCING LEISURE WITH WORK TIME

Let us take the example of a young growing family. As the children arrive, the housewife's work fload increases. Besides preparing meals, working in the garden or farm and cleaning the house, the wife must look after all aspects of the family's welfare. It takes her 3-4 hours every day to care for a child under one year, and about 2 hours to care for a child of 1-2 years. Her working day is long and tiring.

Older children can be of great assistance to give the mother more leisure time if they trade some of their leisure for work or mix leisure pastimes with work. But for this system to work properly. mother has to plan and the coordinate various activities of the family members. This way, the younger people can spend their leisure helping to run a home in creative and enjoyable ways, such making dolls and toys for the as baby to play with, experimenting in making some dishes etc. The mother can take time off to go to the hair dresser, women's discussion groups or to learn some skills that can help her improve the health of her family.

Everyone needs leisure. Leisure should be both enjoyable and constructive. Here are some of the activities which fall under constructive leisure.

1 Entertaining Christmas cookery,



Birthday, wedding, and other Learning activities parties. for the above activities bring a lot of properly can satisfaction both to the participants and the perfor-And there is never a mers. dull moment. It may еvеп become a profitable hobby if one is good enough to hire out their services.

- 2 Renovation and replacement of broken furniture, furnishings and sewing and embroidery. It can be quite fun to acquire the do-it-yourself skills so that leisure time can be spent in renovations or construction which, in the long term, saves money. "A stitch in time saves nine".
- 3 Redecoration of a house -It may be impossible to give each room enough attention during normal working hours. Leisure hours can be the perfect time to clear up and give special attention to a neglected room; and never know you what unexpected lost treasures may turn up. There is also the thrill of choosing colour schemes for different rooms and the satisfaction of making a house into a home.
- Organise Clubs Everyone can 4 develop interests outside of work and school and find others who have common interests. Pupils can join scouts or guides where leisure time is spent learning useful skills for the future, combined with fun activities. Similarly, pupils can begin their own clubs based on activities such as fishing, sewing, football, agricultural pursuits (raising

chickens, etc.) science, cooking, mechanics, and so forth.



PLANNING WORK TIME TO MAKE MORE LEISURE TIME

- To make the most of leisure time, use the following list:
 - 1 First list everything that has to be done at home, school and/ or work place.
 - 2 Set down activities that must be done at regular times and allow enough time for them. Such jobs are meals, child care, sleeping etc.
 - 3 Arrange the activities in a logical order and estimate the length of time required for each.
 - 4 Alternate difficult jobs with easy ones and do unpleasant jobs before the enjoyable ones.
- 5 Put hardest jobs to be done early in the day and arrange them such that work becomes progressively lighter.
- 6 If there are older children, relatives, long stay visitors or elderly people, decide who is to be responsible for the

various jobs. Involvement of all members in the house ensures that no one gets bored and therefore into mischief. Also, one or two people are not always overworked and therefore fatigued, tensed up, and have no leisure time.

7 Leave some unassigned time in each day's plan. This is called 'catch-up-time' to allow for emergencies and interruptions such as sickness, or unexpected visitors.

Methods / Activities

IMPROVING LEISURE TIME

Get pupils to make a list of their

favourite leisure time activities (hobbies, games). Examine the activities to determine how each helps improve the life of the individual (mental stimulation. relaxation, leadership or other social skills, improved motor skills, exercise, educational, self discipline, money making). Does the activity help the family? What activity best promotes good habits? You may wish to add new leisure activities to the pupils' list by teaching them new games, (e.g. Immunisation Snakes and Ladders) new skills (how to make mouse traps, household utensils and furniture (see Primary 5, Term 1, Housing and Health) and how to bake or cook simple things such as maize meal scones, cassava cakes, and millet biscuits).

Foreign Bodies In the Eye, Ear, Nose and Throat

Primary 6, Term 2

Objectives

Having completed this chapter the pupils should be able to:

- 1 Describe what first aid is.
- 2 Describe first aid for foreign bodies in the eye, nose, ear, and throat.

Main ideas for the pupils

- 1 First aid means those actions that you can take immediately on finding some ill or injured.
- 2 First aid does not involve the use of any special equipment or drugs.
- 3 First aid for any serious problem always involves seeking the help of someone experienced in health care.
- 4 The technique of abdominal compression can save the life of a person who is choking.

Behavioural changes

Students should be able to demonstrate the first aid methods in this section.

Note to the Teacher

This section has been intentionally simplified to include only those types of first aid that the authors consider appropriate for pupils at this level. The emphasis should be on using only materials that are very readily available i.e. the rescuer's own two hands, mouth, and clothes. Drugs are not mentioned since they are often not readily available and anyone requiring drugs should be evaluated by a health care worker.

FOREIGN BODIES IN THE EYE

A foreign body means "something that doesn't belong there". Foreign bodies in the eye are a common problem for people of all ages. Blowing dirt or dust and sometimes small insects are common foreign bodies in the eye. First aid is to wash the eye with plenty of clean water if it is available. If the foreign body remains in the eye, try to gently wipe it away with the corner of a soft piece of cloth. Never use anything with sharp edges like a leaf or piece of paper to touch the eye with. If the particle remains in the eye after these efforts it is best to seek the help of an adult or a health worker.

FOREIGN BODIES IN THE EAR

AND NOSE

Getting foreign bodies in the ears and nose, is mainly a problem

pre-school children. of These accidents are often caused by seeds, stones, insects, and for example groundnuts and peas. Since it is very easy to either push the foreign body deeper or to injure the child's nose or ear it is best to let a trained health worker handle these problems.

FOREIGN BODIES IN THE THROAT

Foreign bodies in the throat are a common and potentially lifethreatening problem. A large piece of food is the most common thing to get stuck in the throat but in young children it can be almost anything they find lying on the ground. When something gets stuck



in a person's throat it can block the air passage to their lungs. This is called choking. Like drowning, if a person is unable to breathe, he or she can die within minutes.

If you see a person choking, the first thing to try is several sharp on the person's back. blows If this does not work and one is still choking, you should stand behind the person and wrap your arms around the person's waist. Put your fist against the person's belly above the navel and below the ribs. Press into the belly with a sudden strong, upward jerk. This forces the air from the lungs and should expel whatever is blocking the throat. Repeat this several times if it is necessary.

If the choking victim is the SAME SIZE as you...



If the person is bigger than you or is already unconscious: lay the person on his/her back, sit over the person as shown in the picture with the heel of your lower hand on the belly between the navel and ribs. Make a quick strong upward

If the choking victim is BIGGER than you or UNCONCIOUS...

push up with the heels of your hands.

If the choking victim is SMALLER than you...





push. Repeat several times if necessary. If the person still cannot breathe, try mouth-to-mouth breathing. (See Unit 3 FIRST AID, Primary 7, Term 2, for an explanation of mouth-to-mouth breathing).

Methods / Activities

FIRST AID ROLE PLAY

One of the best ways to teach first aid is by having the pupils playact the types of accidents you are discussing and then demonstrate the appropriate first aid. After each small play you can ask the class to evaluate the "rescuer's" performance and to ask any questions they may have.

HEALTH PROFESSIONAL VISITORS

If they are available, it can be interesting and helpful to have nurses, primary health care workers, or Red Cross teachers come in to teach some of this material. In addition to learning from their expertise, it is a good chance for the students to familiarize themselves with these people in their community.

Diseases Associated With Water Primary 6, Term 3

Objectives

Having completed this chapter the pupils should be able to:

- 1 Describe the diseases associated with inadequate water supply (diarrhoea, dysentery, lice and scables) and ways to prevent these diseases.
- 2 Describe the diseases caused by drinking water contaminated by germs (typhoid, cholera, and hepatitis) and ways to prevent these diseases.
- 3 Describe the diseases carried by vectors which, at some stage, develop or live in water (malaria, bilharzia, river blindness) and some ways to prevent these diseases.

Main ideas for the pupils

- 1 Diseases associated with water can be caused by inadequate water supplies, by drinking contaminated water or by vectors which at some stage develop, live or get their food from water.
- 2 All of the diseases associated with water can be prevented through adequate supplies of clean water, improved personal, food and environmental hygiene

and early treatment of persons with the disease.

Behavioural changes

- 1 To appreciate the importance of clean and adequate water in the prevention of certain diseases and to prevent these problems through their own behaviour.
- 2 To appreciate the association of certain disease transmitting vectors with water, and to stop these vectors in their own environments whenever possible.

THE IMPORTANCE OF WATER

Water is essential to life. It is part of every cell in the body of every living thing. It forms a large part of body fluids such as blood, sweat, tears, urine, etc. The sensation of thirst tells us that we should drink more water in order to replenish our body's fluids. Water is also necessary for cooking food and washing our bodies, clothes, utensils, houses, lives are therefore etc. Our completely dependant, on water. Nevertheless, water or the lack of it can be a source of disease.

DISEASES ASSOCIATED WITH INADEQUATE WATER SUPPLY

Whenever water is in short supply

people tend to restrict its use to the most essential functions of cooking and drinking. Little or none is used to maintain personal or environmental hygiene. Germs and parasites remain and multiply on the body, clothes and immediate environment of the person. Once the germs have become plentiful, thev are easily transferred by dirty fingers, flies or utensils to food or drink. Ingestion of contaminated food or drink is known to cause certain types of diseases or problems. Some of the most common are:

1 Diarrhoea

Diarrhoea means the passage of frequent, loose or watery stools (faeces). It may be associated with vomiting, abdominal pain, and a low fever. It is usually caused by the types of germs called viruses. If fluid and mineral salts which the are lost in the diarrhoeal stools are not replaced, the person becomes dehydrated. Severe dehydration can lead to unconsciousness and eventually death. Most types of diarrhoea will eventually stop without treatment. However, it is very important that a person with diarrhoea drink extra fluids in order to prevent dehydration.

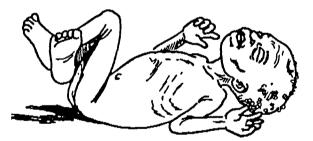


(See Primary Five, Term 1, Unit 4 Sanitation - "Diarrhoea and Dehydration" for a more complete description).

2 Dysentery

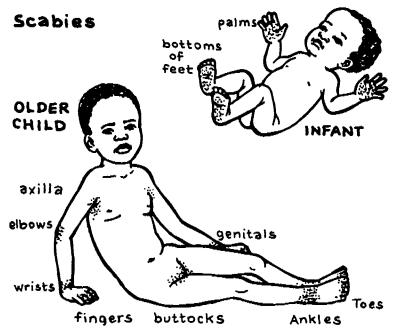
Dysentery means bloody diarrhoea. The germs which cause the disease different from those are causing diarrhoea but the mode of common spread of the disease is similar. The person gets abdominal pain associated with painful defecation of loose, bloody stool. There may fever, vomiting and headache. be Fluids should be given by mouth to prevent dehydration, but the person dysentery should seek the with assistance of a health worker for specific treatment.

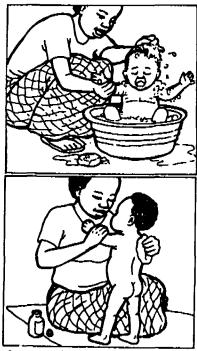
After beginning ORS, seek the assistance of a health worker to treat dysentery.



3 Lice and Scabies

Lack of personal hygiene predisposes people to infection bv lice and scabies. Scabies is caused by a tiny itch-mite which passes from affected persons or their clothes or bedding directly to a healthy person. The mite burrows in the skin especially the wrists, between fingers, the elbows. armpits, genitals, ankles and toes





in adults and older children and especially the palms and bottoms of the feet in infants. It causes skin rash with intense itching of the body. Scratching causes breaks in the skin which are invaded by germs and can become infected. Scabies is easily treated bv application of benzyl benzoate emulsion on the body after thorough scrubbing. All affected members of the family should be treated at the same time. Clothes and beddings be washed, should dried and ironed.

DISEASES CAUSED BY DRINKING WATER CONTAMINATED BY GERMS

Germs can be introduced into drinking water in various ways and sites. Surface water, the most commonly used source of water, is also the most frequently contaminated by people and animals, particularly by their faeces. Ordinary activities like bathing,

washing clothes and dirty utensils. playing. grazing or watering animals can easily introduce germs into ponds, lakes, shallow springs and wells. streams and rivers. Underground water can also be contaminated, for example at an unprotected spring or well. Even piped water can be contaminated by germs from leaking sewage pipes. People, animals and use of dirty containers can also contaminate rain water. Water may also be contaminated in the home by dirty hands. utensils or animals. Drinking contaminated water can cause certain types of disease. Some of the most common are:

1 Typhoid Fever

Drinking of water containing typhoid bacteria causes typhoid fever, a very common and serious disease. The bacteria may also contaminate certain drinks such as fruit juices, homemade alcoholic

and foods which are beverages, prepared and sold in unhygienic A surroundings. person with typhoid fever has persistent fever, headache. abdominal pain. and general weakness. The disease may cause severe complications like bleeding from the intestine. Α person with typhoid fever passes typhoid bacteria in their stool and urine and can contaminate food. drink or water sources and thus infect other people. Typhoid fever be treated by a health should who will give worker specific treatment.

2 Cholera

Cholera is a life-threatening disease caused by drinking water contaminated by cholera bacteria. The infected person suddenly starts having profuse diarrhoea associated with excessive vomiting. The loss of fluid is verv rapid and weakness, unconsciousness and death can occur in a matter of hours. Even though there is vomiting, fluids must be given by mouth while help is sought from a health worker.



Treatment includes provision of of large amounts fluids and the specific against treatment cholera Infected bacteria. persons the bacteria in pass their stool and can contaminate drink water food. or sources and thus infect other people.

3 Hepatitis

Hepatitis is an infection of the liver. The disease is often caused by drinking water containing the hepatitis germ which is a virus. Infected persons lose their appetite and feel weak. Thev generally have yellow eyes, dark urine and abdominal pain. In general persons are very sick for two weeks and remain weak for one months to three more before improving. A few can get severe complications such as bleeding and unconsciousness. Infected persons pass the hepatitis virus in their stool and urine and can contaminate water sources or food that they are preparing and thus infect other people.

PREVENTION OF DISEASES ASSOCIATED WITH INADEQUATE OR CONTAMINATED WATER

The diseases described above which are caused by lack or contamination of water can largely be prevented by the following measures -

- Provision of clean and adequate water supply.
- Good personal hygiene, especially washing ones hands before eating.
- Proper disposal of rubbish and use of latrines.
- Good domestic hygiene such as frequent washing of clothes and bed sheets.
- Good food hygiene, especially washing ones hands and preparing food in a clean place.

(For more details of the above see Primary 7, Term 1, Unit 3 Air and Water - "Water Sources and Protection".)

DISEASES CAUSED BY VECTORS ASSOCIATED WITH WATER

Some diseases can be caused by vectors (carriers of disease) which at some stage develop or live or obtain their food from water.

1 Malaria

Malaria is a disease which is caused by a parasite. Technically parasites called the are plasmodia. but they are commonly just called malarial parasites. parasite lives in the human The red blood cells where its presence causes the disease. The parasite is spread from human to human by a certain type of mosquito. This mosquito is found in most of the tropical countries of the world including most parts of Uganda. of the Much of the life cycle mosquito is dependent on having nearby source of stagnant or slow moving water.

Mosquitoes reproduce by laying eggs which float in water. When eggs hatch they the produce a a very sma11 worm-like larva. in the that must live creature The water to survive. larvae eventually develop into adult mosquitoes which are capable of biting humans. When the mosquitoes bite. they suck a small amount of blood from their victims. If the victims have malarial parasites in their blood, the mosquitoes can pass them on to the next people that they bite.

When people are infected by the malarial parasites from mosquito bites. the parasites quickly multiply in their blood cells The most common symptoms of malarial are high fevers infection and chills which come and go. Other



bites man with malaria



healthy mosquito sucks in parasites

healthy person. bitten by malarial mosquito gets malaria

malaria parasite develops inside mosquito

include headache and symptoms general weakness. Sometimes, very serious infections will affect the brain causing convulsions (fits), coma (loss of consciousness), and even death. If a person has a high fever that comes and goes it is important that the person be treated by a health worker. Early treatment will usually prevent the serious complications of malaria.

Prevention of malaria is accomplished through the following methods:

- Use of insecticides to kill mosquitoes in both adult and larval stages.
- Use of personal protection methods such as screens and nets.
- Draining and filling of swamps which are common breeding places for mosquitoes.
- Use of drugs to treat people who are currently infected.
- Use of drugs to prevent infection in certain high risk groups such as pregnant women.

2 Bilharzia (Schistosomiasis)

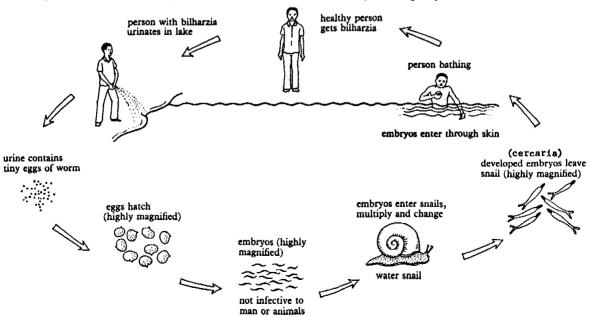
Bilharzia is an infection caused by parasite called a schistosome. a It is a worm that lives in the human intestine or bladder (depending on the species.) Ιn order to complete its life-cycle. the schistosome must go through a developmental stage outside the human body. During this stage it must live in the body of certain aquatic snails. These snails are commonly found in many lakes and slow-moving rivers in temperate climates around the world. In Uganda, manv lakes and the Nile river harbor the snails and so supply the proper condition for continuation of the infection.

Passage of bilharzia from human to human begins with the eggs which are laid by the adult worm inside the human intestine or bladder. When urine or stool containing eggs is passed into water where snails are present, the eggs hatch into embryos that then enter the snails. The parasites develop inside the snail until they emerge in a form called a cercaria. The cercaria is capable of penetrating the skin of humans who are standing in the water. Once they are inside the body, the cercaria migrate to the bladder or intestine of the newly infected person.

People become ill from bilharzia because the eggs which are laid by the adult worms can cause bleeding and inflammation of the intestine or the bladder. This is usually noticed by the person as either cramps and bloody diarrhoea or as painful urination with blood in the urine.

Prevention of bilharzia is accomplished by three methods:

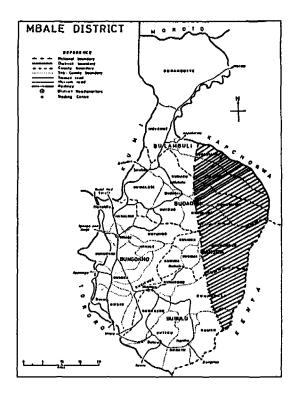
- Education of people to stop defecating and urinating in lakes and rivers.
- Treatment of those people who already have the parasite in their bodies.
- Use of chemicals to kill snails in those areas where people work, bathe, and play in the water.



3 River Blindness (Onchocerciasis)

is an infection caused by a This parasite called Onchocerca volvulus which is transmitted from human to human by the biting Simulium fly also known as the blackfly or Jinja fly. Unlike mosquitoes, this fly needs fast moving streams in which to lay their eggs. The disease is common in tropical Africa and South In Uganda, it is mainly America. found along fast flowing rivers on the slopes of Nkokonjeru in Mbale District.

The female Simulium flies lay eggs in rapidly running their The eggs attach to rocks. water. and other objects by a grass, gelatinous fluid. The eggs hatch into larvae which attach themselves to stones, crabs, prawns, or mayfly nymphs. In 2 to 3 weeks the larvae develop into the adult Simulium flies.





When the adult flies bite humans who are already infected with the onchocerca parasite, they can carry some of the parasite larvae with them and introduce the larvae into the body of the next person they bite. In the newly infected person the parasite larvae grow into adult worms which form bumps on the skin, particularly on the hips and legs. The adult worms then produce more larvae. The larvae live under the skin causing skin rashes and severe itching. Since they are close to the surface of the skin, the larvae can be picked up by another fly and spread to other people. The larvae may also spread to the eyes and lead to blindness, hence the common name "river blindness".

Prevention of onchocerciasis is accomplished through two main strategies:

- Vector control methods using insecticides against the Jinja fly or its larvae.
- Treatment of affected persons in order to limit the spread of the disease.

Materials needed for the pupils

- School Health Kit on "Water and Sanitation" available through the Ministry of Education.
- Charts on the life cycles of water associated vectors.
- School Health Kit on "Diarrhoea and Dehydration".

Methods / Activities

GROUP DISCUSSIONS

Lead pupils in discussions regarding water related diseases. Do any of the diseases occur in your community? Have any pupils personally suffered from malaria, diarrhoea or other water related What were the symptoms diseases? and how did they feel? Did they take any medicine? Did they see a How many of their health worker? family members or friends also got the disease? How could the disease have spread? Did one person infect What can they do in the other? their own homes and around the school to prevent these diseases?

DIRTY WATER GAME

Arrange the pupils in a circle and have ready a small basin of water. Give the water basin to the



first pupil and have the pupil wash his hands. Pupil one then passes the basin to pupil two who washes her hands in the same water. The basin is passed around the circle of pupils and each of the pupils in turn wash their hands. When the basin reaches the last pupil in the circle, ask him to drink the water! The pupils should realise that the water is now very dirty. (You should not. of course actually allow the last pupil to drink the water.) Lead a discussion about the need to keep drinking water Water which is used for clean. ourselves and our clothes washing should be kept separate from drinking water.

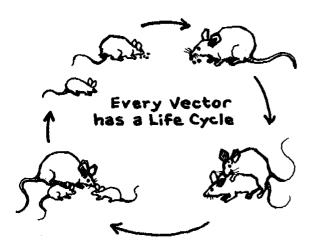
Vector Control

Primary 6, Term 4

Note to the Teacher

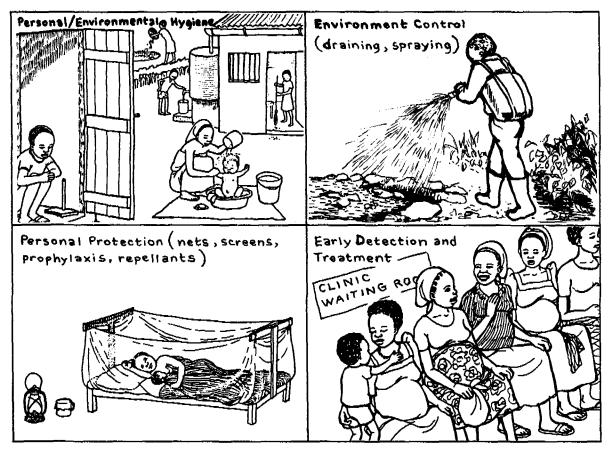
Information about vectors to be studied in this term can be found in various chapters of this Teacher's Guide. The main ideas to be taught are that:

- 1 A vector is an animal or insect which carries disease from one person to another
- 2 Every vector has a life cycle in which it is born, eats, develops, matures, mates and reproduces itself. If we break any part of the vector's life cycle by destroying the vector, the place where it lives, its food or its young, we can stop the disease the vector carries.



Explain the above to pupils, then extract information about the vectors from other resources you may have, and from the following chapters:

- 1 Mosquitoes
 - Unit 3 AIR AND WATER, P6/T3 "Diseases Associated with Water"
 - Unit 4 SANITATION, P5/T1 "Housing and Health"
- 2 Common Housefly
 - Unit 4 SANITATION, P5/T1 "Diarrhoea and Dehydration"
 - Unit 4 SANITATION, P5/T1 "Housing and Health"
 - Unit 4 SANITATION, P7/T1 "Latrines and Toilets"
 - Unit 6 COMMON DISEASES, P6/T3 "Eye Diseases"
- 3 Tse Tse Fly
 - Unit 4 SANITATION, P5/T1 "Housing and Health"
- 4 Bilharzia Snails
 - Unit 3 AIR AND WATER, P6/T3 "Diseases Associated with Water"
 - Unit 3 AIR AND WATER, P7/T1 "Water Sources and Protection"
- 5 Lice and Scabies
 - Unit 3 AIR AND WATER, P6/T3 "Diseases Associated with Water"
 - Unit 3 AIR AND WATER, P7/T1 Water Sources and Protection"
- 6 <u>Simulium Fly</u> (Black Fly, Jinja Fly)
 - Unit 3 AIR AND WATER, P6/T3 "Diseases Associated with Water"



Some Methods of Vector Control

Bacteria and Viruses

Primary 6, Term 3

Objectives

Having completed this chapter the pupil should be able to :

- 1 Define what bacteria are.
- 2 Explain two ways in which bacteria are useful to humans.
- 3 Define what an infection is.
- 4 List two places where it is common to find disease causing bacteria and viruses.
- 5 List two situations where the body is more vulnerable to infection by bacteria or viruses.
- 6 List four of the simple things we can do to help stop the spread of bacterial and viral diseases.

Main ideas for the pupils

- 1 Bacteria are tiny, one-celled organisms that are present almost everywhere.
- 2 Some bacteria are very useful to humans e.g. - digestion, rotting, and nitrogen fixation.
- 3 Some bacteria are capable of making humans ill. This process is called infection.
- 4 Wounds and malnutrition are two common ways in which the body is more vulnerable to infection.
- 5 There are simple methods which should become a part of

our daily lives, which help to avoid bacterial and viral illnesses.

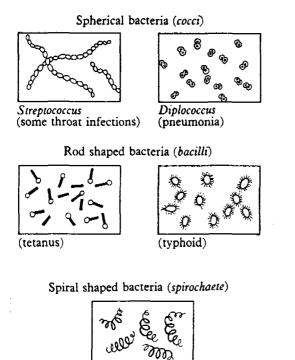
Behavioural changes

1 To encourage the pupils to incorporate simple methods of preventing illness into their daily lives.

BACTERIA

Bacteria are one type of very tiny, one-celled organisms that can only be seen with the help of a microscope. There are thousands of different types of bacteria. They come in different shapes and sizes. Some are shaped like a ball, some are rod-shaped, some form chains, others form clusters.

Like all living organisms, they need food, water, and a warm place They also form waste to grow. products. Bacteria are found animals almost everywhere: on (including humans), on plants, in the soil, in polluted water, and even floating in the air. Bacteria reproduce by division. When it has adequate nourishment and the proper temperature, the bacterium is able to divide in half creating two "daughter cells". Soon, these cells are also able to replicate if given the proper enviroment.



(syphilis)

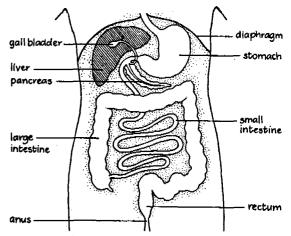
THE WORK OF LOUIS PASTEUR

Bacteria are extremely important organisms that play both helpful and harmful roles in the life of planet. this Nothing was understood about how bacteria functioned until the mid-nineteenth century when a French scientist named Louis Pasteur made some discoveries. important Pasteur worked for a company that made wine. He was trying to figure out what made some bottles of wine turn sour while others remained tasting good. He noticed that if good wine was immediately put into clean bottles and then tightly covered, it would not turn sour. However, if wine was left standing in the open air or if it was put in that weren't completely bottles clean, then it would usually turn

Using a microscope, Pasteur sour. there were that bacteria Saw growing in the wine that had turned sour, while in the good wine he saw nothing. From his experiment, he made several important observations: (1) good wine does not go bad by itself, (2) the bacteria in the soured wine must have come from the air and the dirty bottles, and bacteria (3) the were doing something to the wine to make it sour. Although other people hađ seen bacteria before, Pasteur was the first to realize their role in the spoiling of foods and drinks.

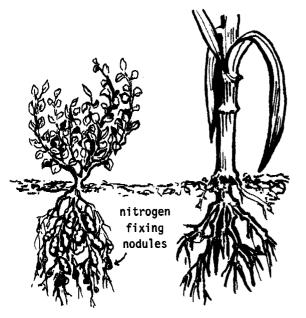
HELPFUL BACTERIA

Since Pasteur first discovered that bacteria caused food to spoil, we have learned that this process is actually very helpful and necessary to plants and animals. Here are some examples of the ways that bacteria are helpful:



• Digestion - The intestines of all animals (including humans) are full of many different types of These bacteria play an bacteria. important role in helping break down the food so that the nutrients can be used bv the body.

- Rotting When garbage of any kind is left out it gradually rots, loses its form, and becomes a part of the soil. This is also what happens to human wastes in a latrine. The process of rotting is the result of billions of bacteria digesting the garbage sewage. The nutrients and released by the bacteria can then be used by new plants growing in that soil.
- Nitrogen fixation Special bacteria live in nodules or bumps on the roots of plants called legumes (peas and beans). These bacteria are called nitrogen fixing bacteria because they can take nitrogen gas from the air form or "fix" it into and chemicals called nitrates. These nitrates are important for the growth of the plants. When the legumes die, these chemicals are left in the ground and are useful to the growth of other plants such as maize and potatoes which are unable to use the nitrogen from the air.



HARMFUL BACTERIA/THE WORK OF ROBERT KOCH

While some kinds of bacteria can be helpful, there are many types that can make humans 111. Harmful bacteria are also called germs. bacteria enter When harmful the body they can damage tissues of the body both directly and by their This is called an toxic wastes. infection. Some infections affect the whole body while others may affect only a certain part of the body.

For a number of years after Pasteur's work there were still many people who didn't believe that these invisible organisms called bacteria could actually cause disease. The work of the German scientist, Robert Koch, in 1876 offered very convincing evidence that this was, in fact, true.



Koch was studying anthrax. а disease that was killing many sheep in his country. Koch found that, by examining the blood of the dead he could always find the sheep, same type of bacteria present. Next, he took some of the blood and it into some tried injecting healthy mice. He found that the mice soon died of anthrax. When he examined the blood of the dead the bacteria were always mice. in great numbers. He there repeated the experiment over and over. The blood from a sick or dead mouse would always cause



Healthy mice injected with blood from a mouse infected with anthrax bacteria will develop anthrax.



when injected disease into а healthy mouse. Just to make sure that it wasn't something else in the blood that was killing the mice, he tried injecting the blood from healthy mice into other They stayed healthy. healthy mice. Through his experiments, Koch convinced most doctors and scientists that bacteria were responsible for causing many serious diseases. Koch is also credited with the discovery of the bacteria that causes tuberculosis.

VIRUSES

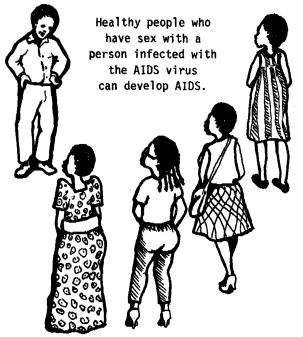
Viruses are another type of germ that are so small that they can't be seen even with a microscope. A million viruses could fit in one A virus is capable of bacterium. doing only two things: invading the living cells of animals and plants, once it is in the cell, and, multiplying to form more viruses. Once they are inside a cell. viruses can have many different effects. One important effect is that they can kill or damage the cell. When this happens to many cells in a human's body, it is also called an infection.

THE AIDS VIRUS

A virus that we all should know about is the virus that causes AIDS (sometimes known as "slim disease" in Uganda.) This virus attacks a very important part of our bodies the white blood cells. These cells are necessary to our bodies because help they fight many other infections. When the white blood cells are damaged by the AIDS virus, they no longer do a good job of defending the body and other diseases are able to attack the body. Frequently, these "secondary infections" (the second disease after AIDS first attacks) are fatal.

There are two factors that are causing this disease to spread very rapidly:

• The virus often hides in a person's body for many months to years before it causes any symptoms. During this time the infected person can spread it to others.



• The main way that the AIDS virus is spread from person to person is by sexual intercourse. Since there are not yet any immunizations against it nor any drugs yet available to treat this disease, the best way to avoid its often fatal consequences is to have only one lifelong sexual partner. (For more information on AIDS see Primary 7, Term 2, "Sexually Transmitted Diseases").

WHERE BACTERIA AND VIRUSES ARE FOUND

Although bacteria and viruses are found almost everywhere, there are certain places where we are most likely to find the kinds of germs that make humans sick:

• In human and animal faeces and water contaminated by them. Many of the germs that cause vomiting and diarrhoea are found in latrines and in water sources that have been polluted by people or animals defecating in or near them. Other important diseases transmitted through faeces include typhoid and polio.



• Around people who are already <u>ill</u>. The mucous, blood, pus, and urine of ill people often contains the harmful bacteria or viruses that are making them ill. Common diseases where this is true are tuberculosis, whooping cough, hepatitis, and most skin infections.

INCREASED RISK FOR ILLNESS

There are also certain situations where the human body is more vulnerable to attack by bacteria:



- <u>Malnutrition</u>. Without adequate nutrition, the body is weakened and is less able to defend itself against infection. Two illnesses that are especially severe in a malnourished child are measles and tuberculosis.
- Wounds. Usually the skin acts as a barrier to keep harmful bacteria out of the body. When the skin is damaged through cuts or burns it allows germs to get in and cause an infection. One serious illness that can get into bodies through wounds is tetanus.

GOOD HEALTH HABITS

There are a number of simple things we can do in our everyday lives to prevent the spread of disease causing bacteria and viruses. By learning these habits we can reduce the chance of getting ill for both ourselves and for others.

Good Nutrition

A body that has enough of the right types of food is less likely to get sick. Also, if a person does get sick, they are more likely to get well sooner and avoid serious complications if they are adequately nourished. (See Unit 2 - Food and Nutrition, Primary 6, Term 1)

Clean Water

Water is capable of carrying many different disease causing bacteria and viruses, including polio, typhoid, cholera, and many others that cause diarrhoea. The two most important ways of preventing these diseases are: Always use a latrine in which to defecate. This is especially important when a person has diarrhoea since the germs that cause this disease are present in the person's faeces. If the person defecates in or near а of water the germs source can spread to anyone drinking that water and cause the disease in them.

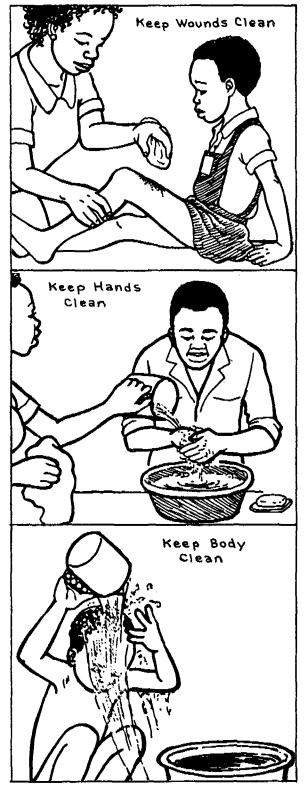


• Take water from a protected source (such as a protected spring or borehole) but if this is not available. drink only water that has been boiled first. Since many people do not build and use latrines, unprotected sources of water including lakes, streams, springs, and wells can be contaminated by bacteria and viruses. Boiling will k111 almost all types of disease causing germs in water. Protection of water sources will prevent the spread of these germs in the first place. (See "Water Sources and Protection", Primary 7, Term 1).

Personal Hygiene

Another way that many germs are spread is by our hands. Every day we touch many things that may have germs on them, including other people. Since we also use our hands to eat, it easy for these germs to get into our bodies and make us sick. The simple act of washing our hands before preparing or eating food can help wash off any bacteria and reduce our chances of getting ill.

In addition to washing our hands, it is important to keep our entire body clean. This can reduce the chance of getting certain infections of the skin. This is especially important if we get any type of wound. All wounds should be washed with soap and clean water at least twice a day (and even more often if they become dirty.) This will help the wound heal more quickly by preventing infection of wound. (See "Diseases the Associated with Water", Primary 6 Term 3).



Methods/Activites

EXAMINING BACTERIA

Ideally, it is best to have a microscope to be able to actually show the pupils what bacteria look like. However, realizing that many schools may not have this piece of equipment, you will have to illustrate the organisms with pictures on the board as well as by demonstrating their effects and where they live. If possible, you should try to dig up a legume in order to demonstrate the root nodules.

PASTEUR'S EXPERIMENT

Supplies: • 1 liter of meat broth

- 2 unwashed, clear glass bottles (at least one must have a screw top.)
- 1 pot (large enough to hold one of the bottles.)

• 1 parrafin or charcoal stove.

Pour the meat broth into the two unwashed clear glass bottles. Loosely place the cap over the opening of one of the bottles and place that bottle upright in a DOT of water so that it is 3/4 submerged. Then boil the water in the pot until the liquid in the bottle is also boiling. Remove the bottle and let it cool with the cap still loosely in place. When it has cooled, tighten the cap. Leave the other bottle open. Keep both bottles in the classroom for several days and then on the second or third day pour out the liquid into two cups and let the pupils examine and smell them. Discuss what you would see if you could examine the fluid under а microscope. (Note: If by chance the contents of the open bottle have not become quite rotten by the second day, add a small pinch of soil and re-examine the next day).

Unit 6 COMMON DISEASES

Eyes and Eye Diseases

Primary 6, Term 3

Objectives

Having completed this chapter the pupils should be able to:

- 1 Identify the major parts of the eye and have a basic idea of their functions.
- 2 Describe two common eye infections, conjunctivitis (pink eye) and trachoma.
- 3 Explain basic hygiene for the eyes including simple removal of foreign bodies.

Main ideas for the pupils

- 1 The important parts of the eye are the eyelid, cornea, iris, lens, and retina.
- 2 Conjunctivitis or "pink eye" is a common infection of the eye caused by bacteria or viruses.
- 3 Trachoma is a serious infection of the eye which can lead to blindness if not treated properly.
- 4 Good care of the eye can help prevent these illnesses and visiting the health worker can help prevent blindness if eye problems persist.

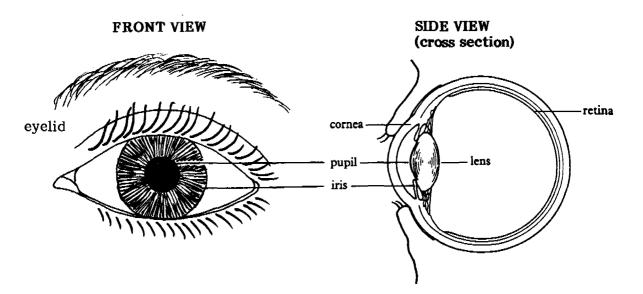
Behavioural changes

To encourage the pupils to practice good care of their eyes.

THE EYE

The eye is a complex organ that enables us to see. The eye receives and focuses the light rays that enter it and translates them into nerve signals that we interpret as sight. The important parts of the eye are the:

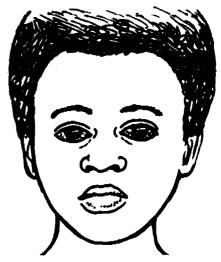
- Eyelid The thin covering of skin which can be closed to cover and protect the eye.
- Cornea The clear, curved tissue which protects the internal parts of the eye.
- <u>Iris</u> The round, coloured part of the eye. In the middle of the iris is an opening called the pupil. The iris is actually a
- special muscle that automatically opens and closes to regulate the amount of light which is allowed to enter the eye through the pupil.
- Lens This clear, oval-shaped tissue lays behind the iris. With the help of special muscles inside the eye, it can change shape in order to focus the eye on things that are near or far from the eye.
- Retina This is a special type of nerve tissue located in the back of the eye. It converts the light into nerve signals that are interpreted by the brain as the things we see.



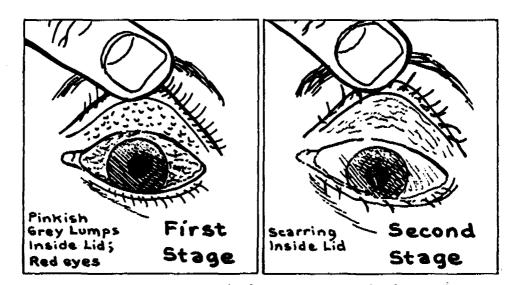
EYE DISEASES

A common disease of the eye is called conjunctivitis, often known as "pink eye". Either bacteria or viruses cause this infection of the outer surface of the eye and the lining of the eyelid. The white part of the eye becomes pinkishred and sometimes the eyelid is slightly swollen or closed. There may be a slight itching sensation noticed and often there are small amounts of pus that often cause the eyelids to be stuck shut in the The best home treatment morning. for this condition is to moisten a clean cloth with warm water and apply this to the eye four or more If the redness and times a day. swelling last for more than 3 or 4 is getting worse, or if the days. become painful the person eyes should see a health worker to determine what further treament may be necessary.

A potentially serious disease of the eye is called trachoma. This is a disease caused by a small organism called <u>Chlamydia</u>. It is most common in those areas where water is scarce and people are often unable to wash dust and dirt their eves hands. from and Trachoma begins with symptoms that are identical to conjunctivitis mild redness and itching. However, if it is not recognized and treated correctly, these symptoms wi11 continue for months. If this condition is allowed to 80 untreated, it will eventually cause scarring and blindness. Any eye that remains red for more than a month must be evaluated for possibility of this disease.



Trachoma is a disease which progresses for months and leads to blindness.



EYE CARE

are used in almost Our eyes everything we do during the day. Therefore it is very important to take good care of them. Fortunately, eyes have some clever ways of taking care of themselves. The eyebrows and eyelashes help keep dust from falling into the A constant supply of tears eve. lubricates and protects the delicate surface of the eve. By blinking our eyelids, (which is it without thinking about done hundreds of times a day) the surface of the cornea is constantly being washed clean. In order to the eve from becoming help infected, it is also important to wash the outside of the lid and the skin around it daily.

A common problem is when a person gets a foreign body in their eye; for instance a speck of dust, wood, or even small insects. Some of these can be easily removed by using the corner of a piece of clean, soft cloth. After carefully looking in the person's eye to locate the foreign body, gently wipe the particle away with the cloth. Do not touch the surface of the eye with your finger tip or any other rough material since it is very easy to scratch the surface of the cornea. If the particle does not come out easily or if the person has continued pain in the eye after removal of the particle, they must be seen by a health worker.



Methods / Activities

THE EYE "MATCHING GAME"

Draw a diagram of an eye on the board and then list the names of the different parts on the other side. Make a "matching game" by having the students try to correctly different name the parts of the eye. You could also have a third column containing the functions of the different parts which the students would then have to match with the names of the parts.

OBSERVING LIGHT REACTION

Have the pupils in class observe the reaction of the pupil in the eye to bright light. On a sunny day have the pupils go outside in pairs. Have one pupil cover both eyes with his or her hands for about thirty seconds then suddenly remove the hands. (Note: Warn them not to look directly at the sun since this bright light can damage the eye.) Have the pupils describe what they see.

THE BLINDFOLD WALK

To illustrate how important our eyes are and how important it is to take good care of them do а "blindfold walk". In pairs have one of the pupils blindfold the other and then lead them around the school. Reverse the roles. Have the pupils describe what it is like to be "blind".

EYE ANATOMY

Obtain some cow's or goat's eyes from the local butcher. If you carefully cut them open you can have a "live" demonstration of the anatomy.

Unit 6 COMMON DISEASES

Ears and Ear Diseases

Primary 6, Term 3

Objectives

After reading this chapter the pupils should be able to:

- 1 Identify the major parts of the ear and have a basic idea of their functions.
- 2 Describe the two common types of disease that occur in the ear.
- 3 Explain the principles of safe ear care.

Main ideas for the pupils

- 1 The ear is the organ which enables us to hear. It is divided into three parts: the outer, middle, and inner ear.
- 2 Outer ear infections are infections of the ear canal. They are caused by improper cleaning of the ear and by contact with contaminated water.
- 3 Middle ear infections usually affect young children and cause pain and fever.
- 4 Both types of ear infections are easily treatable by a health worker.
- 5 Never attempt to clean your ears with anything smaller than your finger. The small amounts of wax usually found in the ear canal do not need removal since they have important antibacterial properties.

Behavioural changes

Pupils should understand the importance of the ears and be able to care for them properly.

THE EAR

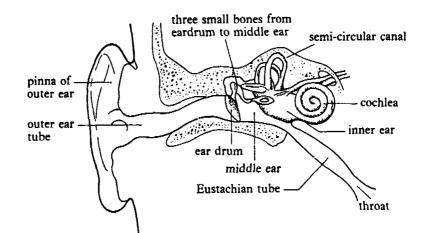
The ear is that part of the body designed for hearing. There are three main parts which make up the ear.

The Outer Ear

The outer ear is that part which is visible on the outside of the head as well as the hole or canal which enters the skull. The main function of the outer ear is to act as a funnel to help gather sound waves. This enables us to hear better. The canal also produces a sticky, brownish wax which helps trap dirt and keeps the inner parts of the ear clean.

The Middle Ear

The <u>middle</u> ear is an air-filled cavity just inside the skull which has two main parts: the drum and the ossicles. The drum is a thin membrane stretched across the canal which vibrates in response to sound waves which enter the ear. The ossicles are three small bones which are arranged so as to amplify the vibration of the drum.



The Inner Ear

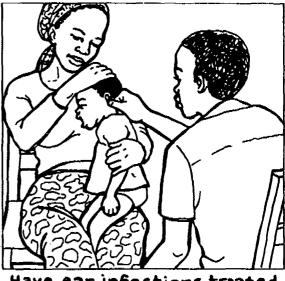
The inner ear, also called the cochlea, is further inside the skull. The cochlea is a coiled fluid-filled tube which converts the movement of the ossicles into a nerve signal going to the brain. The brain interprets this nerve signal as the type of sound that is being heard.

DISEASES OF THE EAR

There are two main types of ear diseases, one affecting the outer one the middle ear. and ear Disease of the outer ear is an infection usually caused by either fungus. These bacteria or infections occur in both children and adults and are often the result of the canal having been scratched too hard by the person trying to clean their ears with a stick or other instrument. Sometimes these after infections also occur swimming because of organisms that get into the ear from the water.

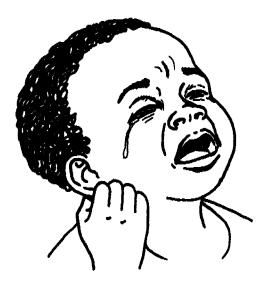
The symptoms of an outer ear infection usually begin as an itchy or burning sensation. As the infection worsens there may be some thick fluid draining from the canal as well as redness and pain of the outer parts of the ear. These infections should be seen by a health care worker who can easily treat them.

Disease of the middle ear is most common in young children. It is usually an infection caused by bacteria or viruses that cause pus to build up in the middle ear cavity.



Have ear infections treated by a health worker,

The symptoms of a middle ear infection range from a dull ache to severe pain causing the child to



cry and pull at the affected ear. The pain is often accompanied by fever and chills. Sometimes there is so much pus in the cavity, that it breaks out through the drum and is seen draining from the ear. If this type of infection is left untreated, it can sometimes result in permanent damage to the hearing. These infections can be easily treated by a health care worker.

CARE OF THE EARS

Like the rest of the body, the ears should be kept clean. The brownish wax in the ear canal is normal and important since it traps dirt from going further into the ear. Ιt also helps fight infections. Many people worry that this wax needs to be cleaned out frequently. This is a mistaken belief that can lead to unnecessary injury. It is dangerous to use anything smaller than your finger to clean inside the ear canal. Small sticks or swabs can easily scrape the lining of the canal and this can be the starting place of an infection. It is also quite easy to puncture the drum and seriously damage your hearing. A few people actually do get so much wax that it blocks the canal. Especially in children, it is best to have this wax removed by a health worker.



Methods / Activities

DISCUSSION ABOUT HEARING

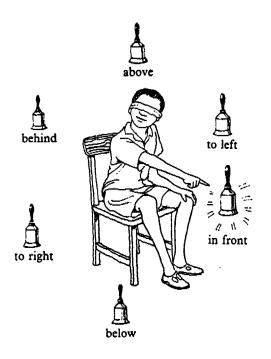
Ask the pupils to list all the reasons why we need ears. Other interesting lists they could make include: dangerous sounds, happy sounds, sounds from a certain place such as walking to school, or sounds from different times of the day. Have the pupils compare their lists.

"WHERE IS THE SOUND" DEMONSTRATION

Why do we need two ears? Blindfold a pupil and make a noise such as snapping your fingers or ringing a bell near the student. Can the pupil point to where the noise is coming from? Ask the pupil to block one ear and to not turn his or her head. Does this make it more difficult to locate the direction of sounds?

A SILENT PLAY

Do the students know anyone who is deaf? How does a deaf person communicate? Have some pupils put



on a brief play without talking or making any noise. Can the other students figure out what they are doing?

Unit 3 AIR AND WATER

Water Sources and Protection

Primary 7, Term 1

Objectives

Having completed this chapter, the pupils should be able to:

- 1 Describe where water comes from and where it goes.
- 2 Explain the need and uses we have of water.
- 3 Name at least eight ways that water can become contaminated and ways to prevent this contamination.
- 4 Name at least six water related diseases and how we get them.
- 5 Describe four ways to ensure a safe water supply.
- 6 Construct a model of a well, protected spring, pump, cistern or other supply of safe drinking water.
- 7 Describe four ways to clean dirty water.

Main ideas for the pupils

- 1 Water is essential to life, but if it is contaminated it can be a source of sickness and even death.
- 2 Surface water is more easily contaminated than underground water but there are ways to protect water and make most water useable by humans.
- 3 Water can be contaminated by humans, animals and chemicals.

- 4 Water related diseases are contracted by drinking contaminated water, by not using enough water to keep clean, by bathing in contaminated water or from insects which live in or near unprotected water.
- 5 Water can be made clean by settling, filtering, boiling (sterilising), or adding chemicals depending on how it is contaminated.

Behavioural changes

- 1 Pupils should be aware of where their water comes from and take it from the cleanest source possible.
- 2 They should never defecate or urinate in or near a source of water and stop their classmates and younger children from doing so.
- 3 Pupils should always be aware of how close they are to a source of water and keep from contaminating it.
- 4 Pupils whose home task is to fetch water should keep all articles used to collect and store water clean (including hands) and always keep water covered.

THE WATER CYCLE

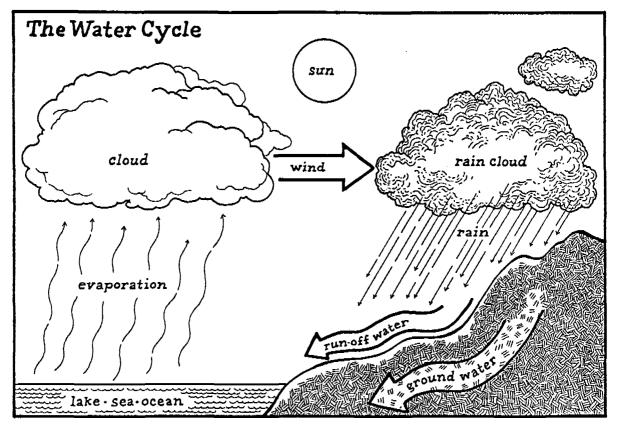
Much of the earth's surface is covered by water, from small ponds to the huge oceans. As the sun heats it evaporates this water and mixes with the air to form a warm, colourless gas called water vapour. Additional water vapour is added to the air by transpiration. This is the water vapour produced by the skin and lungs of animals and the leaves of plants. All of this warm water vapour is lighter than the surrounding cooler, drier air and so it tends to rise up. As it rises and gets further away from the warm surface of the earth, the water vapour begins to cool. As it cools it condenses, changing from a gas back into small drops of liquid water. A mass of small drops of

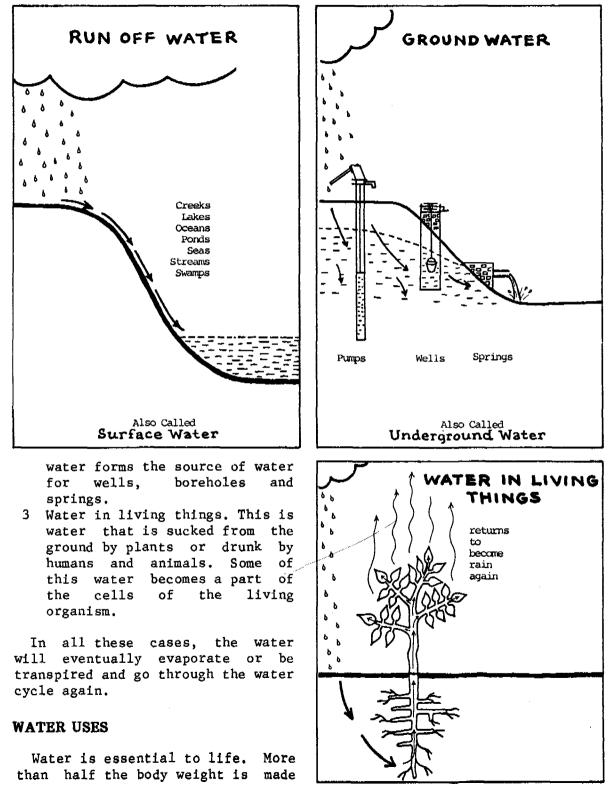
water is seen as a cloud. As they continue to rise and cool, the small drops enlarge and start to join one another. As they get bigger, the drops become too heavy to be supported by air and fall to the surface of the earth as rain drops.

WATER SOURCES

When rain reaches the earth the water is stored in three places:

- 1 Run-off water (also called surface water because it runs on top of the ground). Run off water is any lake, river, creek, pond, swamp, ocean or sea.
- 2 Ground water (also called underground water because it runs under the ground). Ground





of water. People can live several days without food but cannot live more than four days without water in one form or another. The average adult needs a minimum of two litres of water daily. Water:

- makes up most of the body
- transports substances in the body
- takes part in changes that must occur in the body (such as cooling and other functions) These are some of the uses we make of water:

- Drinking
- Cooking
- Washing (clothes, our bodies, dishes, vehicles, homes)
- Animals (drinking, washing)
- Agriculture (watering crops) houseplants, trees)
- Industry (production of electricity, manufacture of cement and other goods, fishing and other industries)
- Recreation (playing, swimming, boating)

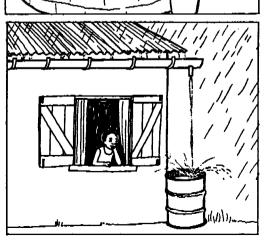


WATER COLLECTION

Water can be collected from many places:

- 1 Surface Water (lake, swamp, stream, creek, roof catchment)
- 2 Underground water (wells, pumps, springs)





(this can 3 Piped Water Ъe surface or ground water which had been pumped to a storage tank. It is collected from taps in stands water or directly into buildings and homes)



WATER CONTAMINATION

Playing with water pipes,

crack, break or plug them and

taps, walls, floors or pumps can

allow the water to become dirty.

Latrines placed too close to water (less than 50 metres) allows faeces to soak through the ground and make water dirty

When water falls from the atmosphere to earth as rain it is clean. Once it strikes the earth it can easily become dirty or contaminated with germs, dirt, chemicals and other substances.

1 Surface water is the most easily contaminated because it has no protection to stop contaminants from being added directly to it, or from being washed into it by the next rains. Therefore, unless it is surface protected water is usually unsafe to drink before filtered, boiled or it is treated with chemicals even if it is clear.



in or near water and can break or crack water pipes, taps, walls or floors and allow water to become dirty.

Industry can make water dirty when factories use water to wash or make things.

- 2 Underground water goes through layers of soil and porous rock (rock full of microscopic holes) until it reaches nonporous rock and can travel no farther. Thus it goes through а filtering action. In most cases, once water has travelled through 30 metres of soil and rock it is clean and safe to But underground water drink. can be contaminated 1f the into the contaminant seeps ground less than 30 feet away from the place it is collected.
- 3 Piped water can be contaminated when there is a break in the system allowing contaminants to enter the pipes or tanks.

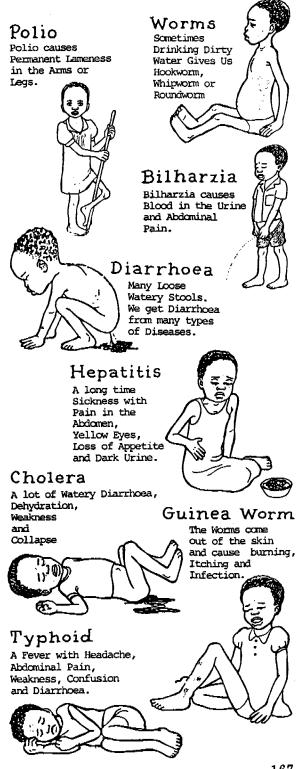
Water can be contaminated by human animal soluble and faeces. from rotten matter substances (rubbish) and soap used to wash in Soil fertilisers, the water. herbicides and insecticides. industrial chemical wastes can also gradually find their way into the water. Increasing use of these things is a means of polluting surface. underground and piped further Water can be water. contaminated through careless maintenance of the source, cracks breaks 1n the concrete and surrrounding the well. pump, or of and improper ways spring; collecting and storing it (dirty jerricans, pails, pots, bottles).

DISEASES ASSOCIATED WITH WATER

There are four ways that unprotected water can cause sickness.

1 Water BORNE diseases are those which we get by DRINKING unprotected water. They are:

Water BORNE Diseases



- Biharzia this causes blood in the urine and abdominal pain
- Cholera this causes watery diarrhoea, dehydration. weakness and collapse
- Diarrhoea we get diarrhoea (many loose watery stools) from many types of diseases
- Guinea Worm this is where worms come out of the skin and cause burning, itching and infection
- Hepatitis this is a long lasting sickness with pain in the abdomen, yellow eyes, loss of appetite and dark urine
- Polio this causes permanent lameness in the arms or legs
- Typhoid typhoid is a fever with headache, abdominal pain, weakness, confusion and diarrhoea
- Intestinal worms sometimes contaminated water can give us hookworm, whipworm or

. . .

Conjunctivitis

Red, Sore,

Watering Eves.

Scabies

A skin itch Infection made by small Insects. The Itching is Worse at Night.

Diarrhoea

Many Loose Watery Stools. We get Diarrhoea from many types of diseases.



roundworm

- 2 Water CLEANED diseases are those which we can get if we do not use enough water to KEEP CLEAN. Our skin is an important part of our bodies. is important It to wash it frequently to help avoid infections by germs and parasites. Some examples are:
 - Conjuctivitis red, sore, watering eyes.
 - Diarrhoea many, loose watery stools
 - Impetigo crusted or rawlooking sores on the face, nose, ears, head and buttocks
 - Lice small insects which live on the body or in the hair and cause itching
 - Scabies a very itchy skin infection caused by small "itch-mites". The itching is often worse at night.
 - Trachoma soreness of the eyes which gets worse and if untreated can cause blindness

Water CLEANED Diseases



Small Insects which live on the Body or in the Hair

Trachoma Soreness of the Eyes which gets Worse and can make you Blind.

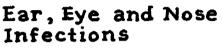


Water CONTACT Diseases

Bilharzia

Bilharzia causes Blood in the Urine and Abdominal Pain.

We get Bilharzia when we Bathe or swim where people have been urinating.



We can get <u>Sore Ears</u> (Pain and Puss coming out), <u>Sore Eyes</u> (Pain, Redness and Watering), and <u>Sore</u> <u>Noses</u> (Pain and stuffiness) when we swim or Bathe in Dirty Water.



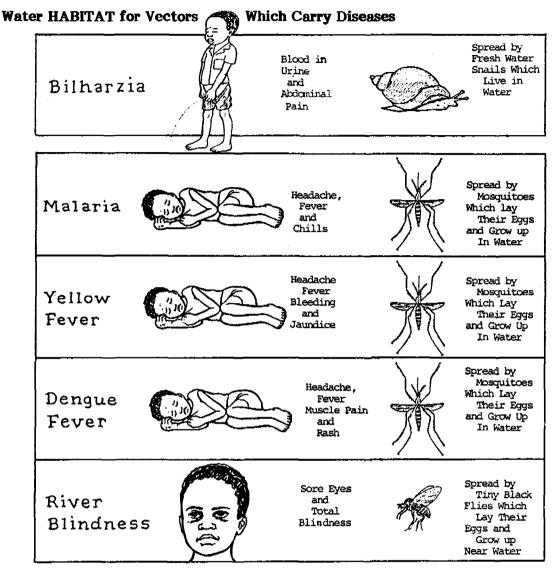
Swimmer's Itch

We can get <u>Itching</u> <u>Skin</u> all over our Bodies if we swim or Bathe in Dirty Water.

- 3 Water CONTACT diseases are those which we can get from BATHING or SWIMMING in unprotected water. Examples are:
 - Bilharzia this causes blood

in the urine and abdominal pain. Bilharzia is spread when people urinate into many of the lakes, ponds, or rivers which we bathe in.

- Sore Ears (pain and pus coming out), sore eyes (pain redness and watering) and sore noses (pain and stuffiness) when we get contaminated water in them.
- Swimmers itch we can get itching skin all over our bodies if we swim or bathe in dirty water
- 4 Water is the HABITAT for the vectors of diseases. many These vectors animals are (usually INSECTS) which live or breed in water and can carry or transmit certain diseases. Examples are:
 - Bilharzia blood in the urine and abdominal pain spread by fresh water snails living in water
 - Dengue Fever headache, fever, muscle pain and rash spread by mosquitoes which lay their eggs and grow up in water
 - Malaria-headache, fever and chills spread by mosquitoes which lay their eggs and grow up in water
 - River blindness sore eyes and eventual blindness as well as skin nodules and itching spread by tiny black flies which lay their eggs and grow up near water
 - Yellow fever headache, fever, bleeding and jaundice (yellowness of eyes, inner mouth, palms and bottom of feet) spread by mosquitoes which lay their eggs and grow up in water.



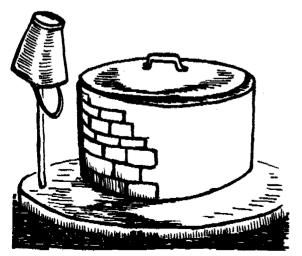
KEEPING WATER CLEAN

The following precautions should be taken to safeguard wells, springs and other water sources.

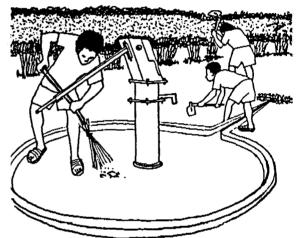
- 1 Surface wells or shallow wells: these are usually where water collects from the surface soil after it is stopped by the first non-porous layer of clay or rock. Such wells do not usually go below six metres.
- Surface wells should be constructed at least 30 metres from human habitations and latrines as well as away from grazing grounds.
- The bush around the well should be cleared away so does not fall into that it the water and rot there. it not attract animals to does to the well. and it come does not house insects. bush, clearing the After

short grass should be planted around the well extending from the concrete platform.

- The concrete platform prevents water from soaking into the well from the soil immediately around it. The platform slants gently away from the well to keep the surroundings dry and easy to keep clean. The chances well of the becoming contaminated by the wellusers defecating or urinating near it are also reduced.
- The retaining wall or tunic ensures that water collects in the well from a fair depth. The wall protrudes beyond the general surface of the ground so that soil and plant remains are not washed into the well by running surface rain water.
- The well should be covered for protection against birds, animals, and dust. The cover also inhibits the growth of green algae since it needs sunlight to grow. The cover should be movable to allow periodic cleaning of the well.

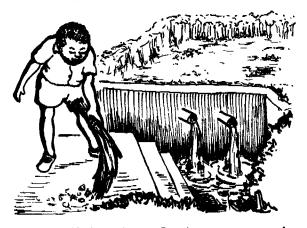


- Water should be obtained through an opening in the cover. Clean, uncontaminated vessels should be used to draw water from the well, preferably one vessel kept hanging on a stick or hook near the well which is never put on the ground.
- Any damage to the well construction should be reported and repaired immediately.



2 Deep wells or boreholes: these are usually where water is tapped from between 30 to 100 metres deep. They are too deep to bring water up by hand so pumps are installed onto them. As with surface wells. deep well pumps should not be constructed less than 30 metres from human habitation, latrines and grazing areas. No washing or rubbish disposal should be done near the pump. animals should be fenced out of the area, the platform should be the clean and swept, and drainage A11 kept clear. cracks, leaks and break-downs should be reported immediately to the caretaker.

- 3 Springs: this is where water comes to the surface after running underground for a long distance. At the point where the emerges (called water the eye) the water is clean and filtered but can become contaminated if not protected. To protect a spring:
 - The eye is found.
 - Retaining and supporting side walls are built.
 - A platform is built.
 - Steps are built to lead to the tap.
 - A fence is built round the spring.
 - An inlet pipe is fitted in.
 - An overflow pipe is fitted in. This pipe should carry excess water to a trench which should then carry the water a long distance away from the spring.
 - A brick tunic should go down upon the non-porous rock.



To Maintain a Spring: grass is cleared all around, the site is kept clean and swept, children are not allowed to play at the spring, animals are kept away from the spring, the excess water trench is kept unblocked, and any damage to the works is reported immediately. Piped water or tap water: this water that has been pumped is from a river or lake into a storage and treatment system such as in Kampala and some Water is pumped major towns. source into an open from its at the top of a hill reservoir where it remains many days. The reservoirs must be higher than the place the water eventually comes out (higher than the taps all over town) so there is enough that water pressure. The sun kills some bacteria at this time and sediment (mud and silt) settles to the bottom of the reservoir. The water is then filtered to remove algae, food for bacteria) and other large particles, then the water is treated with chemicals. (principally chlorine) to kill bacteria, and made good for human consumption. The clean water is then pumped to service reservoirs where water flows to homes and other buildings.

To protect piped water, the pipes, tanks and taps must be kept in good condition and repairs made to any part of the system as soon as possible. People should not apply their mouths at the tap as this can spread germs from person to person. Water drains should be kept clear as standing water can easily become stagnant and contaminated. Any announcements made by water authorities to boil piped water in a certain area and for a certain time should be observed. It means there is contamination of the piped water (probably from a leak) which the authorities are working to repair.

5 Surface Water: Any surface water such as lakes, rivers. ponds or creeks should be protected as much as possible from contamination. Latrines, rubbish heaps and industries that give off waste matter should be placed far away from People should never water. defecate or urinate in water or do so close enough that faecal matter will wash into the water with rain. Washing should take place at least 30 metres away from surface water so that soap and filth soak into the ground and are filtered out of the water that returns to the lake. Animals should be given a special place to drink and bathe such as at a pit or trough 30 metres from the lake.



handling buckets, dippers, cups, jerricans or pots. Make sure all water collection and storage containers are clean before water is added. See that covers are placed on all water containers.

CLEANING DIRTY WATER

In many cases water that is collected is not from a clean source. There are four methods for cleaning water:

- Settling Water this is a way 1 to remove large particles of debris in water. Water is collected in a covered pot or ierrican and left to stand undisturbed overnight. The large particles will sink to the bottom of the container. The next day the clear water from the top of the container is poured into another clean pot or jerrican. The sediment in the first container is thrown away. If the clear water is not clear enough, the process is repeated.
- 2 Filtering Water - this is another way to remove particles from water. A pot or jerrican cleaned and small holes or 18 small opening made at the one bottom. 10 cm of broken bricks large stones are placed or in the container. 10 cm coarse is placed over gravel the 21 cm of fine sand is stones. placed over the gravel. The container is then set on top of another clean container which will collect the water. Dirty water is poured into the container with the stones. gravel and sand. The water which seeps through the sand. gravel and stones will be filtered. (Filtering water alone will stop guinea worms!).

- 3 Boiling water - this method helps to kill germs. Although settled and filtered water looks clear it can still have germs (such as cholera and typhoid) in it. Always boil and cool water for small babies or when there is a serious outbreak of a diarrhoeal disease in the area. Boil water in a sufuria (aluminium cooking vessel) or pot for 10 minutes. Put it in a clean covered container to cool. Use a clean cup or gourd to take water from this container.
- 4 Chemical treatment of water these are substances added to water to kill germs. Calcium chloride, potassium permanganate or iodine are the most commonly used chemicals in very small quantities. Chemical treatment of water kills germs but is expensive, does not make water clear, usually adds a smell and taste to the water and should be left to experienced persons to do.

Materials needed for the pupils

- small stove
- kettle
- containers
- items to make filter
- items to make things to protect water (class project)

Methods/Activites CONDENSATION/EVAPORATION

To show students the effect of condensation (cooling water vapour) heat muddy water in a kettle to boiling and place a bottle of cool water in the steam. As the hot

vapour condenses on the bottle. collect the clean water formed in another container. Compare the muddy water (water from the earth's surface) to the final condensed water (clean rain) when discussing the rain cycle.

WATER SOURCE FIELD TRIPS

Arrange field trips to different places where water is collected in area (including the water your of the school). Have source students observe sources of contamination. In the classroom have students design schemes to clean up or protect the water they have visited. If water sources are currently being protected in your arrange to have students area. assist the fundi (skilled worker or artisan) to protect the spring, clear the area for the well, haul stones or gravel, etc.

Have students bring in glass jars or bottles with different samples of water. Pass the bottles around to look at and smell the water. Leave the samples to settle overnight and discuss observations of debris, how water can look clean but not be clean and purposes of filtration.

PROTECTING WATER

Have students make out of local materials water filters, covers for water containers, brooms, latrine covers. rubbish bins and other items related to the protection of water. Each student should be able to explain how their item protects If there is a latrine at water. students should school, be organised for clean up and repair duties.

Unit 4 SANITATION

Latrines and Toilets Primary 7, Term 1

Objectives

Having completed this chapter, the pupils shold be able to:

- 1 Explain the importance of using
 pit latrines / toilets.
- 2 Describe and draw a VIP latrine including variations in the housing.
- 3 Name and draw the parts of a toilet.
- 4 Explain the dangers of defecating in the open.
- 5 Explain the proper use of a pit larine/toilet.
- 6 List the activities to keep a pit latrine/toilet clean and in good working order.

Main ideas for the pupils

- Human waste matter left in the 1 open (put behind the house, in the garden) and near water sources can spread dangerous (such typhoid, diseases as cholera, dysentry, worms and polio).
- 2 Pit latrines and toilets are important to our health because they prevent the spread of disease by keeping faeces and urine where insects, animals and humans cannot spread it into food and water.
- 3 Pit latrines and toilets need proper care in order to do their

job correctly.

4 Pit latrines and toilets must be used correctly (including the washing of hands after use) in order to prevent the spread of disease.

Behavioural changes

- 1 To convince the pupils that proper use of latrines is beneficial to their own health.
- 2 To encourage pupils to share the principles of good hygiene with their families.

HUMAN WASTE AND DISEASE

Human faeces and urine can be the source of many disease germs. Some of these diseases are bilharzia, cholera, diarrhoea, guinea worm, hepatitis. polio, typhoid, hookworm. roundworm, pinworm. threadworm, and conjunctivitis. If faeces and urine with disease germs in them get into our water or food we become sick with the disease.

Pit latrines and toilets are very important for our health because they keep faeces and urine in a place from where flies, other insects, animals and people can not bring it to our food and water. By protecting our food and water from faeces we protect ourselves from disease.

TYPES OF LATRINES

A latrine is a place for urination and defecation. There are different types of latrines but those commonly used in Uganda are

- Pit latrines (a hole made in a covering above a pit, usually with a housing above it)
- Pottees (small pots or containers used by very small children)
- Toilets (ceramic receptacles with water flush systems in houses in cities, or areas with piped water)

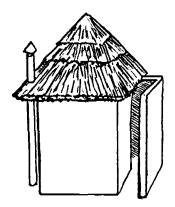
Pit Latrines

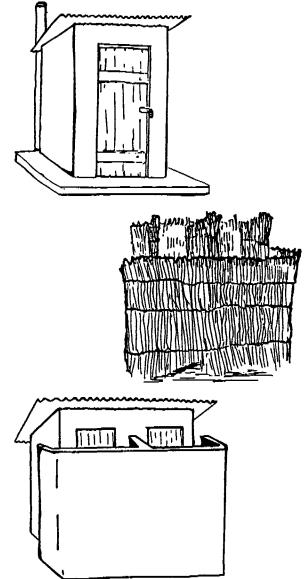
Well built pit latrines have:

- <u>A pit</u> deep enough to hold faeces of the users for many years. It can be square or round and is usually 5 to 7 metres deep.
- <u>A floor</u> strong enough to stand on and smooth enough to sweep and wash clean easily. The floor can be made of a cement slab, strong logs of treated wood, or sticks with murram.
- <u>A hole in the floor</u> which is big enough to allow faeces and urine to pass but also small enough to prevent small children from falling through.
- <u>A lid for the hole</u> to cover the hole completely and keep flies out of the pit. It should have a handle to make it easy to remove and replace.
- Walls and a door for privacy made of bricks, blocks, mud, bamboo, wood or grass mats. It is best if they are smooth enough to avoid insects living in its cracks.
- <u>A roof</u> to protect the floor and people from rain, made of grass or any other thatch, iron sheets or tiles.

LATRINES

come in different shape and sizes and are made from a variety of materials



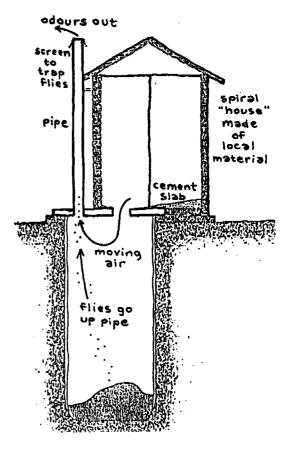


The Ventilated Improved Pit (VIP) Latrine

The Ministry of Health encourages every family and school to build the VIP type latrine. The difference between the VIP and other latrines is that the VIP has:

- A screened vent pipe to let bad smelling air out of the pit 80 that the house of the latrine does not smell badly. The pipe has a screen on top so that any flies which go into the pit and try to escape through the vent pipe are trapped and die inside the pit. (The flies do not go on to carry faeces onto food).
- <u>No lid for the hole</u> so that moving air (draughts) can come through the pit and up the vent pipe to carry away odours.
- <u>Spiral shaped walls</u> with no door so that moving air (draughts) can come through the pit and up the vent pipe. Otherwise the VIP latrine has a

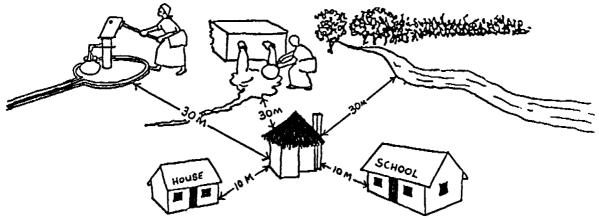
pit, a floor, a hole, and a roof in various materials just as a regular latrine does. It is called Ventilated because of the vent pipe and Improved because it does not smell badly and helps to kill flies.



THE SITE FOR A PIT LATRINE

Pit latrines of all types should be:

• Below (downhill) from any place where water is collected This is because if water comes



underground in contact with the faeces in the pit, it will carry the faeces away from where we collect water for drinking.

- At least 30 metres away from any water collection place. This is so that any water which comes underground in contact with faeces in the pit will have a chance to filter out into the soil before it reaches the water collection place.
- At least 10 metres away from any school, home, kitchen, hotel or building so that any smell does not reach the people and flies are not close to food.

USING A LATRINE

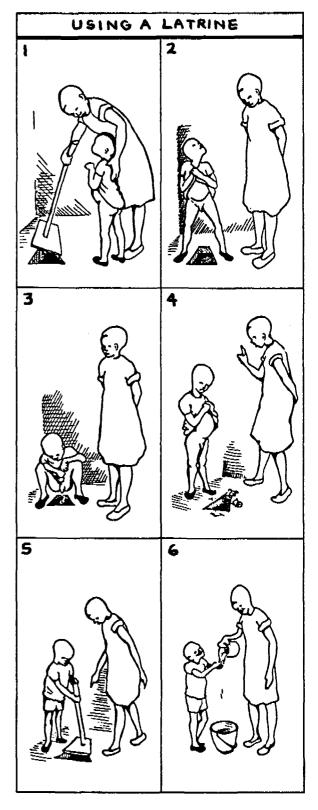
All pupils should know how to use a latrine correctly and be encouraged to teach younger children to use them properly:

- 1 If there is a lid for the hole, remove it.
- 2 Place feet on both sides of the hole and squat so that the body is directly over the hole.
- 3 Pass faeces or urine into the hole taking care that nothing soils the slab.
- 4 Any papers or other materials used for personal cleaning should be put down the hole.
- 5 Replace the lid if there is one and close the door if there is one.
- 6 Wash your hands!

KEEPING A LATRINE CLEAN

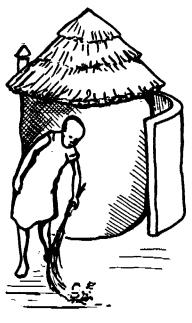
Latrine maintenance is simple but must be done regularly.

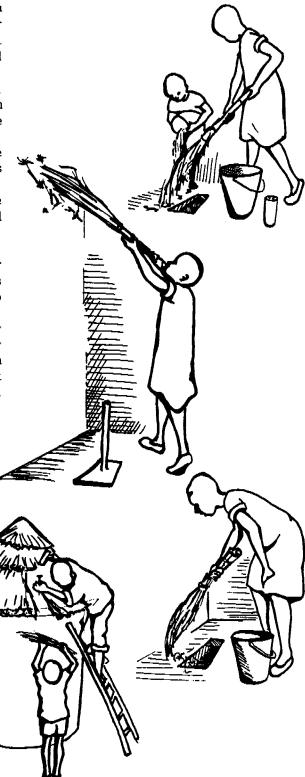
1 Clean the slab. If it is made of cement sprinkle it with water. Use soap, Vim, or disinfectant if you have it,



but just use water if you don't. Scrub with a brush or sweep with a broom and push all faeces, urine, papers, dust and rubbish into the hole.

- 2 Wash or sweep any faeces, insects, cobwebs and dust from the walls and corners of the ceiling.
- 3 Replace the lid if there is one and close the door if there is one.
- 4 Trim grass and bushes outside the latrine and sweep around the area
- 5 See that walls, doors, roof, vent pipe and screen, and floor are in good repair. Get adults to assist if students can't do it alone.
- 6 If the latrine is badly infested with flies you may want to smoke them out with burning banana fibre on a stick or wire. Get adults to assist in this procedure.
- 7 Wash your hands!





TOILETS

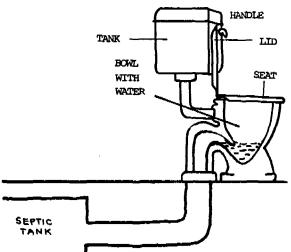
Toilets are found inside modern houses in cities towns and places where there is a piped water system. They have the same use as a latrine: to keep faeces and urine away from our food and water. Toilets use water to flush waste matter into a septic tank where flies, other insects, animals and humans cannot reach it.

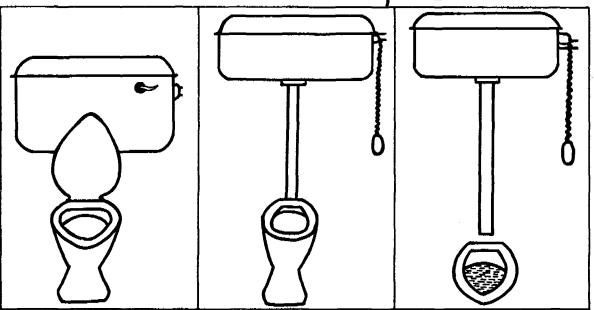
A good toilet has the following parts:

- <u>A bowl</u>. This is a basin containing water where faeces and urine are deposited.
- <u>A seat</u>. This is around the bowl. In many cases it has a lid to cover the seat. Some toilets have no seats and covers (such as toilets with bowl rims at ground level).
- A water closet or Tank. This part is filled with water. We sometimes refer to a toilet as a "WC" which stands for Water Closet. Tanks differ in size and makes but the important thing is

that they hold a lot of water (about 10 litres) to flush the toilet well.

- <u>A handle</u>. This is the handle on the water closet which we push or pull to flush the Faeces and urine away down the septic tank.
- Pipes. Under the ground there are pipes through which faeces and urine pass to reach the septic tank. These pipes are very big and are different from those which carry our water for drinking, cooking and washing.

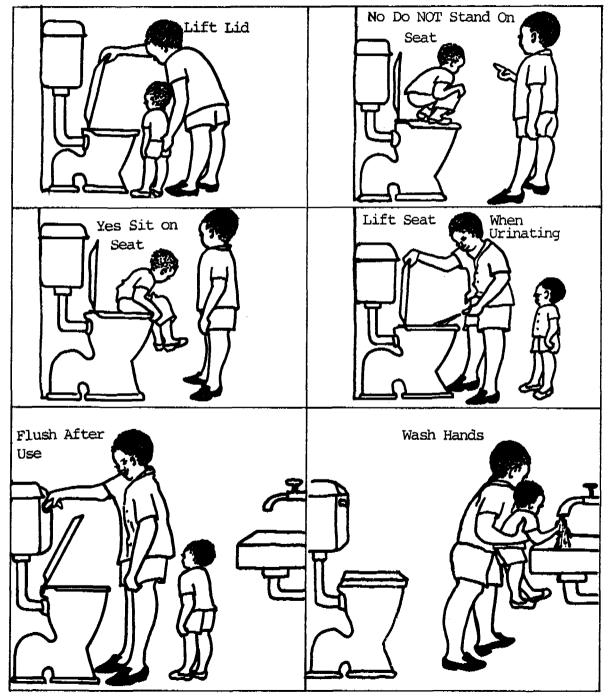




• <u>Septic Tank</u>. This is a very big tank underground where faeces and urine are emptied. The septic tank holds and keeps faeces and urine away from clean water.

USING A TOILET

It is important to teach students and everyone in a school or house how to use toilets they may find in



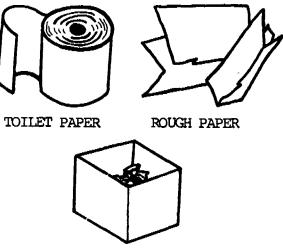
towns and cities. Older students should be encouraged to teach younger children.

- If there is a lid, lift it. If there is a seat, sit on it (or on the rim) just as if it were a chair. DO NOT stand or squat on the seat as this can break the seat, make it dirty or cause accidents.
- Pass faeces or urine into the water in the bowel, being careful not to drop waste matter on the rim or seat.
- Boys and men who stand to urinate must take extra care not to wet the seat or rim. If there is a seat, lift it out of the way before urinating.
- Flush the toilet after you use it. Make sure all faeces, urine and toilet paper have been washed away in the pipes. If there is no water in the water closet or if the flushing mechanism doesn't work, pour the bucket of water directly into the bowl to flush it down.
- Wash your hands!

NEVER leave a toilet unflushed because it smells bad, looks bad and can allow faeces to spread disease. If you know you cannot get water to flush the toilet or it is broken avoid using it until it is repaired. Find a pit latrine as an alternate place.

Toilet Paper

There is paper made specially to be used to clean oneself after urinating or defecating. This paper comes in rolls, is soft and can be flushed away in toilets if used in small amounts. Too much toilet paper can plug or stop up a toilet.



DUST BIN

If proper toilet paper is not available, other soft paper can be used. Hard paper such as note book or newspaper can be squashed until it is soft for use. But it is not soft enough to go through the pipes of a toilet easily. If any paper other than proper toilet paper is used, it should be thrown in a rubbish bin then burned after use. DO NOT put any other thing in a toilet except faeces, urine, water and toilet paper.

CLEANING THE TOILET

Cleaning a toilet is simple but must be done regularly:

- wipe the seat, rim, water closet and handle with a wet cloth or sponge. Use soap, Vim or disinfectant if you have it, but just use water if you don't.
- Scrub the inside of the toilet down with a brush. Use soap, Vim, harpic or disinfectant if you have it, but just scrub hard with water if you don't. The brush used to clean the toilet should be cleaned after use and kept only for cleaning the

toilet.

- Sweep the floor around the toilet and brush walls and corners of the ceilings.
- Remove used papers from the rubbish bin taking care not to touch them. Burn the papers on a rubbish heap.
- If any part of the toilet needs repair or the pipes are stopped up get someone knowledgeable

about toilets to help in repairs.Wash your hands!





Methods/Activites

Materials needed for the pupils

• Local materials to construct items that keep a latrine clean (brooms, latrine covers, rubbish bins, paper dispensers)

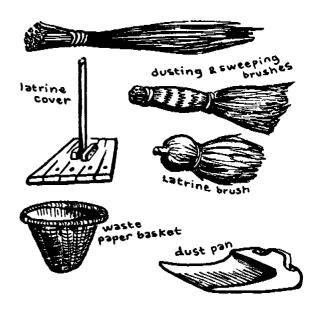
VISITING LATRINES

Organise field trips to places which have different kinds of latrines to observe the variety of superstructures, slabs, etc. When students come back to class have how the them note original structures could have been improved and how upkeep could be improved. If school latrines the were included, organise а clean-up inspection and roster. Have pupils take turns keeping school facilities in order.

If there is a latrine being built in the area, organise a visit to the site and form pupils into a work assistance group. Have pupils help dig, cut sticks, clear the area, bring materials for bricks, thatch, mix locally made cement for finishing walls, etc.

MAKING ITEMS TO PROTECT LATRINES

Have each pupil make one item which helps to keep latrines and toilets in good order (such as brooms, latrine hole covers, brushes, paper dispensers, rubbish bins, hand washing basin stands, soap holders, latrine pit smokers). Students should be able to describe how their item contributes to the protection of the latrine and how that in turn promotes health.



BUILDING A SCHOOL LATRINE

In order to ensure that latrines are properly built, your District Health Administrator or Inspector should be contacted before starting The Ministry the project. of Health and your Local Administration encourage the collaboratiion of schools with these authorities on sanitation.

The DHA or DHI will obtain suitable plans for school latrines for your school and can assist students with proper siting and construction.

SCHOOL HEALTH COMPETITION

Organise a competition between each class or dormitory/house which has its own latrines. Set a time in which inspections are held (at the end of each week, month or school year) and award a point system for each category of proper maintenance. Award an overall prize or give public recognition to the group with the best health habits.

Roles of Family and Community In Immunisation Primary 7, Term 1

Objectives

Having completed this chapter, pupils should be able to:

- 1 Describe the role of the family and community in establishing, organising and maintaining an immunisation centre to provide routine immunisations for children and women in their own community.
- 2 Describe the role of the family and community in immunisation activities such as:
 - routine immunisation of children and women,
 - immunisation campaigns,
 - school immunisation programs,
 - community surveys
 - ongoing identification of susceptible children and women,
 - notification to authorities of outbreaks of measles, tetanus, poliomyelitis, whooping cough, tuberculosis and diphtheria
 - ongoing health education and mobilization of family and community in immunisation activities.

Main ideas for the pupils

1 Thousands of children die or are disabled every year by six diseases which are preventable through immunisation.

- 2 There are many activities which individuals, families, and communities can do to establish immunisation services for their area and to promote immunisation.
- 3 Every member of every family, every family in every community and each community in our nation is responsible to ensure that its children and women have immunisation services available, and to see that these services are fully used.

Behavioural changes

Having appreciated the role of families communities and in immunisation, the pupils should as members of families and communities, actively participate in getting children and women in their own family, community and schools immunised fully.

THE EFFECT OF IMMUNISABLE DISEASES ON FAMILY AND COMMUNITY

Common immunisable diseases include measles, tetanus. tuberculosis, pertussis (commonly called whooping cough), poliomyelitis and diphtheria. It is estimated that up to 25% of babies born in Uganda die before the age of five years mainly because of the common immunisable

Measles alone is diseases. responsible for about 18% of deaths under one year. Many more children survive the infections but have physical and mental disabilities, often associated with inadequate care and malnutrition.

consequences of death or The disability are quite widespread. Disabled children are unable to attain their full potential and provide for usually cannot themselves sufficiently during adulthood. In the family circle, death or disability often causes emotional upheaval and may lead to disruption. family In other instances, the result is increased childbearing in the family, which together with the presence of a disabled child, increases the the family. Yet burden on productivity of the family is often decreased because of child death or disability and family preoccupation looking after the sick or in disabled. The effect of these and other related factors on the family is increasing poverty, disease and backwardness - which are reflected at both the community and national level.

Immunisation is protective measles, tetanus, against whooping tuberculosis, cough, poliomyelitis and diphtheria.





Immunisation increase the can productivity of the family and community and accelerate social and economic development.

THE IMMUNISATION SCHEDULE

Immunisation is most useful when given at the following ages:

- At Birth -BCG protect to against tuberculosis
- DPT • 3 months and polio and vaccine to protect
- 4 months against (Diphtheria, and Pertussis and Tetanus)
- 5 months
- 9 months Measles vaccine (to protect against measles)
- Girls and Women (15 to 49 years of age
- A11 Pregnant Women

Tetanus Toxoid (TT) (to protect against tetanus)

According to the United Nations Charter for the Declaration of Human Rights, of which Uganda is a signatory, every child born alive has the right to receive love and protection, food, clothing. health shelter, water, care, education and training so as to develop to his/her full potential lead a healthy productive and and satisfying life as an adult. Immunisation is thus a basic human right which every individual, family and community should have access to. It is not a favour to some families or communities. Tt. is every child and woman's right.

FAMILY AND COMMUNITY PARTICIPATION IN IMMUNISATION

Every family and community should have easy access to an immunisation centre which provides routine immunisations of children and The family and community women. should work hand in hand with government and voluntary agencies, in particular the resistance and committees, the District Medical Officer and the Uganda National Expanded Programme on Immunisation (UNEPI) to establish and maintain such an immunisation centre. UNEPI providing aims at complete immunisation for all unimmunised children and women in Uganda on a regular basis. The family and community should assist in maintaining and protecting the immunisation facilities such as buildings, equipment and vehicles.

Every family and community should participate in immunisation activities which include:

1 Ongoing identification of nonimmunised children and women in the family and community.

- 2 Taking children and women to immunisation centres for routine immunisation.
- 3 School immunisation programmes. When requested, parents should provide the school authorities with Child Health Cards showing proof of immunisation of their children. should Parents co-operate with school and health authorities to get unimmunised children under five years of age fully immunised.
- 4 Community immunisation campaigns. It may be necessary to carry out mass immunisation campaigns, for example to control an epidemic or in times of disaster. The family and community should participate fully in such immunisation campaigns.
- 5 Community surveys. These are usually undertaken to identify family and community health problems to arrive at solutions improve the health of the to family and community. Members of the family and community should participate in community surveys by making themselves available, answering questions completely and truthfully and co-operating with the survey teams.
- 6 Health education and mobilization of family and community in immunisation. Within each family and community, there are individuals who are knowledgeable and motivated about immunisation. These individuals have a responsibility to educate and motivate the families and community using various methods and groups e.g. discussions in women's groups, religious

groups, resistance councils and committees and other publicly spirited groups. Notices instructing people when and where to go for immunisation should also be displayed in the community.

7 Notification of disease outbreaks. Most of the commonly immunisable diseases can to a certain degree be identified by the people. The occurence of these diseases in the family and community should reported through be the Resistance Committees to the health authorities so that measures can be taken to treat the affected children and to protect the unimmunised ones.

Materials needed

for the pupils

- Primary School Health Kit on "Immunisation"
- Charts on Immunisation from Ministry of Health

Methods/Activites

COMMUNITY MOBILISATION

School teachers and pupils can

arrange a visit to the nearest immunisation centre or have health workers visit their school. Plan activities with the centre in which pupils can advertise immunisation services by:

- Making charts or posters explaining days and times for immunisation sessions for display in the community.
- Conducting surveys of the local area to find out how many children under 5 years of age have Child Health Cards and have been fully immunised; and how many women between 15-49 years old have had TT immunisation.
- Giving immunisation information (the schedule, the dangers of the diseases, etc) to households in each area and encouraging parents to bring children for immunisation.
- Giving immunisation information to women in the neighbourhood and in the senior schools about Tetanus Toxoid (the schedule, information about the disease, etc.).

Growth and Development: Changes In Adolescence Primary 7, Term 1

Objectives

After studying this topic the pupils should be able to:

- l Explain what is meant by adolescence.
- 2 Describe the physical and psychological changes that take place during adolescence.
- 3 Identify three secondary sex characteristics for each sex.
- 4 Define what are meant by "outof-step" growth changes.
- 5 Identify and explain three common sources of conflict encountered by adolescents as they grow up.

Main ideas for the pupils

- 1 Adolescence is the time of physical and psychological transition from childhood to adulthood.
- There 2 are individual differences in the time of completion onset and of adolescence, which usually lasts from the early teens to the early twenties.
- 3 Secondary sex characteristics are only a part of the many changes that occur during adolescence. They are the visible external features that distinguish men from women.
- 4 It is common for adolescents to

experience rapidly changing and often contradictory emotions as they attempt to cope with the conflicts of this life stage.

- 5 "Out-of-step" changes occur and may be a source of conflict for the affected individual. Early-maturing girls and latematuring boys being the ones who frequently have these problems.
- 6 Adolescent problems are usually symptoms of the individual's difficulty in adjusting to the changes occurring during this stage of development.

Behavioural changes

- 1 Pupils should view or regard adolescence as a transitional period between childhood and adulthood; and as a part of growth and development taking place throughout life.
- 2 Pupils should appreciate the fact that differences in rates of growth and development ("out-of-step") are natural and nothing to be ashamed about.
- 3 Pupils should be inquisitive about local sex taboos, beliefs and rituals related to adolescence and try to find out how they came about. They should not dismiss them out of hand as primitive or pagan but understand that they are a

- . .

valuable part of their own culture.

4 Pupils should learn to choose their friends carefully and avoid joining gangs that are bent on anti-social behaviour.

THE NATURE OF ADOLESCENCE

Adolescents have a bad reputation. Parents often feel that problems or troubles increase tremendously when children enter adolescence. Policemen are not well disposed to adolescents because they see them frequently getting into mischief.

always Someone seems to be "youth complaining about the problem", and the prevalence of juvenile delinquency. The above picture is, of course, incomplete and unfair to the adolescents, but there is some truth in it. The transition from childhood to adulthood is not always easy or smooth. As youngsters stop being dependent on emotionallv their parents, they may grasp their newfound freedomwith excessive enthusiasm or exuberance. But they may also be shy and sensitive. Adolescents have many adjustments to make within a few years: to choose their occupation or vocation and prepare for it; to find ways to manage their new interest in members of the opposite sex; they look forward, not without some anxiety, to selecting a mate and establishing a home of their own. Adolescents are faced by all these problems and decisions at the very time that the many changes in their physical appearance. physiological functioning, and psychological make-up may often make it hard for them to understand

and accept themselves.

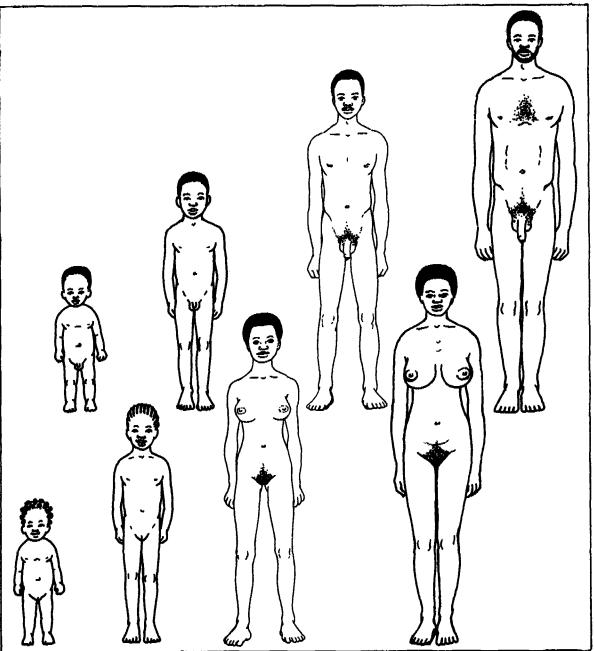
Adolescence can be defined simply as a transitional stage between childhood and adulthood. Since transition this includes both social and biological milestones that tend to vary between individuals, it is difficult to specific assign а age when adolescence begins and ends in any individual. As a general rule. adolescence is taken to begin at the age of 15 and end at 21 in boys, and to begin at 13 and end at 21 in girls, but it may start earlier or later and end earlier or later in some individuals.

BODILY CHANGES DURING ADOLESCENCE

Puberty is the word used to describe the period of physical maturation of the individual. Some of these changes are the development of the internal and external reproductive organs. These changes are called the primary sex characteristics. Ĩη girls, a landmark of this process is the first of her menstrual periods. In boys, the penis and testicles enlarge and sperm are by the testicles. (see produced Unit 7 - "Human Reproduction")

The other striking changes that take place during adolescence occur in those physical features that distinguish a grown-up man from a mature woman. These changes that are not directly related to the sexual organs are known as secondary sex characteristics. Some of these modifications, such the development of breasts. as appear only in girls; others, such as the marked change in voice and the growth of a beard, take place only in boys; whereas others, like the rapid growth in height and weight and the appearance of pubic and axillary hair, occur in both boys and girls.

These bodily changes are psychologically important because of the behavioural changes that are associated with them - changes in attitudes, in emotional responsiveness, and in social behaviour. The whole period of development from childhood to maturity may be as long as nine or ten years, starting before the teens (in girls) and not ending (in boys) until the early twenties.



PSYCHOLOGICAL CHANGES IN ADOLESCENCE

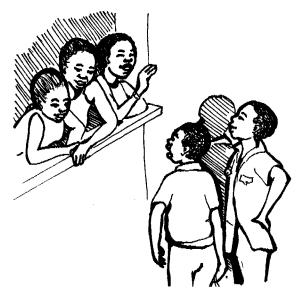
As they grow, adolescents undergo psychological development as well as the bodily changes taking place during this period. They cannot be expected to deal satisfactorily with the demands of their new. enlarged bodies with the psychological make-up that may have served them well in their childhood. Although the personality of an individual takes much longer to mature fully than the length of time that he spends in adolescence, individuals' personalities normally develop sufficiently to enable them to cope with and understand the tremendous physical changes taking place in their bodies. and the social demands made on them.

Intellectual abilities, which steadily during childhood, grow reach their peak during the middle part of adolescence. However, the fact that maximum mental capacity is reached so early in life should not be a cause for alarm. What reaches its peak at this time is the potential to acquire and use knowledge and skills. After the achievement of maximum intellectual potential, we can enrich our mental life by the continued acquisition of knowledge and skills, by study, bv experience. and During adolescence and after, the individual's interests grow and spread over wider spheres including vocational, recreational, social, and intellectual.

EMOTIONAL CHANGES DURING ADOLESCENCE

The bodily changes described above

are accompanied by a stimulated sex urge. The adolescent drive or normally develops а greater interest in members of the opposite Falling in and out of "love" sex. is common as adolescents start to associate with each other. These experiences help them to decide on the kind of person they are compatible with.



adolescence, During the individual has to try and break the emotional links between himself and his family, and acquire a greater degree of independence and responsibility. This is not always easy for everybody. It may bring out feelings of insecurity and anxiety individuals. in some Parents may also resent the emotional changes that may accompany the striving for The independence. previously docile and cooperative child may now become resistant, irritable, frankly disobedient, and even hostile. this the parents may То react with resentment or utter frustration. The chief charac-

teristics of the normal adolescent are ambition, hope. being affectionate, and a desire or need for social contact. He is inclined to feel anger, frustration, disappointment, and other emotions more acutely. In some individuals serious maladjustment may develop adolescence during such as delinquency, minor or major mental illnesses, marked emotional instability, and drug dependence.

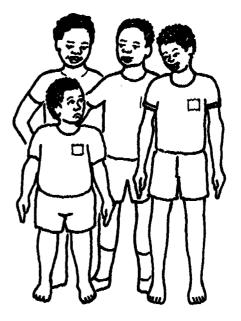
Finally, during adolescence the individual gains а better appreciation of the needs of society, develops standards in moral, ethical and religious matters and, in short, develops his own way of looking at life.

"OUT-OF-STEP" ADOLESCENT CHANGES

Not all adolescents show the same or similar changes at the same time. Even within the same individual, some of the changes may occur earlier than others or before their expected time. Also the sequence in which these changes occur may be altered. For example, growth curves for height during adolescence show that not a11 adolescents follow the same pattern of growth. A boy who previously was relatively tall may suddenly find himself short compared to his friends; a girl once considered small may find herself too tall compared to the rest of the girls of her age. Too much may be expected of those who grow fast or mature early. Anxiety may be produced in those who mature late and are left behind by their mates.

An individual's psychological or emotional growth may lag behind their physical development. Athough one has the physical features of an eighteen-year-old, they may still be reacting emotionally or psychologically as a ten-year-old child. A11 these out-of-step developmental changes are likely to create problems and difficulties for the individual.





ADOLESCENT "AWKWARDNESS"

is generally believed that Τt and girls go through bovs an "awkward stage" during adolescence. is partly due to the out-of-This growth which has just been step described above. But some of the "awkwardness" that adolescents are thought to have is more of an illusion than a fact. If adoleswere really cents awkward or they should show muscular clumsy. incoordination or loss of athletic Careful studies show capability. that in actual fact adolescents improve steadily at athletics; and at no point is there loss of skill.

How do we account for the general impression that adolescents are awkward?

• The Size-Age Confusion

The first reason for this false impression of awkwardness is called the "size-age confusion". Muscular skill or coordination does not always keep pace with physical size. Since coordination depends more on age than on size, a twelve-year-old who has quickly grown to the size of most fifteen-year-olds may appear awkward compared to fifteen-year-But compared to other olds. twelve-vear-olds their muscular skill will be similar or even advanced. The illusion of awkwardness is created for those who do not know that the child is only twelve years old.

• <u>Social Awkwardness</u> - The second source of the impression of muscular awkwardness is the very real social awkwardness of some adolescents. Self-consciousness is often intensified during the adolescent years. An adolescent who is highly skilled at football or netball may spill a drink or trip awkwardly at a social gathering. This social awkwardness may be caused bv insecurity or the embarassments that result when an adolescent begins to participate in adult social occasions. If is not due lack of muscular to coordination.

PROBLEMS OF THE ADOLESCENT

Adolescents commonly become а problem to their parents or community largely because they are problem to themselves. The а change from childhood to adulthood with it the conflicts brings with associated achieving the social behaviour that is expected of him by the cultural group to which he belongs. (Conflict 18 said to occur when opposing or

You do as you	l'm my own man!
are told,	I don't have to
boy!	listen to you!

mutually exclusive impulses, desires, tendencies appear or at one and the same time.) Another problems source of the for adolescents is that demands made on them for adult behaviour are not always accompanied by adult freedom: they are in some respects both a child and an adult at the same time.

SEXUAL DEVELOPMENT AS A SOURCE OF PROBLEMS

Adolescents are very much aware of changes in their bodies - changes that are at once a source of pride and of embarrassment. The boy who is secretly proud of his budding moustache may feel humiliated by being teased about his "lip fuzz" or "pin feathers". The girl, pleased with the development of a more womanly figure, may feel very conspicuous in her first brassiere.

There are also invisible changes which may give rise to adolescent self-consciousness. These may take the form of new wishes, desires, fantasies brought about by and sexual maturation. The new intense awareness of sex can become а source of embarrassment because of the taboos on sexual matters 1n cultures. (A taboo 15 some that is strongly something or banned within prohibited а usually with culture. severe penalties for violation).

There is a theory that the "storm and stress" of adolescence is due to cultural conflicts arising from sexual restraints placed on normal development. This biological theory is supported by findings from studies of societies or cultures in which greater sexual freedom is allowed. In these more adolescence cultures permissive appears to have relatively fewer However, it may be that problems. in these cultures which permit sexual freedom, the greater allowed adolescent is greater freedom in many other non-sexual matters, so that they are relieved of "stress and strain" in problems of wider scope.

Just as sexual taboos vary from

Joyce, you're too old to go for water with the boys. You wait to go with



culture to culture, they also vary in the subcultures of a complex society. What is permissible in one tribe, for example, may not be allowed in another. Even within Ъe the same tribe there may well differences from one section to another. Teachers are therefore advised to find out the well prevailing sexual restrictions in and sub-cultural cultural the groups from which their pupils are drawn.

As a result of the sexual taboos prevalent in most cultures, many forms of normal sexual interest and fantasy give rise to feelings of apprehension or anxiety, as well as wanting to experiment with the forbidden. Under these circumstances sex becomes a source of adolescent conflict, even though biological demands alone would not make such a conflict inevitable.

EMANCIPATION FROM HOME

Emancipation from parental authority and from emotional dependence on parents begins in childhood, but this process of emancipation is accelerated adolescence. during The ease with which transition from dependence to independence is made in later adolescence depends very upon the ability of much the parents to change their mode of interacting with their children as they proceed through adolescence.

The "parent problem" as talked teenagers about bv and the "teenager problem" talked about by adults may be more of an illusion than a fact. Studies in this field have not come up with any evidence of as high a parent-child conflict adolescents and parents would as have us believe. Many of the problems concern restrictions on adult behaviour (going out with members of the opposite sex, use of money, coming home late, etc.) In these. as in other ways, the adolescents see their parents as treating them too much like children.

The adolescent's wavering between childish dependence and the desire for independence makes it difficult for the parents to know how to treat their child at any given Emancipation from home and time. parents does not take place all at It takes time; the and once. of the change unevenness from dependence to independence may be a source of problems for both the parents and the adolescent youth.

Adolescents whose parents are unable to relinquish overly close supervision tend to experience two types of problems. One is the kind of child who continues to show childish dependence and obedience throughout adolescence and into adulthood. The other is the child who rebels against the parents and often the community and society.

RELATIONS WITH PEERS

When adolescents are able to form secure relationships with those of their own age, they will find emancipation from home and parents easier. Adolescents value greatly their acceptance by their own group. Since acceptance at this age is based strongly on conformity of interests, standards and values it is common to observe frequent changes in these areas in order to achieve conformity. If the fashion school is to wear blue jeans at with the cuffs turned up, for example, the adolescent will insist that he has to wear blue jeans with cuffs turned up. the To he different, or to dress differently, would be to risk criticism and rejection.

The need for security that comes from a group often leads to the



formation of groups, such as "gangs" among boys and "cliques" among girls. Members of such a group feel especially close to the others within the group and are very much aware of the distinction

between "in" and "out", between those who belong and those who do not. With this distinction lies the problem of gang delinquent behaviour. Inorder to "prove" their lovalty to a group. an adolescent may be asked to perform certain acts that may run against their standards or values and often against the law. Common examples of this proving behavior include sexual encounters, use of alcohol and other drugs, and theft.

Just as groups can have destructive effects, they can just as easily function to reinforce positive values in the adolescent. Many of the groups which reinforce positive values often have an adult as a leader or advisor.

THE SEARCH FOR IDENTITY

An important task facing adolescents is the development of a sense of their own identity - an idea of "Who they are" and "Where they are going". In order to know who they are, they must learn standards of conduct for themselves and also standards by which they can assess the behaviour of others. They must also discover and learn what they value as important and worth doing. Finally they need to develop a sense of their own worth and competence.

Children's values, social and standards moral are initially derived from their parents: feelings of self-esteem or worth are a reflection of the parents' view of the child. As children progress through their schooling. the views of their age-mates (peer group) and teachers become increasingly The important. adolescent tries to pull all these



evaluations together to form а consistent whole. The search for identity will be relatively easy if the parents, teachers, religious leaders and peers share the same or similar values and moral standards. However, if the values, and therefore the opinions of parents and other adults differ markedly those of his peers, from the possibility for conflict is great.

Adolescents are forced to reexamine many of the beliefs they had previously considered basic New experiences and newly truths. acquired intellectual abilities and insights often move adolescents to challenge some of the values and beliefs they had taken from their parents. Prior assumptions about religion, sex, drugs, the value of hard work, and the omnipotence of one's parents are those most likely to be questioned. A girl who has accepted the parents' code of

sexual behaviour may discover that of her classmates have some different standards regarding sex. An adolescent whose home training stressed the dangers of drugs mav find that some of his mates do not share this view, and consider drug experiences an important way of extending or enriching one's own self-awareness.

JUVENILE DELINQUENCY

This topic has been covered separately in another section (see Primary 5, Unit 7 - Anti-Social Behaviour and Delinquency). Only a few remarks will be made here to demonstrate the connection between delinquency and the other problems of adolescence.

Delinquent behaviour is closely related to the changes the adolescent undergoes at this stage Adolescents are of development. more likely to engage in delinquent behaviour if they fail to resolve the conflicts of this period. Adolescents having doubts about their identity and competence may engage in "proving crimes" like breaking into a house or stealing a These crimes are done with car. the misplaced aims of proving adulthood and gaining attention. An adolescent boy may find himself anti-social involved in gang behaviour because he wants to be "inas a member of the accepted group" and does not want to be called a coward.

Materials needed for the pupils

• Charts or Posters showing secondary sex characteristics of males and females.

Methods / Activities

Before teaching this topic, the teacher is encouraged to read, in addition to this section. the sections on "Anti-social Behaviour and Delinquency", "Drug Dependence", and "Smoking" in Unit 7. If you are new to the area where teaching are or 1 f you а significant group of your students are of a different tribe or religion. it is important to contact the appropriate elders or authorities from these groups. Discuss with them the sexual taboos of their community, their expectations of adolescents, and at what ages adolescents are allowed various adult freedoms. It would also be interesting to find out if there are any initiation ceremonies or rituals connected with the beginning or the end of adolescence or puberty.

GROUP DISCUSSION ON ADOLESCENCE

When teaching about adolescence, start off you can with the question-and-answer approach to draw information out of the pupils you may find they know quite a bit about the subject! Give the chance to ask pupils а some questions of their own. Trv starting a discussion with the the about their feelings students toward local rites of passage and the roles assigned to adolescents in the community. You might also consider debating topics such as: "Adolescence is nothing but a time of problems" or "Parents don't remember what it was like to be an adolescent." Finally, summarize the lessons learned using the Main Ideas section as a guide.

Problems of Very Young Parents Primary 7, Term 1

Objectives

After studying this topic the pupils should be able to:

- 1 Identify what age is meant by very young mothers and fathers;
- 2 Describe the risks of the babies of very young mothers;
- 3 Explain the problems of very young mothers and fathers.

Main ideas for the pupils

- 1 Girls below the age of 20 are often too young to safely have babies.
- 2 Having babies before the age of 20 carries increased mortality risks for the baby as well as the mother.
- 3 Fathers who have children at a very young age also face problems related to their inability to support their families financially.

Behavioural changes

To have pupils understand that although they may be biologically ready to reproduce when they reach puberty, they may not be physically, mentally, or financially ready to do so.

VERY YOUNG MOTHERS AND FATHERS

As a normal part of puberty, boys' and girls' bodies change to become ready to produce children. It is not uncommon that by the age of 15 and sometimes earlier, both boys and girls are physically capable of producing a child. In other words, the girl has started to ovulate and the boy's testicles are producing sperm. Even though these reproductive functions have developed, there are many reasons why it is unwise for young adolescents to become parents. Some of these reasons involve the social and emotional maturity of the parents. Other reasons include a number of health risks to both the mother and the baby.

It is impossible to define exactly how old a person has to be in order to be ready for parenthood. Besides the individual variations in rate of adolescent maturation, there are also racial and cultural differences in this process. For the purposes of this section we will consider men and women under 20 to be very young parents. Obviously, this is a generalization there and are certainly persons under this age who are very good parents while there are older persons who are very immature and don't do a good job of parenting.

SOCIAL AND EMOTIONAL FACTORS AFFECTING YOUNG PARENTS

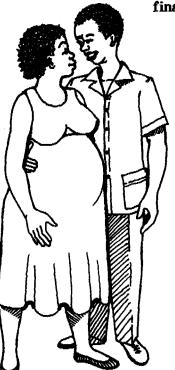
Very young mothers and fathers may problems related to the fact have the arrival of the baby that mav their force them to discontinue from education or prevent them themselves for preparing an life. independent adult way of find that caring for a Thev mav baby involves much more than they originally thought. The most common situation is where the adolescent parents never considered having a child and in many ways don't want one.

The very young mother may not be able to look after her baby because she is too immature

emotionally to do so, or because she does not know how to do it properly. Lack of monev or relevant material resources are often a big problem for these very voung mothers. They are often not married to the father of the baby and may have to fend for themselves and their baby.

For one to be a father, he needs to be sufficiently mature and have the necessary material means to support his wife and children both emotionally and financially. A boy should therefore be able to stand on his own feet and have the means support a family before he to thinks of fathering children. Ϊt takes time for an adolescent to acquire this kind of independence.

Women who are both mature and married are best able to bear healthy children and provide for them financially and emotionally.





ANATOMICAL PROBLEMS OF YOUNG MOTHERS

Although a girl is capable of fulfilling her reproductive functions at puberty, (see the section on "Human Reproduction") she may still not be biologically mature in all the necessary respects to have children without complications. Thus, though her ovaries may be able to produce ova (eggs) that are capable of combining with sperm to begin a pregnancy, her pelvis may not be sufficiently developed and may give rise to problems during labour and delivery. This 15 an example of "out-of-step development" (See "Changes in Adolescence")

Some of the complications of pregnancy that are caused by having a pelvis that is yet too small include:

- Obstructed Labour means that the baby's head is not able to fit through the pelvis. This often means that the only way to the baby is deliver bv an operation where the woman's abdomen and uterus are cut open and the baby is removed. As with any major operation there is a risk serious bleeding or occurring as a result infection If the girl of the surgery. is unable to get to a hospital in time to have the operation, the baby may die inside her or the uterus may even rupture (break open) which is a lifethreatening complication for both the baby and the mother.
- Difficult Delivery Even if the baby is able to fit through the pelvis, It may be so tight that the tissues of the pelvis are torn badly in the process.

Like any wound, it may become infected and make the mother very i11. Some of those with tissue damage may not recover fully from the damage done to their pelvic tissues. Thus, as a result of this damage, a passage may be established between their vagina and the bladder as a result of which they may go on oozing urine through their vagina for a long time. The damage may prove difficult to repair.

Another significant cause of maternal illness and even death is abortion. Although there are no reliable figures, it is generally accepted that the incidence of (illegally) induced abortion is increasing in most, if not all, African countries. This is particularly 50 ín cases of adolescent girls who are unmarried and want to stay at school or а job. Since many of these abortions are carried out without proper equipment and sterilization. there a relatively high rate is of infection of the uterus among these If these infections aren't women. cared for properly, they can be fatal.

PROBLEMS OF THE BABIES OF VERY YOUNG MOTHERS

The children of very young mothers have increased risks of getting sick and dying. There is evidence to show that children born to mothers under the age of 20 are almost twice as likely to die in infancy (in their first year of life) as children born to mothers in their mid-twenties. This increased mortality risk appears to be concentrated in the neonatal

period (first month of life). This is most probably caused by the incomplete growth of the pelvis. small. immature pelvis may The result in prolonged labour (labour taking longer than normal) which in turn lead to the death of mav the unborn child. Children who survive a prolonged labour or difficult delivery are more likely suffer from brain damage due to to a poor blood (and therefore oxygen) supply during the delivery. The brain damage may lead to poor development and other mental like illnesses of the brain (convulsions) and epilepsy infantile paralysis.

The average birth weight of babies born to young mothers is also lower than that of babies born to older women. This leads to the problems of low birth weight, which may result in increased morbidity and mortality.

Another factor which may explain why high mortality risks persist throughout the post-natal period (1-11 months) is the young woman's mental immaturity and consequent failure to properly care for the infant.

Materials needed for the pupils

- Posters, drawings, charts or diagrams on adolescence, and puberty
- Charts, drawings or diagrams on pregnancy and common diseases in childhood

Methods / Activities

When teaching the topic, the can start with the teacher question and answer method to find out what the pupils already know about the subject. One or more of the following activities can then be done:

- Discuss the risks and problems involved in becoming pregnant before the age of 20, or while at school.
- Write an essay on "How to avoid becoming pregnant while at school" or "The Advantages and Disadvantages of having Babies Before the Age of 20".
- Debate: "School girls who become pregnant should be sent away from school" or "School boys who make school girls pregnant should be sent away from school".

Marriage Primary 7, Term 1

Objectives

Having completed this chapter, the pupils should be able to:

- 1 Understand what is meant by having proper friendship between boys and girls
- 2 Explain the purpose of marriage
- 3 List the types of marriage in Uganda
- 4 Explain things to consider in making a proper choice of a partner
- 5 Explain responsibilities of a married couple as mother and father
- 6 Explain the custom of divorce in Uganda and its relationship to marriage

Main ideas for the pupils

- Before courtship begins between 1 boys and girls there are proper ways that they can interact as friends through social activities. These proper social activities may in time choose provide one way to suitable candidates for а marriage partner.
- 2 The purpose of marriage in most Ugandan cultures is to ensure the continuation of the family and for companionship and security of its members.
- 3 Types of marriage are monogamy and polygamy and they are bound by customary, religious or

civil laws.

- Making a proper choice of a 4 marriage partner varies from culture to culture but is usually hased personal on appeal combined with traditional social values.
- 5 One of the principal purposes of marriage is to have children. Accordingly, the responsibilities of parenthood are most important for a couple to understand during partner selection and before marriage,
- 6 Divorce is not common in Uganda although there are provisions for it in customary, religious and civil laws. Making the proper choice of a partner in the first place and maintaining responsibilities within the marriage can prevent divorce.

Behavioural changes

1 Pupils should take the responsibility of choosing a partner seriously, realising that it is a foundation for their future life and the continuation of their culture.

PROPER FRIENDSHIP

As boys and girls grow up they have opportunities to interact with each other. As they become sexually mature they may become

attracted to each other and must learn to cope with their feelings in socially acceptable ways. lf boys and girls are not ready for courtship, yet are interested in each other, they can interact through various mutually interesting activities such as singing clubs, wildlife groups, young farmers associations and the like. These can be school, religious or community sponsored. It is important to guide boys and girls in friendship when they reach puberty so that they remember that people of the opposite sex are not just sex objects but people, and that they learn to respect each other's feelings and opinions. Friends are persons with whom they can share interests, can trust and talk to, and if guided in this way boys and girls can have proper friends of the opposite sex.

THE PURPOSE OF MARRIAGE

Marriage is defined as the condition whereby men and women are joined in a special social and legal way for the purpose of founding and maintaining a family. The purpose of marriage in most societies is to:

- Produce children The biological end product of socially and legally approved marriage and coitus is the conception of Children are necessary children. to continue the family or tribal lineage and as old age "insurance" of support to the parents.
- Provide companionship In many societies the purpose of the union in marriage is also a communion between persons in a medium of physical, psychological

and spiritual communication of love and commitment of oneself to the other. This provides another tie or bond to ensure for the caring of any children as а result of physical intercourse. These spiritual purposes are reflected in Christian philosophy with such phrases as "It is not that man should be alone". good 'the two shall become one" and other sayings which have their counterparts in other religions.

TYPES OF MARRIAGE IN UGANDA

In Uganda, monogamy and polygamy are practised. Monogamy is the state of being married to one person at a time. Polygamy is the state of being married to more than one person at a time. Whether monogamous or polygamous, the three principal types of legal marriage in Uganda are as follows:

• Customary Marriage - Customary marriage in Uganda is usually marked by mutual family consent and the giving and acceptance of a dowry. Dowry is property or money given to the bride's family husband, bv the and is а significant part of customary marriage. The dowry symbolises the value of the bride (it pavs the bride's family for her loss to them, as Ugandan families are patrilineal, that is brides/wives/children belong to the husband/father's family and are "lost" from their own family once married). The dowry also seals the bargain of marriage and provides mutual security for husband and wife (parents must pay back dowry if a wife wishes to leave her husband and once dowry is paid, the wife's

the security becomes responsibility of her in-laws). Without family consent and payment of dowry (whether actual or symbolic) customary marriage is not valid or legal. Customary marriage may be monogamous or polygamous depending on social standing. religion, historical custom and other factors.

• Religious Marriage - There are many types of religions practised in Uganda, principally Christian, then Muslim and then others. Depending on the religion and religion, sect within the rites are observed, different usually at the house of worship and sanctioned publicly by an official of the religion invested with powers of marriage.

Religious marriage is monogamous or polygamous according to the laws of the religion.

• Civil Marriage - Civil marriage in Uganda is rare. It is a legal performed by the ceremony Commissioner who is District invested by the Republic with powers of marriage, and requires that the persons being married be of legal marriageable age (over 21 years unless parental permission is given), that the persons are not married by any customary or religious ceremony anyone else, and that the to notice of marriage is publicly posted for 3 weeks prior to the marriage. Civil marriage is thus strictly monogamous as polygamy becomes bigamy (the criminal act of remarrying while a former marriage has not been dissolved death of spouse or legal by divorce) under civil law.

In many cases in Uganda, customary marriage combines with religious

marriage so that persons may marry other in both types each of They may seek mutual ceremonies. family approval, make payment of dowry and observe other customary rites, then go to their house of religious undergo worship to marriage ceremonies.

PROPER CHOICE OF A PARTNER

When boys and girls become sexually mature or have reached the age of consent (the age at which it is legal for them to engage in sexual intercourse) they usually begin dating and courtship which are both processes in choice of a marriage partner. Marriage is thus the end of a search. Dating means meeting the opposite sex at a given time and spending time together to know more about each other than in proper friendship. During dating prospective partners can learn how to communicate with each other and review each others suitability for Courtship is usually courtship. the stage after dating when one has made a choice of partner and begins to try to persuade or attract the other to choose them (consent to marriage). During courtship the couple usually show off their strengths (best looks, manners. generosity, wealth, power). a guard against the dangers of As pre-marital sex (and its resulting illegal pregnancies and sexually transmitted diseases) dating and courtship in Uganda has been traditionally supervised by family In many societies the members. girl's aunt or brother and the boy's sister looks for suitable partners for the eligible boy or girl. In some cases the go-between grandmother acts as

(intermediary). In most cases courtship is short once boy and girl have agreed to marry each other and gained family consent. Choice of partner is traditionally based on the following criteria:

- Family approval
- Mutual cultural background (same tribe, religion)
- Good reputation (industrious, ambitious, desirable temperament, good social standing)
- good family background/character
- Boy is older than girl
- Boy has better education
- Equal economic status or, boy's family is richer
- Personal appeal (romantic love, good looks, similar interests).

In order to fulfil the purpose of marriage and create a relationship that will succeed, the marrying couple should consider during courtship whether they and their intended are willing and able to

- Endure hardships together (stand by each other, not blame each other for misfortunes) as well as enjoying good fortune.
- Maintain a permanent relationship (work on the marriage together, care for the marriage and each other).

- Develop a special loyalty to and for each other with mutual assurance to give each other first consideration above others
- Raise children together and assist each other to fulfil the responsibilities of parenthood.

Traditional courtship is marked by several stages and details vary from culture to culture and place to place, but usually the boy or one of his family members must ask and her family the girl for permission to marry. Background research is made mutually between families to check reputation. mental and physical health history. social position and other criteria. If the boy ís accepted, negotiations are begun between families concerning the dowry. Festivities and rites usually take place after bargaining is completed. Sometimes the couple may cohabitate (live together) and consummate the marriage (begin sexual intercourse) before dowry payment is completed but the marriage is not considered legal until the dowry has been paid in full.





RESPONSIBILITIES OF MOTHERS AND FATHERS

The proper choice of a partner should Ъe made with the understanding of the purpose of marriage and the responsibilities it entails in raising a family, and responsibilities of partners towards each other. Persons who marry for immature reasons (to get from home, away to retaliate against parents, for purely sexual purposes, out of loneliness or pity) without thought or ability to social obligations of sustain family, community, and partnership, generally regret their actions and create difficult relationships for themselves, spouses, in-laws and Good marriages are the community. source of happy children and productive contributions to the stability of society.

According to most customary laws and religions, it is the duty of a11 married persons to bear and care for children, in order to propagate their family, tribe and nation. marriage without Α children does not therefore fulfil marital the image that most partners have of themselves. This is one of the chief reasons why childless couples adopt children and why not having children cause marital family can and problems, and even divorce.

- responsibilities of mothers • The and fathers are first and provide foremost food, to shelter. clothing, security and love for their children. Mothers and fathers are equally responsible to see that their children are provided for.
- It is also the responsibility of



parents to bear just the right number children they of can provide for. Each couple should critically look at their resources and limit their to the number children thev personally can cope with and provide for. They should not expect a rich uncle or the grand parents to subsidize them. Manv uncared for children become a liability to society.

- When children get sick, parents are duty bound to take them for treatment and to ensure proper medical care. They are responsible to ensure the health of their family members including the teaching of good health habits.
- Parents have to protect their children from physical harm or from being stolen.
- Parents have the responsibility of bringing up their children, (i.e. caring for all their needs until the children reach the majority age of 21 years. During those years, the parents are responsible for their children's discipline). (See Primary 5, Term 3 Anti-Social Behaviour and Delinquency).
- According to customary law, it is the responsibility of the parents to provide the dowry for their male children's marriage. Failure to do so can lead to elopement and other forms of anti-social behaviour.
- In Uganda, parents have a duty to instruct their children according to the father's religion or according to the written laws of a particular religion.
- When a child is taken to school, the parental right is transferred to the school, thereby giving teachers the parental duty to

discipline the child. In other words, teachers are supposed to take over or stand in for the parents' role during school time, so their disciplinary actions must only be equal to what the parent would have given. It is the parent's duty to see that teachers fulfil this obligation through parent-teacher meetings.

- Parents should ensure that children are not given too much work beyond their age limit. (Illegal child labour). For example, a child may be required to fetch water, firewood, helps dig and is the one sent to cook. to buy cigarettes or drinks for parents. This overworking the child contributes to the poor school performance, mental and physical fatigue of some children. and to early child marriages in other cases \mathbf{as} children attempt to escape from the excessive workload at home or school.
- Parents should not be slaves of their children neither should the children. be slaves of their parents. Some people feel that in Europe, parents are slaves of children (in other words. their do everything for their they children), whereas in Africa. children are the slaves of their parents.
- Parents must not buy children's love by giving in to everything they want. It is the duty of every parent to teach children that they must work for what they want; that yelling for it simply is not adequate. Children should be taught and directed on how to achieve success, not just satisfy their every whim.
- Parents should remember that in the final analysis, it is not



what they do for their children but what they have taught their children to do for themselves that will make them successful human beings.

• In Uganda, it is customarily the responsibility of parents to look after the offspring of their teenage daughter if she is not married and has not yet reached the majority age of 21 years. Legally she is still in the hands of her parents as a child.

• It is illegal for parents to force or sell their children into marriage before they reach the majority age of 21 years. should Parents see to it that their children do not start having children before the majority age of 21 years through education about reproduction and through loving but firm moral guidance.

DIVORCE

Divorce is very rare in Uganda although it is provided for in customary, religious and civil laws under different circumstances. Divorce is the legal dissolution of a marriage and usually only granted under extreme circumstances such as the non-consummation of marriage (when coitus can for some reason not take place), the discovery of a significant action (crime, other marriage) in one partner's past, the inability to have children or non-support or extreme cruelty of one spouse to another. Divorce is not allowed or is discouraged in many societies because it destroys the basic family unit and endangers the care of children which may have been produced. For the majority of people, marriage is a partnership made for life.

Methods / Activities

GROUP DISCUSSION ON MARRIAGE

Divide class into groups by boys only and girls only. Have the boys discuss among themselves and write down the qualities desired in a girl they would like to marry. Have the girls discuss among

themselves and write down the qualities desired in a boy they would like to marry. Compare the lists with the whole class together and ask questions about this "ideal couple". Do the qualities listed meet parental approval? Would the couple get along together? (Do thev have similar interests?) be Would they suitable parents? Which qualities do not contribute to getting along and providing for a family? Ask the pupils to answer the question silently to themselves "Do I have the qualities necessary to be a good husband/wife?"

MARRIAGE ROLE PLAY

Arrange a role play for dating. courtship and marriage according to the customs observed in your area. Assign roles of bride and groom and families. their Allow some controversy such as: the groom's family does not think the girl is hardworking enough. How does the bride's family prove she is? $\mathbf{0r}$ the bride's family feels the bride is worth more than the usual dowry How because she is educated. do the families negotiate? How do the bride and groom prove they can provide for a family and raise children?

Budgeting Primary 7, Term 2

Objectives

Having completed this chapter, the pupils should be able to:

- 1 Make plans for items and services which require money and understand the meaning of the term "budgeting".
- 2 Explain how to make money serve the needs of a typical family.
- 3 Explain simple costings and accountability.
- 4 Know what to do to avoid financial chaos.
- 5 Understand the importance of proper decision-making.

Main ideas for the pupils

- 1 Budgeting helps us to live without getting into debt (live without spending beyond our income).
- 2 Proper management of money can lead to a peaceful, happy, healthy family life.
- 3 Money which comes into a household whether from salary, sales of crops, bonuses, gifts and inheritance, should be well planned in order to benefit the entire family.

Behavioural changes

Pupils should plan expenses before spending the shillings they earn (or will be earning) in preparation for their future family life.

METHODS OF HANDLING HOUSEHOLD EXPENSES

То budget means to plan in advance the amount of money needed according to what is available for the next week, month or year. Many families do not budget -- they just spend money when they get it. In way unplanned needs this 11ke illness, school fees, taxes. visitors, parties, buying a car or building a house can take all the money a family has at one time and other needs have to wait until more money can be obtained. There are different ways to handle monev within a family, some of which depend on a budget, others which not. They are: do

1 The Handout System - This system is an authoritarian, dictatorial method where one member of the family controls the family income and pays it out on demand.

The main disadvantages of this method are -

- The controller of the money cannot use the money effectively because they do not consider all the relative values of what they are spending the money on.
- The request, especially by

young children or relatives may be unreasonable, which can result in a lot of tension in the family.

- Family members never understand the true financial situation of the family, or to see how such can be obtained - monthly or annually.
- Some basic needs of the family may get neglected e.g. nutrition and household or personal requirements.
- 2 The Allowance System Here the money earning member of the family, usually the husband gives the housekeeper, usually the wife an allowance and keeps the balance of the money for their own use. This method is a bit better than the handout system because

the person responsible for housekeeping can plan





expenditures (budget) according to how much allowance is allotted.

The main disadvantages of this method are:

- The wage earner may not give a realistic allowance which is adequate to cover all the household expenses especially if emergencies arise.
- The housekeeper may misuse the money by skipping on essential items like food in order to stretch the allowance to cover their own personal needs, resulting quarrels over in responsibilities.
- Certain items needed by the family may be neglected completely.

3 Joint Control - This is where both husband and wife earn money, and they divide up the household expenses. For example, one may pay school fees, house rent and transport while the other buys foods and meets household expenses. Or they add up total household expenses, divide by two and each contribute half the share.

This system works well if all the expenses are stable and predictable, otherwise it can lead to arguments as to who contributes more and who covers unplanned events.

4 Family Budgeting - A Family Budgeting system is where all the needs of the family are examined by the whole Family. Plans are made so that the income made by all wage total are utilized cover earners basic needs to suit the way of life desired by the family and plans are made for emergencies.

This is the most satisfactory method of handling money because:

- It is democratic and gives both parents, and grown up children the opportunity to give their views, and teaches younger children how to be responsible for money.
- Priorities can be worked out according to resources.
- There is less likelihood of one member being selfish.
- Each member is made fully aware of the family's financial situation and becomes capable of managing if left on their own.
- All needs of the family can be taken care of.
- In the event of extra demands, as in our present very high cost of living, family members can offer to contribute their skills and knowledge to help raise more funds (for example by making things for sale).
- It creates less suspicion and leads to honesty and harmonious atmosphere in the home.
- It ensures that families live within their income bracket and not try to "keep up with the neighbours".



COMPONENTS OF BUDGETING

Good management of money should have the following:

- 1 <u>Planning</u>. Think of all the things a family needs, write them down and find out how much they will cost. Allow reserves for emergencies (savings).
- 2 Prioritising the family needs. Arranging the requirements in order of priority so as to decide on which items to spend money on first. For example a father may want to buy a suit for going to big meetings or parties: while one of the school children's shoes are worn out; and the younger child and needs i11 special is expensive treatment at an clinic. Families should decide priorities together.
- 3 Evaluation. As each problem is solved, it is necessary to look back to decide if the right action was taken, or should a different solution be used in the future.

A good money spender looks for "value-for-money" buys. That is to say the cost of the item should prove tο be less run. expensive in the long For instance, one 10 kg bag of maize meal flour costs shs 250/-. If the same maize meal flour is bought one kg at a time it costs shs 30/- per kg. If you can afford it, it is cheaper to buy the 10 kg bag because in the long run you save shs 50/-. spur of the Buying on the moment is wasteful because you cannot estimate the relative value of the goods.

4 <u>A System for Physically</u> <u>Handling the Money.</u>: The

simplest way to work with a budget is to use an envelope system. Divide the money to be spent into planned amounts and label tins or envelopes with "Food", "House", "School", "Health" "Savings" etc. Put in each container the amount allocated for it and seal each container, 80 that money budgeted for each item is not confused.

5 Accounting - When you have to shop for something, for example food, write down all the items you need for that week; write the likely costs next to each required. Open the tin/envelope labelled "food" and see if you have enough money for all your shopping. If the money is not enough, go through the list again and see if you can reduce the quantity of some items or substitute them. For instance instead of buying 5 Kgs. of rice at shs 250/-, you can buy 5 Kgs. of potatoes at shs 100/- and/or 5 Kgs of maize meal flour at shs 100/-, which has the same food value and is. much cheaper.

STRICT MANAGEMENT

If you can't afford something, work to raise more money. Never try to live beyond your income. Avoid borrowing.

Materials needed

for the pupils

- Empty packets of commodities to make a shop full of variety of items - class collection.
- Imitation money made by colouring pieces of paper. Class should make these in advance.

Methods / Activities

PLANNING A BUDGET

- 1 Divide class into 5-6 groups. Assign each group to different income brackets.
- 2 Tell each group to divide their money according to the items suggested in the following sample budgeting guide.
- 3 Groups should choose a money keeper, and this pupil should find out what each family member wants to buy that week and the cost of the suggested items.

- 4 Class should work out how many items suggested can be bought with the money available and suggest ways of over-coming their problems.
- 5 Have class make simple rules on how best to manage money income.

ROLE PLAY ON FAMILY BUDGETING METHODS

Divide pupils into two groups:

- 1 A family that knows how to budget, the parents are responsible, budget well and inform children about money matters.
- 2 Α careless family, parents do not share information about the value of money. Father smokes, is a drunkard, fights when he comes home, and keeps most of the money to himself. Α crisis occurs in both families. The smallest child

Family Budgeting Guide for Weekly Expenditures

Expenses	Per Item % Voted	Shs. 100	Shs. 200	Shs. 500	Shs. 1000	Shs. 2000	Shs. 5000
1. FOOD 2. HOUSE and	30	30	60	150	300	600	1500
GARDEN	20	20	40	100	200	400	1000
3. OPERATION	,	,	•		10		
AND FUEL	4	4	8	20	40	80	200
TRANSPORT	6	6	12	30	60	12	300
PERSONAL	5	5	10	25	50	100	250
6. CLOTHING	10	10	20	50	100	200	500
7. EDUCATION	10	10	20	50	100	200	500
8. RECREATION	5	5	10	25	50	100	250
9. HEALTH	5	5	10	25	50	100	250
10. DONATIONS	2	2	4	10	20	40	100
11. SAVING	3	3	6	15	30	60	150

Examples of Expenses According to Different Income Brackets

is struck by a vehicle while playing on the road and money suddenly is needed to hospital fees. What pay happens in each family? Have they planned for emergencies and put money aside? Are other members of the family willing to pitch in to help? Can money be saved from one budget category to help in another?

Class should add the likely ending to the stories. Let class practice and act it for the school or local community. Unit 7 FAMILY HEALTH AND SOCIAL PROBLEMS

Sickness In The Home Primary 7, Term 3

Objectives

Having completed this chapter the pupils should be able to

1 List ways of making sick people more comfortable

Main ideas for the pupils

- Sick, invalid and convalescent people need to be kept clean, they need to drink extra fluids, they need good food, the chance to rest quietly, sometimes the advice or treatment of a health worker, and comfortable care.
- 2 Everyone in the household or family can help to contribute to the comforts needed by the sick in their own home, but it is especially important that pupils use their health education knowledge in real life towards people for whom they care.

Behavioural changes

1 Pupils should understand that the sick, invalid and convalescent in their own homes are people for whom they are responsible and care for them using health education learned in school.

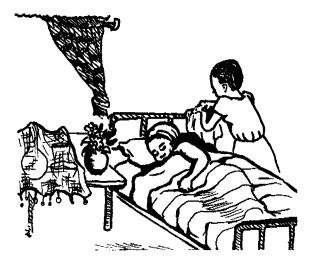
CARING FOR SICK PEOPLE

There are many causes for sickness in the home as we have studied in prior health chapters. When someone has fallen sick it is important to remember that the same rules of preventing sickness (to keep clean, drink plenty of fluids, get plenty of rest and eat well) important to help are restore health during a period of illness. For most sicknesses, no medicines are needed. Our bodies have their own ways to resist and fight disease. In most cases, these natural defences are more important to our health than are medicines. People will get well from most sicknesses - including the common cold and flu - by themselves without need for medicine. In the case of more serious illness when drugs and the care of a health worker may be needed, it is still the body which overcomes the disease, the drugs and treatment only help. Cleanliness, extra fluids, extra good foods, plenty of rest and comfort are still needed.

Following are descriptions of the specific types of care required by people who are ill in the home:

1 <u>Cleanliness</u> - (Review: Our Health sections on how to wash hands, faces, bodies, eyes, teeth, nails, hair, clothing,

bedding. Food and Nutrition section on "Food Hygiene", and Sanitation section on "Housing and Health") sick people need assistance in keeping their bodies, bedding and the sick Cleanliness helps room clean. to prevent reinfection of the sick person, allows the sick person to feel more comfortable (especially if they have fever or diarrhoea), and keeps their sickness from infecting others in the household.



- 2 Extra Fluids (Review: First Aid section on "Fever", Common Diseases section on "Diarrhoea and Dehydration", and Food and on "Food Section Nutrition Nutrients and their Functions") people need plenty of sick extra fluids to replace those lost in diarrhoea, sweat and vomiting. Clean water, tea and coffee, fruit juices, milk and clear soup are good for those who are a sick. Fluids should be clean and freshly made and given to the sick persons on demand.
- 3 <u>Good Food</u> (Review: Food and Nutrition sections on "Food for



Vulnerable Groups" and "Food Hygiene). People who are sick need energy and nutrients from to help their food bodies overcome sickness. Food can also provide physical comfort for someone who is convalescing, but special diets can be formulated to help those who, because of their sickness have difficulty in eating. The important things to remember are to be helpful in making foods the patient wants to eat and serving them in as cheerful and comforting atmosphere as possible to induce a good appetite.



4 Rest - Rest is needed to help the body overcome sickness. Most of a sick person's energy expended in developing is antibodies, replacing damaged cells. or other internal activities in a war on the



disease or injury. A sick person is therefore prone to be easily tired or weakened by simple actions such as talking, sitting up or moving from room to room. Comfort to sick persons can be provided by leaving them undisturbed when they need sleep, keeping noise levels down (leaving the radio off, keeping children and animals out of hearing range, postponing noisy household chores) and bringing the sick persons whatever they need so that they do not have to get out of bed.



5 Treatment by a health worker In case of serious disease disability or injury a sick person may need the treatment advice of a health worker. or The people of the household can contribute to the patient's comfort by assisting them to get to the health worker in the first place, by assisting them to keep subsequent appointments and by giving medicines or treatment as prescribed by the health worker.



Patience and Emotional Support - When people are sick they often do not want to eat or talk, are in pain or in a bad mood because they feel sorry for themselves, are afraid or lonelv. Comfort to the sick can therefore mean more than physical care. All members of the family should make an extra effort to show compassion for those who are sick and in need bv bearing with the sick person's temper or depression, providing companionship when showing needed and extra attention in any way possible.

Methods / Activities

ROLE PLAY ON CARING FOR THE SICK

Carefully organise a script ahead of time in which two families have one person who falls very sick and must be cared for at home.

- Family one ignores the sick person and does not give any special attention. Show how the sick person may get worse, may transmit disease to others or how this causes quarrelling and other problems in the home.
- Family two tends for the comforts and needs of the sick person. Show how the sick person can get better and how it helps to bring the family closer together.

Unit 6 COMMON DISEASES

Sexually Transmitted Diseases

Primary 7, Term 2

Objectives

Having completed this chapter the pupils should be able to:

- 1 Identify three major sexually transmitted diseases (STDs) -AIDS, gonorrhoea, and syphilis - and explain their major consequences.
- 2 Explain the basic concept of the transmission of STDs.
- 3 Describe other ways by which AIDS and other STDs can be transmitted in addition to sexual transmission.
- 4 Explain how the spread of STDs may be prevented.

Main ideas for the pupils

- 1 There are certain diseases that are spread through the act of sexual mating the most common of which are gonorrhoea, syphilis and AIDS. These diseases can cause serious harm to men, women and their babies:
- 2 Gonorrhoea and syphilis can cause many health problems including sterility (loss of the ability to produce children). AIDS is a deadly disease.
- 3 Gonorrhoea, syphilis and especially AIDS can live in a person's body for a long time without any sign of the

disease. During this time it can be passed to another man or woman sexually.

- 4 Gonorrhoea and syphilis are treatable at health centres but only if the person knows they have the disease. There is no known cure for AIDS.
- 5 You can avoid the risk of getting sexually transmitted diseases by choosing to have only lifelong sexual partners.
- 6 You can minimise the risks of getting sexually transmitted diseases by using a condom correctly, but it is not a guarantee against the disease.
- 7 AIDS patients should be cared for like any other sick person. There is no reason to fear catching the disease by caring for these sick persons.
- 8 Primary school girls should be warned that men have been known to come to schools to have "safe sex with virgins" in an attempt to avoid experienced women of their own age who may have AIDS. Girls should beware of men who pretend to be helping them but who are only interested in sex.

Behavioural changes

1 To have pupils understand how STD's are acquired and to take

responsibility for their sexual behaviour and its consequences.

2 To impress on the pupils that AIDS is an extremely serious problem that can be overcome both by protecting themselves and through their actions in publicizing the issue in their communities.

Note to the Teacher

It is important to teach the section on human reproduction before this one so that it is clear pupils how STD's to are transmitted. In the new curriculum this information should initially be taught at the Primary 5 level, however if there is any doubt that the pupils have not had this basic material, it should be reviewed thoroughly prior to teaching this chapter.

This section, especially that part regarding AIDS, is extremely important to the very survival of our youth because pupils may already, or may soon be experimenting in activities which have serious consequences.

The aim of this chapter is to provide adequate material and methods for teaching pupils about the risks and responsibilities of sex before they become sexually active. This knowledge can become an important weapon, not only in fighting the AIDS epidemic, but also in decreasing other problems associated with irresponsible sexual behaviour.

You as a teacher have a moral responsibility to ensure every pupil understands the subject by:

- learning as much as you can about STD's (especially AIDS which scientists are learning more about every day).
- teaching all the facts clearly using the correct vocabulary (leaving out parts or teaching myths is dangerous).
- teaching with the knowledge and support of colleagues, parents influential religious and or community groups (these groups can assist you in your teaching especially if you share information with them and explain whv vou are teaching the subject).

You may wish to divide your pupils by sex and have a senior woman teacher teach girls and have senior man teacher teach boys а about sexually transmitted If possible, diseases. invite students to come and see you for personal sessions should they be reluctant to ask some questions during class.



SEXUALLY TRANSMITTED DISEASES (STD'S)

As has been illustrated in previous sections the of curriculum, human diseases are spread in a number of different ways: contaminated water and food. certain insects and animals, and by themselves coughing, humans by touching, and defecating. There is another group of diseases where the germs are most commonly passed from person to person through the act of having sex. These diseases used to be known as venereal diseases or but today this name is VD. no

longer used and has been replaced by the straightforward descriptive term "sexually transmitted diseases" STDs. or The most important point to be made about STDs is that they are only spread when a man or a woman has sex with an infected person. The chance of having sex with an infected person increases when a person has more than one sexual partner. There are STDs which are known many to doctors; in this chapter we will focus on three of the most common gonorrhoea. ones: syphilis and AIDS.

A Sexually Transmitted Disease is a disease that is usually passed from one person to another through the act of having sex.



GONORRHOEA

Gonorrhoea is a common STD in almost all parts of the world. It is easily passed from man to woman and from woman to man when they have sex. The most common symptom of gonorrhoea in men is to have a painful discharge of pus from the penis. This occurs 2 to 10 days after having sex with a woman who is infected.

When a woman gets the infection from a man she will sometimes have discharge of pus from her vagina, however, it is also common that she will have no symptoms at all for many months. Unfortunately, this does not mean she doesn't have the disease. In women, gonorrhoea can hide for many months before causing severe problems.

One of these problems occurs if the woman becomes pregnant while the disease is hiding in her body. When the baby is born, the disease can attack its eyes and cause blindness and even death if it isn't treated rapidly.

Another problem that gonorrhoea can cause in women is a serious infection of the oviduct, the tube that carries the egg from the ovary to the uterus. This infection can cause the woman to become quite

Gonorrhoea can cause blindness in newborn babies!





<u>ill</u>. She may have severe pain in her lower abdomen and a fever. Τf the infection is not treated promptly it can cause damage to the oviduct so that it becomes blocked. If this happens to both of а woman's oviducts, the woman can no longer have babies because the eggs cannot get from the ovaries to the uterus.

Although gonorrhoea is treatable at health centres, the most serious complications occur when people are unaware that it is in their bodies. It is best to avoid getting the disease in the first place.

PREVENTION OF GONORRHOEA

- 1 Lifelong Sex Partners by far the best way to avoid gonorrhoea is to have only lifelong sex partners who are faithful. A husband and wife who only have sex with each other will never get gonorrhoea.
- 2 Early Treatment persons who are infected with gonorrhoea

need to get treatment as soon as possible. They must also tell the people whom they have had sex with to get treatment. They should cease having sex until they are completely cured in order to prevent its spread.

3 Use of Condoms - a condom is thin sheath that can help. а but is not a guarantee to prevent gonorrhoea. The condom fits over the man's penis and prevents the penis from actually touching the vagina which in turn can prevent infection from spreading between the people having sex.

SYPHILIS

Syphilis is another common STD. It is easily passed from man to woman and from woman to man when they have sex. The most common symptom of syphilis is an open sore (also called a chancre) which appears 2 to 5 weeks after contact with an infected person. The sore appears in the genital area of the man or woman and it is full of syphilis germs which are easily transmitted to another person.

A big problem with syphilis is that the sore is usually painless, and if it is inside a woman's vagina where it cannot be seen, the woman can unknowingly infect every man with whom she has sex.

The sore on the man or woman only lasts a few weeks and goes away without treatment, but the disease continues to spread through the body. A few weeks or months later the man or woman may have a sore throat, mild fever, mouth sores, swollen joints or any skin problem like a painful rash all over the body, ring-shaped welts or an itchy rash on hands or feet.



The danger of syphilis is that all of the signs or symptoms may go away even without treatment but the disease continues to spread through the body. Without the right a health treatment at centre syphilis can cause heart disease. paralysis, insanity and other problems.

PREVENTION OF SYPHILIS

As in prevention of gonorrhoea, the best way to avoid syphilis (or any other STD) is to have only lifelong sex partners who are faithful to each other. It is also important to get early treatment and to get treatment for infected partners to stop the spread to others. Again, condoms can help to stop the spread of syphilis but they are not always successful.

AIDS

AIDS stands for Acquired Immune Deficiency Syndrome:

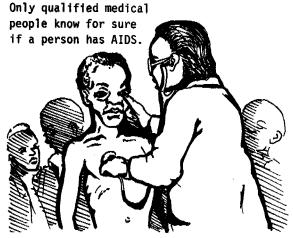
- Acquired to get from. The disease, AIDS, is acquired or gotten from other people by having sex with them. Babies can acquire or get the disease from their mothers.
- Immune protected. The body is normally immune or protected against many illnesses. Children receive immunizations to he1p them against protect serious illnesses like polio and measles. this immunity In AIDS. is destroyed.
- <u>Deficiency</u> a lack of. In the disease, AIDS, there is a deficiency or lack of the body' immunity against other illnesses.
- <u>Syndrome</u> a group of common signs and symptoms. Prolonged fever, diarrhoea, and severe weight loss are common signs and symptoms of the AID Syndrome.

AIDS is a fatal disease that is caused by a virus. This virus is most commonly passed between people by having sex. The virus damages the white blood cells. Since white blood cells help provide the body's immunity, when they are damaged the body is less able to protect itself from other infections. It can take months to many years before the virus does enough damage and the person becomes visibly sick. We don't yet know how long a person can carry the virus in their blood without showing signs of the illness.

When a person has AIDS they can become sick easily by diseases that normal, healthy people are able to fight off. When the person with AIDS does become sick, it can be

from different many types of infections. These are called "secondary infections". The person's symptoms depend on what kind of secondary infections they have. The most common symptoms shown by people with AIDS are: fever, diarrhoea, much loss of weight, cough, and an itchy skin rash. It is because of the loss of people in weight that Uganda sometimes call AIDS "slim". These symptoms last for many months.

Ϊt can be very difficult sometimes to know whether or not a person actually has AIDS or some other disease. AIDS can easily be confused with malnutrition, tuberculosis, typhoid, measles, cancer, severe alcoholism and other diseases. Only qualified medical people know for sure if it is AIDS, and no one should be accused of having it just because they have some of the symptoms.



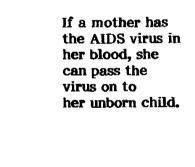
If someone is worried that they might have AIDS it is important to contact a health worker to help find out how best to help that person. Doctors should treat people with AIDS just like any other seriously ill person. There is no cure for the primary problem which is the damaged immune system or "immune deficiency". Sometimes the secondary infections can be treated with medicines that can help the person feel better for a while. Unfortunately, the medicines often don't work very well for people with AIDS and eventually they die.

TRANSMISSION OF AIDS

Sexual Transmission: The most common way that a person gets infected with the virus that causes AIDS is by having sex with another person who already has the virus in their blood. Like other sexually transmitted the virus is present in diseases the man's semen and the woman's vaginal fluids. The important point to remember is that the

virus can hide in the body for many months or years before the person becomes ill. Even though the infected person can appear completely healthy, he or she can pass the virus to their partner by having sex. This is one of the main reasons why the disease has spread to manv people already.

• Infected Mother to Child: Another the virus is spread is from wav infected mother to her unborn an child while it is still in the uterus. The mother can appear healthy but if she has the virus in her blood it can be passed to Just like adults, the the baby. children who are born with the AIDS virus in their blood can become ill from many different infections and die secondary because the have no immunity to diseases.



• Through Blood: The virus can also be spread through direct contact with the blood of an infected There are two ways this person. can happen. One is if health workers don't properly clean their needles after giving an injection to a person with the AIDS virus in their blood and give another person an then injection with the same needle. It is the responsibility of a11 health care workers to sterilize their instruments properly.

The other way to spread the is through blood virus а If the blood that transfusion. is given to the person receiving the transfusion has the virus in then that person will become it, infected as well. All major should be able hospitals tο this prevent from happening because they have special equipment to test the blood with. If the blood has the virus in it then it will be thrown away.

• How AIDS Can NOT Be Spread: It is also important to know how AIDS

isn't spread. You do not get AIDS by touching the skin or clothes of a person with AIDS. virus is not spread The by coughing or sneezing. You do not get AIDS from contaminated water the plate or cup of or an infected person. No animals or insects, including mosquitoes and bedbugs, are know to spread the disease.

CARE OF A PERSON WITH AIDS

It is common for healthy people to be afraid of sick people. This is even more true when a disease is new and there is no cure for it. AIDS is a disease like this. Some people are scared to live with or be around a person who has AIDS. They think that maybe they will get the illness themselves from getting too close or touching the sick person. The reason people have these fears is that they don't understand how the disease is



spread. As we described in the previous section, AIDS is not passed in the ways many other diseases are. There is no reason to be afraid of helping to care for a person with AIDS. The only caution that needs to be observed is that the caretaker use the same proper hygienic methods needed for caring for any other contagious disease, such as covering open wounds, washing hands before and after caring for the patient and before handling food, keeping the patient, and surroundings clean. and other clean practices.

Besides helping to care for the physical needs of people who are sick with AIDS, it is important to consider their emotional needs. It is frightening and lonely to know that you are dying of an incurable disease. One of the best things we can do for AIDS patients is to spend time with them and to let them know that they still have friends who care about them. Simple things like holding their hand or just talking with them can often be the best medicine for their fear and loneliness.

PREVENTION OF AIDS

The best way to keep from getting AIDS is to have just one lifetime If a man has several sex partner. wives, this can also be safe as long as he or his wives don't have sex with any other people. AIDS is other sexually transmitted like diseases in that the more different people you have sex with. the greater are chances your of catching the disease. AIDS is unlike other sexually transmitted diseases because there is no cure for it and because there is a high



risk of dying from it. Therefore, it is extremely important to avoid getting it in the first place.

As with other STD's, condoms can lower the chances of contracting AIDS by preventing the penis from contacting the Vagina. However, it is important to remember that condoms are not a guarantee against getting AIDS. Condoms are not always available. they may be faulty if they old are or improperly made, and if a man does not know how to put a condom on correctly or tries to use it more than one time, the AIDS virus can be spread.

Besides protecting yourself, you can help others in your family and community protect themselves. The best way to help others is simply through talking with them and sharing the new information you have learned. By spreading your knowledge, you are playing an important role in the fight against AIDS.

VOCABULARY

- <u>chancre</u> ulcer or open sore made by an STD.
- insanity condition of being mentally deranged or unhealthy.
- oviduct tube which connects the ovary to the uterus. The ova travel through this tube.
- <u>paralysis</u> loss of function of nerves which cripples a person.
- penis the male organ used for mating and passing urine.

secondary infection - any disease a person catches after AIDS (the primary infection) has weakened the body's immune system and allows these other diseases to attack.

- STD / Sexually Transmitted Disease - a disease which can be spread by sexual contact.
- sterile unable to produce children. Also means free from germs.
- symptom a noticeable change in the body which is noticed by the person. It often means that an injury or disease is present.
- transfusion a transfer of blood from one person to another.
- <u>uterus</u>- also called the "womb"; a large, muscular female organ in which a baby is conceived and develops.
- vagina the passage between the opening of the uterus and the outside of the woman's body
- virus a small germ that can cause disease. Measles, polio and AIDS are examples of diseases caused by viruses.
- white blood cell a type of cell found in the blood that helps provide immunity (protection) against disease.

Materials needed for the pupils

Charts, posters, and leaflets

produced by the Ministry of Health ("Love Carefully"), the Uganda Catholic Medical Bureau ("Love Faithfully") or other medical organizations.



Love Carefully!

Learn Facts About "Slim" AIDS Disease !



Protect Yourself and Those Whom You Love!

What Does "Slim" AIDS Look Like?

A person with Slim Disease has these signs:

- Fever which comes and goes
- · Diarrhoea which lasts a long time
- <u>Weight Loss</u> which cannot be explained
- <u>Thrush</u> (white coating in the mouth)
- · Itchy Skin Lumps which appear anywhere on the body
- Skin Rash Itching Rash anywhere on the body

BE CAREFUL-A person with TB, Typhoid, Malnutrition, Cancer or Severe Alcoholism can be mistakan for a Slim victim. Only qualified medical people know if you really have Slim. If you have some of the Slim signs, check with a doctor.

How Do People Catch "Slim" AIDS ?

- From Sexual Relations with an Infected Person (This is how most people catch Slim Disease)
- · From Contaminated, Unstarilized meedles, blades, knives (Fewer people catch Slim this way than through sex)
- . From Infected Mother to Newborn Child (If a mother has the disease she can give it to her child)

You can NOT get Slim'from food, drinks, clothing, toilet seats, swimming pools, shaking hands or touching things that a Slim victim has used.

How Can We Prevent "Slim" AIDS?

- LOVE CAREFULLY: Know your sex partner and do not have sex with many different people. The fewer your partners the fewer your chances of getting Slim.
- Use Condons (also called "socks", "rubbers", or "prophlactics")
- Do not let unqualified people give you injections

Aids is a World Wide, serious disease because even though most people who get the . Jafection do NOT develop the disease, they can pass it on to others, and all people who do develop the disease <u>DIE</u>:

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Methods / Activities

GROUP DISCUSSION ON STD'S

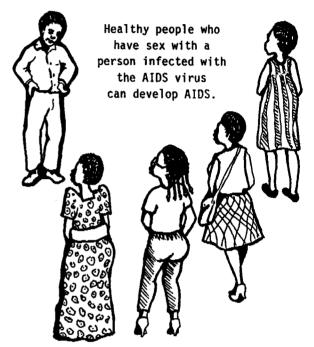
In your discussion of STDs, you should put the most emphasis on how the diseases are spread. Emphasize, especially to the girls, that gonorrhoea can prevent them from



ever having babies. Posters on "How STDs are Spread" can be used here. Although the basic concepts of the other STDs are also important, we suggest spending the majority of your teaching time to focus on AIDS. The main message is the same for all of these diseases: Choose only lifelong partners.

One way of starting your discussion about AIDS is to find out what your pupils already know. You can open each of the sections with this query and list the responses on the blackboard. After doing this, you can go through the list, expanding on those ideas that are correct and explaining why some of them may be incorrect.

The three points which are most important in the whole discussion are: (1) The disease is spread by having sex with an infected partner, (2) It is impossible to tell if a person has the disease by looking or asking them, and (3) Having more than one sex partner increases your chance of acquiring AIDS.



Methods / Activities

THE STORY OF JOHN

Tell pupils the following story after recalling "Harriet's Story" from the chapter on "Human Reproduction". Read the outline of the story to yourself ahead of time fill in the details about and the dialogue as you wish, perhaps changing the names to favourite local names. Keep in mind that this story relates to what you have taught about STD's.

John's Story

When John and Harriet were classmates in Primary school they began to get friendly and meet secretly after church services. After a time, they started having sex and Harriet became pregnant. Because he was scared and immature, John abandoned her. He stayed in school but all the girls there about his bad manners and knew stayed away from him. Many of the girls' brothers kept him away from their sisters.



Because he was shunned by decent John began to become girls, friendly with women outside of school in the town. John soon got some kind of sickness. He went to herbalist for treatment and а thought he was well again. What John didn't know was that the illness was hiding inside him and he was now able to infect others.

When John was about twenty, he found a woman who was willing to



be his wife. He was happy to think that he could now start a new family after disowning his first child. Unfortunately, John passed the disease in his body to his wife and she became quite ill. Although she recovered, she was unable to bear children.

John called a meeting of the clan and blamed his wife for not



Sexually Transmitted Diseases

producing children. His poor wife cried and cried when he accused her of playing around before marrying him, but her tears and denials did not win in the end. The clan allowed John to put his wife aside and marry a younger woman; which he did.

Now John was waiting for his second wife to have children but the same problem happened. The people soon realised it was John's fault for not having children, and



his wife left him. No decent woman would have John so he began to go to town and visit the women (malaya) in the bars there. This time John got an even worse disease from the malaya and became very sick. After a long and painful illness, he died.

Questions About John's Story

Ask the pupils these questions about "John's Story":

- What do you think the other pupils in school thought of John after he had sex with Harriet and she became pregnant.
- What kind of sickness did John probably get when he first started going to town? What should he have done when he got this sickness?
- What happened to John's first wife that kept her from having babies? Whose fault was this? John's, his wife's, or both?
- What kind of sickness did John probably get the second time he was having sex with the malaya?
- How could John have prevented all his problems?
- What have you learned from this story?

Family Planning/Child Spacing

Primary 7, Term 2

Objectives

Having completed this chapter the pupil should be able to:

- 1 Define the terms "Family
 planning", "Child spacing",
 and "Contraception".
- 2 Explain four methods of contraception, including one natural method. Explain the basic advantages and disadvantages of these different methods.
- 3 List three problems caused by having more children than a family can support.

Main ideas for the pupils

- 1 Family planning means using birth control methods to plan when to have and when not to have children within a family.
- 2 Child spacing means that the parents provide adequate time between the births of a family's children. This will help ensure a healthy start in life for each child and is also healthier for the mother.
- 3 There are many traditional and modern ways of family planning that a couple can use in order to space their children.
- 4 Beginning and maintaining a family is a big responsibility that must be considered by

young men and women before they begin courtship, marry and begin a sexual relationship.

Behavioural changes

1 To encourage pupils to take responsibility for their sexuality and its consequences both inside and outside of marriage.

THE PROBLEMS OF TOO MANY CHILDREN

When a man and a woman marry it is natural for them to want to have children. It is also normal for them to want to do the best they can to raise their children to be strong and healthy. If the man and woman marry when they are 20 years old and do nothing to limit the number of children they produce, it is very likely for them to have 10 to 15 children. The burden of caring for so many children is Many families do not tremendous. have the financial resources to provide adequate food, clothing, and education for so many children.

There are also medical reasons why it is unwise for parents to have children too frequently. If the mother becomes pregnant very soon after her last child was born, it can cause the following problems:

• Maternal anemia - The mother is

tired and weak and may become very ill. Her body used much of its supply of iron during the last pregnancy and has not had time to renew its supply.

- Miscarriage The developing baby dies inside the uterus early in its development.
- Premature birth The baby is born too early, before it is completely developed. These babies are at greater risk of illness and death, often from problems with breathing.
- Low birth weight -The baby weighs less than a healthy baby. This happens from lack of nutrition while the baby was These babies developing. are at greater risk of getting sick from many common infections.

If parents choose to have their children two or more years apart, they decrease the risk of these problems occuring.



REASONS FOR TOO MANY CHILDREN

There are many reasons why some people have more children than they can care for properly. Some of these reasons are:

- Ignorance of Family Planning Methods - Until recently, many parents did not know what they could do to limit the number of children they produced. The only option seemed to be to keep away from having sex altogether. Since many people were unwilling accept this to alternative. the result พลอ that there were many children born to parents who were unable to adequately care for them. There are now many organizations including the Family Planning Association of Uganda who now make it possible for most people to learn about and have access to family planning methods.
- High Infant Mortality Rate Many parents in the past have tried to have as many children as they could out of fear that most of their children would not survive childhood. While there are a number of factors responsible for high infant mortality. having very closely spaced children, or more children than the parents can afford to care for contributes to this high In addition to death rate. learning about family planning knowledge of breastmethods, immunization, treatment feeding. of dehydration, and use of health care services will all help to reduce infant mortality.
- The Myth of Male "Strength" -Some men feel that in order to prove that they are strong or sexually superior they must have

many children. These men do not realize that any boy at or after puberty can do this and so it really doesn't prove anything. The true test of a man's superiorty and manhood is his ability to suport and care for his wife and children.

• The Desire for Male Children - In addition to the above reasons, some families who have only or mostly girls will continue having children out of the desire to have male children. In patrilineal cultures like the ones in Uganda there is importance placed on the ability to carry on the through male family name children. Parents need to realize the value of each child they have, boy or girl, and that having too many of either boys or girls deprives the rest of a healthy childhood.



METHODS OF FAMILY PLANNING

Different family planning methods used to space a familv's are children or to limit the number of children a family has. Family planning methods rely on "Contra-" contraception. means against. "-Ception" comes from the word conception which is a word meaning become pregnant. to Contraception is also called birth control.

There are many different types of family planning methods used in Uganda. A family planning nurse or a doctor can help a woman know which method is best suited for her needs. Here are descriptions of the most commonly used methods.

Birth Control Pill

This is the most commonly used method in Uganda. All that is required is for the woman to swallow a small pill every day. The pill contains several drugs called hormones. The hormones act ovulation. prevent the to production of an egg cell by the woman's ovaries. Without an egg it impossible to start the process is of human development.

Advantages of using birth control pills are that they are very effective at preventing pregnancy, they are commonly available, and almost all women can use them.



The main disadvantage of birth control pills is that they must be taken every day to be effective. Older women, those who smoke, and women with certain medical problems should not 1166 the pills. In these women particularly, there is an increased risk of severe problems such as heart attack and stroke. Before starting to use the birth control pill a woman should always see doctor or nurse to make sure that there are no reasons for her to avoid this type of drug.

Birth Control Injection

This method is similar to the birth control pill since it uses drugs to prevent the production of an egg by the woman's ovaries. Instead of being taken orally, the drug is injected every 3 to 6 months.

The birth control injection is very convenient and very effective. However, in some women it may cause a long delay (many months) before they can become pregnant again. become Α few mav completely sterile. For this reason it is usually recommended for women who have already had some children.

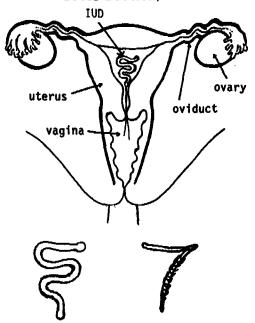
There have been studies that have shown that the drug used in the birth control injection has been associated with a higher rate of certain tumours in animals. For this reason some doctors believe that it has not yet been proved adequately safe for use in humans. In some of the developed countries its use is banned.

IUD or Intra-Uterine Device

This method uses a small piece of specially shaped plastic which is

inserted into the woman's uterus by a nurse or doctor. The plastic device prevents the fertilized egg from implanting in the uterus and so makes pregnancy impossible.

Female Anatomy (Front View: Cross Section)



different types of IUD's

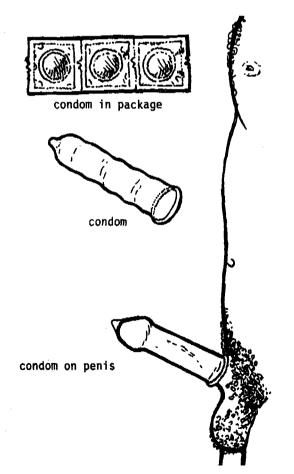
Advantages of this method are that it is easy for the health worker to place the IUD and once in place it can be left for several years. The IUD is highly effective in preventing pregnancy.

The main disadvantage of the THD that if the woman gets is а sexually transmitted disease from her partner, the IUD can cause the infection to be more severe than normal. This type of infection can lead to blockage of the woman's oviducts and may cause sterility. Also, some woman cannot tolerate the IUD because it sometimes causes excessive cramping and bleeding from the uterus.

Condom

Whereas all other methods rely on the woman to use, this is the only method that is used by the man. The condom is a very thin sheath, usually made of rubber, that fits over a man's erect penis. He puts the condom on his penis immediately before having intercourse. It prevents any sperm from getting into the woman's uterus and thereby prevents pregnancy.

Condoms can be a very effective method of birth control when they are used correctly and consistently. They are most effective when used in combination with contraceptive foam or jelly.

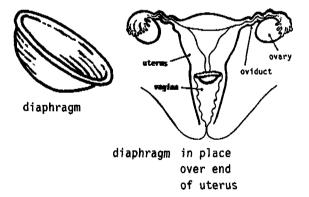


A disadvantage of condoms is that they are not yet a very common method of birth control in Uganda. Because of this. they can be difficult to obtain. Some men will not use condoms because they object to the way they feel. As with all forms of birth control, they are not an absolute guarantee against becoming pregnant.

Foams and Jellies

These are chemicals which kill sperm. Immediately before having sex, the woman puts some of the foam or jelly into her vagina. The sperm are then killed before they are able to enter the uterus.

The main advantage of this method is that it is relatively easy to use. It is usually not as effective as the pill, injection, The effectiveness can be or IUD. increased if these products are in combination with a condom used worn by the man. These products are not yet widely available in Uganda.



Diaphragm

The diaphragm is a rubber barrier that fits inside the woman's vagina and covers the opening of the uterus. The woman puts the diaphragm into her vagina each time before having sex with her husband. The diaphragm prevents the man's sperm from getting into the uterus. Diaphragms come in different sizes and must be fitted a health worker. They must be bv used with a sperm killing jelly to be effective.

The advantages of the diaphragm are that is easy to use and it is effective when it is used consistently and correctly. Its disadvantage, like the previous two methods, is that diaphragms are currently not widely available in Uganda

Natural Family Planning

This includes several methods which are based on the woman's menstrual They require no chemicals cvcle. mechanical devices. or As explained in the section on sexual development, (see section on Human Reproduction under Unit 7 - Family Health and Social Problems, Primary 5. Term 3) there is only a certain time during the woman's menstrual when she can become cycle By carefully keeping preganant. track of the changes in her body during the menstrual cycle, a woman can predict when she is more or less likely to become pregnant. Τf she and her husband limit having intercourse to certain times during the cycle, they can use this method to help plan their family. These methods are encouraged by certain religious groups that feel it is best not to use other methods of birth control. The two best ways for a woman to monitor her cycle are:

• The cervical mucus method -During a woman's menstrual cycle there are changes in the amount and the type of mucus that is

produced by the cervix, the opening of the uterus. The changes in the mucus correspond with ovulation, the release of the egg from her ovary. Women can be taught to recognize these changes and then decide when they shouldn't have intercourse to avoid getting pregnant.

• The basal body temperature method - During a woman's menstrual cycle her basal (resting) bodv temperature changes slightly from day to day. These temperature changes also correspond with ovulation. Women can be taught to use a thermometer to measure their temperature every day and patterns recognize the that predict when they are ovulating. Using this information they can decide when they should avoid intercourse in order to prevent pregnancy.

Another important natural method which helps with child spacing is breastfeeding. When a woman is breastfeeding her newborn child, this will usually cause a delay in



the resumption of monthlv ovulation. The length of time that this effect lasts varies widely from woman to woman and depends mainly the frequency and on duration that the mother her child. breastfeeds In many women it cannot be relied on as an effective method of birth control after four to six months following delivery.

Finally, it should be mentioned that abstaining from intercourse is an effective, but unpopular, method of child spacing.



The advantages of these natural methods are that they are low cost and they avoid any of the complications associated with the other methods.

The disadvantages of these methods are: (1) They are generally not as effective as the other methods in preventing pregnancy, (2) They generally require greater amounts of teaching and supervision time, and (3) They require the complete cooperation of both the and wife who must be husband willing to refrain from intercourse for one to two weeks per month.

Methods / Activities

Family planning may be the most difficult part of the Family Health unit to teach because it talks about contraception. The authors are aware that in some areas there is considerable opposition by parents to the teaching of contraceptive methods because it is felt that this encourages sexual activity. Some parents may feel it goes against their religious beliefs. However, there is also evidence that children at this age are already starting to experiment with sex. We disagree with the idea that the mere knowledge of contraceptive techniques will cause а significant increase in normal adolescent sexual behavior. The section is presented in the context of contraceptive use by the married couple. This has the two-fold intent of introducing the utility of family planning as well as reinforcing the importance of lifelong sexual partners.

Only you as the teacher can know acceptable what is in vour particular area. If you decide to teach this subject, we suggest starting with the section on "The Problems of Too Many Children". This can be followed by having a class discussion about what the students think they will do when they get married, how many children they would like to have and how they would support them. Finally, with proceed the section оп specific methods of contraception. If they are available, you can use to illustrate how these charts methods work to prevent pregnancy.

Some activities to consider after having completed the chapter include:

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- Inviting a family planning worker to visit the class to answer the pupils' questions about family planning.
- Ask the pupils prepare a role play about the problems of a family with too many children. For example, you might suggest portraying two families that live next to each other, one that is

planned and one that is not.

 Organize a debate around a controversial topic concerning family planning. For instance:

Should men have the power to decide whether or not their wives may use contraceptives? or: Should school-age girls be allowed to use contraceptives?

Burns/Fever/Fainting/Near-drowning

Primary 7, Term 2

Objectives

Having completed this chapter, the pupils should be able to:

- 1 Describe what first aid is.
- 2 List common causes of burns and scalds and how to prevent them.
- 3 Describe first aid for burns and scalds.
- 4 Describe first aid for fever, fainting, and convulsion.
- 5 Describe first aid for near drowning with mouth-to-mouth breathing.

Main ideas for the pupils

- 1 First aid means those actions that you can take immediately on finding someone ill or injured.
- 2 First aid does not involve the use of any special equipment or drugs.
- 3 First aid for any serious problem always involves seeking the help of someone experienced in health care.
- 4 First aid for burns involves cooling the area with water and then keeping the wound clean.
- 5 First aid for a high fever is to cool the person's body and to seek medical help.
- 6 First aid for anyone who is unconscious for more than

several minutes or who is having convulsions is to seek medical help immediately.

7 First aid for any person who is unconscious as a result of near drowning is to give mouth-tomouth resucitation immediately.

Behavioural changes

1 Students should be able to demonstrate the first aid methods in this section.

Note to the Teacher

This section has been intentionally simplified to include only those types of first aid that are considered appropriate by medical authorities for children at this level. The emphasis should be on using only materials that are very readily available i.e. the rescuer's own two hands, mouth, and Drugs are intentionally clothes. not mentioned since they are often not readily available and should be prescribed only by a health care worker.

BURNS AND SCALDS

A burn is the type of wound that occurs when a person's skin is touched by any kind of very hot object. A scald is a burn that is caused by a hot liquid touching the skin. Burns are very common injuries and therefore it is useful to know some basic first aid for this type of wound.

First Degree Burns

Burns are described using the term "degrees" to tell how severe A first degree burn is they are. a minor burn that occurs when the object or liquid is not very hot or the contact with the skin is very short. The only sign of a first burn is that the skin is degree tender for several days after the accident. The only first aid for these burns is to put the burned area under cool water immediately after the accident occurs. This can help the burn from becoming worse. First degree burns need no dressing and heal by themselves in several days.

For SECOND and THIRD degree burns cool with water , wash with soap





Second Degree Burns

A second degree burn is more severe than the first degree and is recognized by the formation of а blister on the skin at the sight of the injury. Immediate first aid is to cool the area with water. If the blister is not broken, leave it alone. If the blister has broken, it is important to wash the area with soap and clean water and then cover the raw skin with a clean cloth or bandage. You should never put remedies such as fat. coffee, herbs, or dung on a burn. Any of these can cause the burn to become infected and therefore more serious. A11 second degree burns should be seen by someone experienced in health care as soon as possible.

Third Degree Burns

A third degree burn is the most severe type of burn. In this type the skin is burned very deeply. Depending on how the burn occurred. the skin may appear charred and blackened, but may also appear a shiny white. Like the less severe types of burns, first put the burned area under cool water, then cover it with a clean cloth. Never put any home remedies on these burns. These severe burns should always be evaluated by a health care worker as soon as possible.

time person has Any а а large second or third degree burn they lose a lot of water from their body through the burned skin. If it takes a long time to get this person to the health worker, it is important to encourage the burn victim to drink a lot of liquids. One of the best liquids to drink is 'oral rehydration solution', but in an emergency any kind of clean liquid available should be used.

PREVENTION OF BURNS

Just as important as first aid is knowing how to prevent accidents. Most burns in children happen around the home, especially during food preparation. It is easy for a



young child to accidentally trip on or fall into a charcoal stove (which is usually set on the ground). These stoves should be placed in a protected place and should children be kept from playing around them. Any time hot liquids (like tea, soup, or posho) are being prepared or poured there is the danger that they may splash or spill on a child who is standing close by. Other common sources of burns are irons and any kind of electrical appliance.



FEVER

When the body temperature of a person becomes hotter than normal, we say they have developed a fever. Fever is not an illness in itself but a sign of many different types of illnesses. High fever can mean the person may have a dangerous disease, especially in small children.

Sometimes a high fever can cause convulsions (the body shaking or jerking involuntarily). These usually go away when the illness is treated and usually do not mean there is any kind of brain damage.

First aid for a fever is:

- Remove most of the person's clothes.
- Sponge the person's skin with a wet cloth or a wet piece of clothing.
- Encourage the person to drink more liquids than normal.
- Make sure that an adult or health worker knows about the sick person.



If the person with a fever has convulsions, repeated vomiting, or is unconscious, they should be brought to a clinic immediately.

FAINTING

Fainting is a common word used to describe a person who has become unconscious for a short time. It is a common problem and can be caused by a variety of things for example: prolonged hunger. strenuous exercise, or sometimes just standing up for a long time. especially when it is very hot. Α person who has fainted from one of these common causes should wake up again within 1 - 2 minutes although he or she may remain feeling weak or sleepy for some time after.

There is no specific first aid for someone who has fainted. If they have fainted because they are very hot, placing a piece of clothing soaked in water on their forehead will help them wake up.



If the person is still feeling very weak after fainting, giving them something sweet to drink will usually help them feel better.

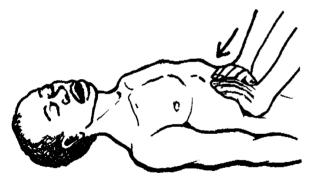
It is important to remember that if a person remains unconscious for more than several minutes, it is probably caused by something more serious than hunger or heat. You should always get the help of an adult and help get the unconscious person to a doctor.

NEAR-DROWNING

Drowning means to die from having the lungs filled with water and therefore unable to breathe air. A person who has stopped breathing has only four minutes to live 80 vou must act verv fast in order to save their life. Drowning victims are usually persons who do not know how to swim or who are injured in some way and cannot swim because of their injury (i.e. hitting ones after diving into shallow head water.) Drowning does not iust occur in deep water. It is not uncommon for pre-school children to drown in bath tubs and basins at Wells. streams. and home. irrigation ditches are other common sites of drowning.

Near-drowning means that the victim has stopped breathing but is not yet dead. If the proper first aid is given, you can sometimes save the person's life. If you find a person unconscious in the water, follow the following steps: • Yell for help

- Remove the person from the water as quickly as possible.
- Lie the person down on their back and start mouth-to-mouth breathing at once.
- If you cannot blow air into their lungs, you should push on their belly with the heels of your hands between the navel and ribs.

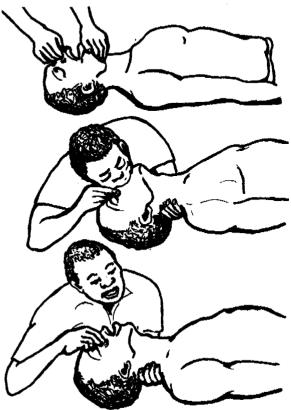


Make a quick strong upward push and repeat this several times in an effort to push some of the water out of the person's lungs

• Immediately try the mouth-tomouth breathing again.

HOW TO DO MOUTH-TO-MOUTH BREATHING

With the person laying on their back, tilt their head back and open Pinch the nostrils the mouth. closed with your fingers. Open your mouth widely and cover the victim's mouth with yours. Blow strongly into the mouth so that the chest rises. Pause to let the air back out and blow again. come Repeat about 15 times in a minute. For young babies, cover both their nose and mouth with your mouth and breath very gently at a rate of about 25 times per minute.



You should continue mouth-tomouth breathing until the persons can breathe again by themselves or until there is no doubt that they are dead. Sometimes you must keep it up for an hour or more.

PREVENTION OF DROWNING

Prevention of drowning is accomplished by being aware of potential sites where drowning can for example occur, springs, irrigation ditches, ponds, and streams. Young children need to be supervised carefully around these places.

Materials needed for the pupils

If you have access to a "first aid kit" you can demonstrate it to the class. However, this is not at all crucial to the first aid methods that are being taught here.

Methods / Activities

FIRST AID ROLE-PLAY

One of the best ways to teach first aid is by having the pupils playact the types of accidents you are discussing and then demonstrate the appropriate first aid. After such small play you can ask the class a the "rescuer's" to evaluate performance ask and to anv questions they may have.

HEALTH PROFESSIONAL VISITORS

If they are available, it can be interesting and helpful to have primary health nurses, care workers, or Red Cross teachers come in to teach some of this material. In addition to learning from their expertise, it is a good chance for the pupils to familiarize themselves with these people in their community.

SAFETY SURVEY

Ask the pupils to think of places they have either where seen accidents occur or places that an accident could occur. Make a list of all of them. What can the pupils do to either avoid these accidents themselves or help others young children) (especially to avoid them.