WHO-EM/IEH/68-E/G/93

PROTOTYPE HEALTH EDUCATION CURRICULUM

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A TEACHER'S GUIDE FOR ADULT EDUCATION


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WORLD HEALTH ORGANIZATION
Eastern Mediterranean Regional Office
1993

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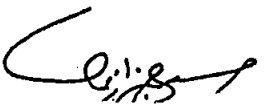
FOREWORD

Efforts towards achieving Health for All by the year 2000 will, hopefully, move a step further with the publication of this guide for adult education teachers of the prototype health education curriculum. It is the fruit of a joint WHO-UNICEF plan to promote health education in formal and non-formal adult education institutions and in the various fields of community development in the Region. Initial training of teachers and leaders responsible for formal and non-formal adult education will be essential, as will the provision of culturally, socially and geographically appropriate teaching and learning resources.

A great deal of work has been put into developing the action-oriented health education project. It comprises methods and techniques of health education and was revised by the technical units of WHO. Acceptance, use and programme development will require further efforts by Member States. The Eastern Mediterranean Regional Office of WHO and the Middle East and North Africa Office of UNICEF are both committed to this endeavour which aims at educating and preparing adults for a healthy way of life. We wish it every success and look forward to receiving feedback from teachers throughout the Region.



E. Lannert
UNICEF Regional Director for the
Middle East and North Africa



Hussein A. Gezairy
WHO Regional Director for the
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1. INTRODUCTION

Ever since the 1978 Declaration of Alma-Ata on the attainment of Health for All by the Year 2000, the international community has been striving to put this slogan into effect. However, the attainment of health for all in a broad scientific sense obviously requires a change in the attitudes, thoughts and habits of individuals. Some may believe that such change is easy and can be brought about by means of a health programme transmitted through the media, an article published in a paper or magazine, or a booklet or film shown to individuals and groups. This is a misconception harboured by many health education staff in the Region.

How then are we to attain Health for All by the Year 2000? Before we answer this question, we must ask another: In what context do education and communication for health occupy a particularly important position? The answer to both these questions lies in addressing the family and its members, both scientifically and practically, in language they can understand, on matters that relate to their health. Every day individuals and families take numerous important decisions that have implications for their health and, as such, are in need of information and skills to enable them to successfully assume their individual and collective health responsibilities.

The Action-Oriented Health Education Project has been developed to assist these people - the general public. It consists of A Teacher's Guide for the staff of formal adult-education programmes, and A Guide for Institutions for the staff of non-formal adult education and community development programmes. Both guides are based on the twenty-two units of the Prototype Action-Oriented School Health Curriculum. This Teacher's Guide is designed for the teachers and leaders responsible for adult health education in formal institutions. It comprises methods and techniques of health education. In addition to its twenty-two units, information on smoking, alcohol addiction and AIDS has been included. The materials are intended, in the first place, for teachers who, in turn, should adapt them according to the context in which they are teaching. It is hoped that they will find this guide useful in providing advice and assistance to individuals and communities for the development and promotion of health.

Our thanks are due to Dr Qamer Eldin Garanba'a of the School of Extra-Mural Studies, University of Khartoum, who prepared the text, and to Dr Mohamed Al Khateeb, WHO/EMRO, who revised it.

2. TERMS USED

Participation

It means the sensitization of people, and thus to increasing their receptivity and ability to respond to development programmes; it also refers to the encouraging of local initiatives, and includes community involvement in decision-making and in implementing programmes.

Behaviour

The total reactions of an individual that are accessible to external observation are termed behaviour. Thought and understanding, which are not directly observable, are implicit aspects of behaviour.

Education

The action or process of encouraging the formation and development of a person's physical, intellectual and moral faculties is termed education.

Feedback

Feedback is an informative reaction to the message of teaching. It is useful not only as a means of checking but also as a means of increasing the adult's learning activity.

Integration

The joining of parts together to form a consistent whole and the coordination of different learning/teaching activities with a view to the harmonious functioning of the educational process and more effective training of the personnel is called integration.

Motivation

Motivation refers to the conscious and unconscious forces that determine behaviour, independently of any moral consideration. Motivation is the key to learning.

Teaching methods

All the means applied in a rational manner to produce a specified educational result are termed teaching methods.

Instruction

Instruction is the process of communicating knowledge and training to the mind of an individual.

Community health workers

Community health workers (CHW) are men and women chosen by the community and trained to deal with the health problems of individuals in the community, and to work in close relationship with the health services. They should have had a level of primary education that enables them to read, write and do simple mathematical calculations.

Primary health care

Primary health care (PHC) is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and

country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community.

Health team

A health team is a group of persons who share a common health goal and common objectives, determined by community needs, towards the achievement of which each member of the team contributes, in a coordinated manner, in accordance with his/her competence and skills and respecting the functions of others.

Health

Health is defined by WHO as a state of physical, mental and social well-being, not merely the absence of disease and infirmity. Health may then be viewed as optimal personal fitness for full, fruitful, creative living and a resource for everyday life.

Health education curriculum

A health education curriculum is a complete outline of the health education subject matter and guidelines. It may serve as a guide for programme development and may influence the health knowledge, attitudes, practices and health status of children and adults. It comprises the coordination of different teaching/learning activities to ensure the harmonious functioning of the educational process for more effective training.

Continuing and life-long education

Continuing and lifelong education is a process of learning lasting the lifetime of each individual and leading to systematic acquisition, renewal, upgrading and completion of knowledge, skills and attitudes with the ultimate goal of promoting the self-fulfilment of each individual.

Literacy

Literacy is the ability to read, write and do simple arithmetic.

Functional literacy

Functional literacy refers to the knowledge and skills in reading and writing which enable an adult to engage effectively in all those activities in which literacy is normally assumed in his or her culture or group.

Community development

It is a process designed to promote better living for the whole community with the active participation and, if possible, on the initiative of the community.

Non-formal education

Any organized, systematic, educational activity carried on outside the framework of the formal educational system, to provide selected types of learning to particular sub-groups in the population, adults as well as children, is termed non-formal education.

Informal education

The lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insight outside the formal and non-formal education systems is termed informal education.

Adult education

Adult education refers to any learning activity or programme deliberately designed for adults. Its ambit is taken as spanning non-vocational, vocational, general, formal, non-formal, literacy and community education and it is not restricted to any particular level.

3. THE PRIMARY HEALTH CARE APPROACH

Primary health care[1] is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system, bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.

Primary health care, as part of the comprehensive national health care system, goes a long way to achieving fundamental health and social objectives, while acknowledging that all persons have the right and duty to participate individually and collectively in the planning and implementation of their health care. Primary health care is an integral part of overall socio-economic development; the factors influencing health are thus social, cultural and economic, as well as biological and environmental.

The fundamental goal of a primary health care strategy is to make essential health care universally accessible in the community. This particularly means improvement in accessibility of health care for the underserved, especially in rural communities, as well as equitable distribution of adequate health and social resources, with due consideration for those whose needs are greatest.

To achieve this goal, maximum community and individual self-reliance are essential, with full community participation in setting objectives, planning, organizing, managing and delivering primary health care. Self-reliance in the achievement of better health clearly requires much more involvement by people, as individuals, families and communities, in taking action on their own behalf by adopting healthy behaviour and ensuring a healthy environment.

The Declaration of Alma-Ata, 1978, defined the eight essential elements of primary health care as follows:

- education concerning prevailing health problems and methods of preventing and controlling them
- promotion of food supply and proper nutrition
- adequate supply of safe water and basic sanitation
- maternal and child health care, including family planning
- immunization against the major infectious diseases
- prevention and control of locally endemic diseases
- appropriate treatment of common diseases and injuries

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[1] Source: WHO/UNICEF, *Primary Health Care*, Report of the International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978, WHO, Geneva (1978).

- provision of essential drugs.

Promotion of mental health was also considered important.

Techniques of primary health care

- Development of group links and interests
- Education as a joint exploration of knowledge
- The community health worker as a group resource and local leader
- Workshops and seminars to discuss health problems and issues
- Open-door consultations as a mechanism for involvement
- Individual home visits
- Individual consultations
- Activation of grass-roots level organizations at the village level
- Encouraging participation of self-help groups as the basis for increased involvement in primary health care
- Initiation of village health committees as organizations that can make community participation easier
- Using school-children as health leaders in promoting knowledge of health problems among adults
- Relying, at local and referral levels, on health workers, including physicians, nurses, midwives, auxiliaries, community workers, traditional practitioners, etc.

4. THE HEALTH EDUCATION CURRICULUM

Curriculum outline

A health education curriculum is a complete outline of the health education subject matter and guidelines. It may serve as a guide for programme development and may influence the health knowledge, attitudes, practices and health status of individuals and communities. It should be noted that although this curriculum is presented in outline form to ensure flexibility and adaptability, no specific order of presentation is suggested when health educational programmes are developed from this curriculum. Choice and selection of topics is left to priorities and the judgement of expert opinion, based on needs assessment, in different situations. It is important to observe a logical sequence, plan or chart along with the form in which the material can be presented most effectively. With regard to the process of choosing the topics, it is necessary to determine the most important problems, as seen by the individual, group or community concerned. Other factors, such as seasonal diseases, climate, resources available and established norms and beliefs must also be observed. Table 1 comprises the outline of the Prototype Health Education Curriculum.

General features of the prototype curriculum

The basic goals of the Prototype Health Education Curriculum are to:

- help individual adults, families and communities prevent disease and promote health;
- integrate effective learning methods and approaches into the planning, delivery and evaluation of primary health care services;
- promote effective interaction among adult learners at the grass-roots level so that they may understand their own situations and choose actions that will improve their health;
- reinforce adult behaviour that promotes health, prevents illness, cures diseases and facilitates rehabilitation;
- encourage self-help, initiative and participation by involving people in the decision-making processes that lead to the implementation of health programmes, and through effective mobilization of resources and direct involvement in the implementation process;
- secure community involvement in health development whereby a form of partnership between governments and local communities is established to guarantee effective planning, implementation and utilization of health activities related to the different aspects of primary health care;
- help adults to understand the principles and methods of community involvement in health development;
- stimulate adults to build networks and alliances to support all aspects of primary health care in their communities;
- direct the role of rural women in homes and local communities towards prevention of disease and promotion of good health by involving them in decision-making about policies and programmes that influence their lives and, directly or indirectly, their health;

- demonstrate the contribution that adult education can make in the community to primary health care and its goal of health for all.

TABLE 1: Outline of the Prototype Health Education Curriculum

SECTION A: BASIC HEALTH UNDERSTANDING		
Unit	1	Responsibility and health
Unit	2	The human body
	2.1	Growth and development
	2.2	Exercise and sleep
	2.3	A place to play
SECTION B: PERSONAL HEALTH		
Unit	3	Personal cleanliness (hygiene)
	3.1	Common infections of the gut and ways to prevent them
	3.2	Basic guidelines for personal cleanliness
	3.3	Cleanliness in eating and drinking
	3.4	Children's faeces and hygiene
	3.5	Cleanliness in the home and school
Unit	4	Oral health
	4.1	Looking after teeth and gums
	4.2	Keeping the mouth clean
	4.3	Our teeth
	4.4	Common dental diseases, causes and prevention
	4.5	Staging a puppet show
Unit	5	Care of eyes, ears, nose, skin, hair and feet
	5.1	Looking after eyes
	5.2	Common ailments of the eye
	5.3	How children see and hear
	5.4	Stuffy and runny noses
	5.5	Earache and ear infection
	5.6	Skin
	5.7	Hair
	5.8	Feet
Unit	6	Food and nutrition
	6.1	Food and growth
	6.2	Play and development
	6.3	Diet for children
	6.4	Identifying food groups
	6.5	Growing family foods
	6.6	Cooking and food storage

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TABLE 1: Outline of the Prototype Health Education Curriculum (cont.)

	6.7	Food for sick children
	6.8	Beliefs about food and nutrition
	6.9	Planning for food
	6.10	Malnutrition
	6.11	Anaemia
	6.12	Night blindness
	6.13	Habits that affect health
	6.14	Educational games
Unit	7	Social and mental health
	7.1	Communication
	7.2	Emotions
	7.3	Understanding children with special problems
	7.4	Stress
	7.5	Mental health
	7.6	Mental retardation
	7.7	Family planning and parenthood
Unit	8	Safety
	8.1	Risk and risk-taking behaviour
	8.2	Personal accidents and home safety
	8.3	Community and public safety
	8.4	Accidents in the workplace
	8.5	Violence and child abuse
Unit	9	Lifestyle
	9.1	Shaping our lifestyle
	9.2	Medicines and their use
	9.3	Overuse of medicines in some common sicknesses
	9.4	Misuse of medicines and guidelines for proper use
	9.5	Smoking and chewing tobacco
	9.6	Alcohol abuse and health
	9.7	Illicit drugs and health
SECTION C: COMMUNITY HEALTH		
Unit	10	Public cleanliness (sanitation)
	10.1	Our neighbourhood – making it better
	10.2	Making a soak pit
	10.3	Refuse disposal
	10.4	Control of vectors in the village

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TABLE 1: Outline of the Prototype Health Education Curriculum (cont.)

	10.4.1	Flies
	10.4.2	Lice
	10.4.3	Mosquitoes
	10.4.4	Bedbugs
	10.4.5	Cockroaches
	10.4.6	Rats
Unit	11	Water and health
	11.1	All living things need water
	11.2	Sources of water in the community
	11.3	Contamination of water sources and how to protect them
	11.4	Safe drinking water
	11.5	The role of water in preventing common sickness
Unit	12	Our living environment
	12.1	Clean air
	12.2	Noise pollution
		SECTION D: HEALTH INFORMATION
Unit	13	First aid
	13.1	Managing fever
	13.2	Nosebleeds
	13.3	Poisoning
	13.4	Wounds, cuts and bruises
	13.5	Rabies
	13.6	Burns
	13.7	Choking
	13.8	Drowning and mouth-to-mouth resuscitation
	13.9	Managing strains and sprains
	13.10	Fractures
	13.11	Bites
Unit	14	How disease spreads
	14.1	Different kinds of disease and their causes
	14.2	Survey of common diseases in the community
	14.3	How disease agents enter the body and how the body defends itself
	14.4	Early signs of illness

/cont...

TABLE 1: Outline of the Prototype Health EducatioCurriculum (cont.)

Unit	15	Needs and facilities in the community
	15.1	Finding out the community's health needs and the health services available to it
	15.2	Relationship with health professionals
Unit	16	Caring for sick children
Unit	17	Immunization
Unit	18	Diarrhoea
	18.1	Diarrhoea and dehydration
	18.2	Managing diarrhoea at home
	18.3	Preparation of rehydration drink or oral rehydration solutions
	18.4	Preventing diarrhoea
Unit	19	Common skin infections and infected wounds
	19.1	Boils and abscesses
	19.2	Chicken-pox
	19.3	Impetigo
	19.4	Ringworm
	19.5	Scabies
	19.6	Small sores with pus
	19.7	White spots on the face and body
	19.8	General rules for treating skin problems
	19.9	Identifying and managing infected wounds
Unit	20	Common infections due to worms and parasites
	20.1	Amoebas
	20.2	Hookworm
	20.3	Malaria
	20.4	Onchocerciasis (river-blindness)
	20.5	Roundworm (*Ascaris*)
	20.6	Schistosomiasis (blood flukes, bilharzia)
	20.7	Tapeworm
	20.8	Threadworm (pinworm)
Unit	21	Common respiratory infections
	21.1	Asthma
	21.2	Colds and influenza
	21.3	Coughs
	21.4	Pneumonia
	21.5	Sore throat, tonsillitis and rheumatic fever

/cont...

TABLE 1: Outline of the Prototype Health Education Curriculum (cont.)

Unit	22	Other diseases
	22.1	AIDS
	22.2	Allergic reactions
	22.3	Epilepsy (fits)
	22.4	Genito-urinary infections
	22.5	Hepatitis

5. THE TEACHER'S RESOURCE BOOK

The Teacher's Resource Book is designed to help the teacher. It contains a representative list of basic activities, which may be dealt with in all countries. The teacher must select particular activities, determine the order of presentation and choose the method(s) and the appropriate teaching aids to be employed in teaching them in an adult class. He can choose from, or add to, these activities, depending on local needs and teaching time available. For the benefit of the teacher the Resource Book contains reference or background material related to the various topics and activities presented. The teacher should not hesitate to seek further information from other references or from local resource people. Teachers should note that although the Resource Book is intended basically for school health education, the methods and techniques to be used should be appropriate to adult education (see Section 7). The teaching aids suggested in the Resource Book should also be developed to suit adult classes and teachers should observe that most of the material embodied in the Resource Book represents real needs in health education. In certain circumstances adult teachers may add additional units and topics to cover urgent health needs of the community. When such a situation arises the teacher should seek local expert opinion and consult the health authorities concerned. Adult learners should be involved in the teaching/learning process and health problems they suggest for discussion should be catered for. Literacy primers should include health vocabulary and health concepts. In most local languages and dialects there are key words and terms that relate to the health and well-being of individuals. Adult teachers and authors of literacy primers should include and use such words and terms. Proverbs, fables and stories which promote good health should be collected and used to highlight the teaching/learning experience. Verses from the Koran and Hadith (Sayings of the Holy Prophet) that relate to health education should be quoted and explained thoroughly in adult classes.

In fact the Koran and the Hadith represent the core of Islamic medicine. Knowledge itself is a source of pleasure and stimulation, but if it is linked with religion it can make life more meaningful, accentuating the desire to work and produce and to recover from illness. The Koran teaches people to have a positive outlook during illness and to live pure lives which are, in every sense, healthy. Teachers should associate the learning situation with religious concepts of the health and welfare of the human being.

Teachers should also note that traditional medicine is firmly based within the local sociocultural context and is therefore readily accepted by the community. The traditional healer, for example, is usually an active member of the community, speaks the local language and is easily available to his clientele. The healing process is often carried out in an atmosphere of mutual confidence and shared expectations. Adult education classes are expected to discuss the positive and negative aspects of the traditional healer's role with the ultimate hope of eliminating the negative aspects. The role of the teacher is central in this process. He can refer to the appropriate unit in the Teacher's Resource Book to support his argument and can invite local health specialists to address the students on important health issues. When using the Teacher's Resource Book, teachers are expected to observe the instructions emphasized in it and to try to integrate them with the relevant activities in the

Teacher's Guide. However, the quality and quantity of the integrated material depends to a great extent on the interest and ability of individual teachers. They should remember that the plans they make must be designed to meet the needs and interèsts of their students. Thus, they help their students to learn how to find and apply valid information in the promotion of health and for the prevention, control, or solution of current or future health problems.

6. GUIDELINES ON TEACHING HEALTH TO ADULTS

Adult learning

Learning is a process resulting in some modification, relatively permanent, of the way of thinking, feeling and doing of the learner. It produces, therefore, a behavioural change, primarily in cognitive behaviour – which has to do with knowing or recognizing, attributing meaning, and other intellectual operations. It is a dynamic and interactive process in which the behaviour and the experience of the adult are vital components. The adult learner must not only receive but also contribute. The learning process requires the development of knowledge, skills, attitudes and behaviour as well as motivation. It continues throughout the life of each individual, leading to systematic acquisition, renewal, upgrading and completion of knowledge, skills and attitudes with the ultimate goal of promoting the self-fulfilment of each individual. The real case for adult learning lies not in gap-filling but in its contribution to the needs, firstly, of individuals and, secondly, of the community as a whole. This reflects its universality, comprehensiveness, articulation, flexibility, diversity and orientation towards self-fulfilment. The contrast with school education is apparent, since education takes place at work, at home and in society. It is a life-long process.

Motivation

The key to learning lies in the ability of the teacher to arouse motivation in the learner, motivation which may or may not exist already. Effective learning will not be achieved unless learning activities are adapted to the needs of individual learners.

Adult motives for learning include:

- the desire to modify one's attitudes towards different aspects of personal and communal life so as to improve the quality of life
- the desire to satisfy one's need for human relationship, belonging and recognition
- the desire to improve one's economic, social and heath status
- the achievement of one's full competence in order to satisfy religious and social needs
- bridging the generational and educational gap which might arise as one's children grow up and attend school.

Adult needs

- Health (physical, mental and emotional)
- Civic and social relationships (family, group, community)
- Professional development
- Religious aspirations
- Education
- Recreation.

Elements influencing adult learning

It is necessary to have an understanding of the elements affecting learning and health education. This understanding will help in the selection of appropriate health education methods, techniques and approach. These elements include:

- beliefs
- values
- cultures and sub-cultures
- behaviour
- attitudes.

These elements, when properly understood and effectively utilized, can provide great impetus to both the learner and the teacher.

Elements that impede adequate learning

There are some elements which might impede learning and discourage adult learners. These include:

- physical and mental state (e.g. age, hearing, eye-sight, health, intelligence)
- resistance to learning
  In many adults resistance takes the form of non-involvement which leads to:
  - inability to see the learning task as personally important and significant
  - conflict between the objectives of the student and those of the instructor
  - fear of failure, resulting in an unwillingness to attempt some kinds of change
  - fear of change, which is perceived as a threat to habitual behaviour.

  To reduce resistance it is necessary to adopt teaching materials that are relevant to adult lives and that secure individual involvement and commitment (see Section 8).
- inappropriate choice of teaching materials or irrelevance of methods and techniques
- inconvenient choice of time and place for learning
- lack of reasonable knowledge of the subject matter.

Elements to be observed in teaching adults

The learning process uses the senses as avenues to reach the mind and it is important to know which of the senses is used to conduct the messages.

It is widely accepted that we learn:

- 1 % through taste
- 1.5% through touch
- 3.5% through smell
- 11% through hearing
- 83% through sight.

And that we remember:

- 10% of what we read
- 20% of what we hear
- 30% of what we see
- 50% of what we see and hear
- 80% of what we say
- 90% of what we say as we do things.

Role of the teacher

Health education is the duty of everyone engaged in health and community development activities – nurses, dispensers, community health workers, community development officers, adult education personnel, etc. Taking into consideration the different aspects of adult learning as spelled out previously, teachers must know precisely their objectives and how to achieve these objectives qualitatively and quantitatively. Teachers should do their best to avoid traditional teaching attitudes and practices where the teacher

- teaches and the students are taught
- knows everything and the students know nothing
- thinks and the students are thought about
- talks and the students listen
- disciplines and the students are disciplined
- chooses and enforces his choice, and the students comply
- acts and the students have the illusion of acting through the acting of the teacher
- confuses the authority of knowledge with his own professional authority, which he sets in opposition to the freedom of the students
- is the subject of the learning process, while the pupils are mere objects.

Adult teachers in health education are expected to help their students to:

- acquire, retain and be able to use knowledge
- understand, analyse, synthesize and evaluate
- achieve skills
- establish habits
- develop attitudes.

To achieve their goals effectively teachers of adults are required to:

- Be available: the teacher should be available to give students constructive criticism of their working objectives and methods.
- Define the learning objectives: the teacher should be able to define the abilities that students' need to acquire, in order to solve a given health problem.
- Assess students work: the teacher should be able to define criteria for assessing students work and measuring their abilities.
- Prepare learning aids: the teacher should prepare learning aids and materials, provide information that will facilitate students' independent work and evaluate the usefulness of such materials.

- Confront students with new problems: the teacher should confront students with a diversity of new problems in order to help them define the terms of the problems and find solutions to them.
- Aid the understanding of basic health problems: the teacher should endeavour to ensure that students understand the basic principles underlying the activities and tasks they are learning in health education programmes.
- Identify the factors underlying health problems: the teacher should make sure that the student identifies and takes account of the psychological, cultural and socioeconomic factors underlying the health problems with which he deals.
- Set an example: the teacher should serve as a model of professional conscientiousness, reliability, analytical sense and efficiency.[1]

[1]Source: Guilbrert, J.J., *WHO Educational Handbook for Health Personnel*, WHO Offset Publication No. 35, WHO, Geneva (1987).

7. BASIC PRINCIPLES OF ADULT LEARNING

It is widely accepted that one of the truly significant differences between adult education and youth education is in the relative freedom of adults to choose the kind of programme they are interested in or see value in and, to some extent at least, the freedom to proceed at their own pace. Still, adult education activities are commonly conducted in settings in which a responsible trained or experienced teacher plans and conducts the learning situation. Thus, it is not enough to decide what will be done, by whom and when. It is also necessary to decide how it will be done. The selection of the appropriate teaching method must be made very carefully, to suit the situation and the problem. People practising health education must make decisions about which methods should be used to help solve problems related to health behaviour. The following aspects should be observed before choosing health education methods:

- How ready and able are people to change?
- How many people are involved?
- Is the method appropriate to the local culture?
- What resources are available?
- What mixture or method is needed?
- What methods suit the characteristics (age, sex, religion, etc.) of the target group?
- Are the methods appropriate to time, place and subject matter?

In all cases, it should be noted that teaching methods and techniques are meaningless if they are used as ends in themselves. They should help learners to develop the ability to demonstrate the information and knowledge they receive, equip them with the skills needed and help them to be continuing independent learners.

Techniques appropriate to adult education

The specific teaching methods or techniques used in health teaching are the same in any subject. Those commonly used for health education include the following, although the list is by no means exhaustive.

Lectures

For many reasons, among which are tradition, necessity, convenience and choice, the lecture method continues to be the dominant mode of instruction in adult education classes. A good lecture is one delivered by a lecturer who is not only knowledgeable, but also skillful in delivery and in establishing a comfortable relationship with students. A lecture facilitates the quick communication of a common fund of information so that every student starts with the same background of data. It functions as a stage-setting and focusing activity for discussions of other group procedures.

For the optimum use of the lecture method the following points should be observed:

- Preparation: thorough preparation and practice are essential elements of each presentation along with the evolution of the lecture plan and the perfection of a technique that suits the lecturer.
- The needs of the learners, which must be considered first: the target audience must be specified and teachers must find out whether the audience has a clear view of what use they want them to make out of the material, for example a deeper understanding of some situation in which they are involved, an awareness of new concepts, re-examination of present opinions or values.
- Active participation: the lecture method is often criticized as one-way communication in which the student is a passive participant – a listener. A skillful lecturer can plan a way of involving adults actively in the process, opening the lecture with a series of questions, presenting a case that sets the stage for analysing a problem, and making the students write a summary at the end of the lecture.
- Logical flow of ideas and use of language: the teacher is expected to cultivate an easy flow in correct language that also has colour and force.
- The beginning and the end: it has been established that the learner invariably retains only the first ten minutes and the last ten minutes of a lecture. The middle part must therefore exploit various techniques for maintaining attention and connection. An effective lecturer will not only be aware of the time allotted, but also will accept that limitation.
- Showmanship: the lecturer should observe a good appearance, clear voice and maintain eye contact with the audience.
- Use of the right visual aid: use demonstrations of visual aids, such as transparencies, pictures, models, posters or puppets to enliven the lecture.

Programmed lectures

The programmed lecture is an instructional technique that bridges the gap between the traditional lecture in which information is transmitted primarily by a speaker, and programmed instruction in which the learner systematically interacts with instructional materials that are logically constructed towards specific measurable objectives.

The programmed lecture is organized primarily for retrieving information by the learner. It is an instructional method using learner feedback as a device for monitoring student learning. The key to the success of this method is good planning, establishment of clear objectives for the lecture and provision of immediate reinforcement to student responses by identifying and commenting on right and wrong responses.

Workshops

The main characteristics of the workshop can be summarized as follows:

- It provides a flexible context for the learning process.
- It provides opportunity for skills training appropriate to the activity area of the group involved. During the period devoted to this objective, the group is usually divided into manageable smaller sections to which separate staff members are assigned to initiate or direct activity.
- It emphasizes the active involvement of the participants. Although the programme design permits the varied use of reading materials and lectures, the majority of the time is spent

in small group activities which emphasize demonstration, role play, or special forms of discussion.

- As the description of the preceding characteristics implies, close cooperation is required among the staff. The workshop staff plan the design together, distribute roles among themselves, and meet together often during the course of the workshop to evaluate progress and decide on necessary schedule changes.

The workshop methodology is flourishing, particularly in the fields of health education, community development, family planning and community relations.

Panel discussions

The panel discussion is a technique that consists of a group of three to six individuals who engage in face-to-face discussion before an audience. This method is one of the most popular devices for improving on that of the traditional single lecturer, by using several speakers and the teacher as a moderator. Speakers prepare brief talks, then interact with the moderator as a discussion leader. Also, introductory statements may be eliminated. The panel ends normally with questions from the audience.

The panel discussion method is used to clarify differences of opinion in the group and to tackle problems which cannot be tackled by one lecturer. The atmosphere in which the panel functions can be formal or highly informal. The panel and the moderator are both seated in front of the audience, preferably on a platform for easy viewing and hearing, and behind a table. The panel discussion technique is used most effectively when some preparation is made, when the panel members understand their full responsibilities and when the moderator fulfils his or her assignment.

Symposiums

The symposium is a technique where two or more speakers talk on a definite theme or topic, with time at the end for some interaction with the group. The major requirement is the careful selection of the speakers. This form is recommended for sessions dealing with fairly technical areas in which several views are required. Controversial topics are well suited to this method.

Buzz groups

Here the group is divided into small segments for a brief period of time to discuss a certain topic or problem and to enforce understanding of the topic or solve the problem. Each group elects a reporter, sticks to the time limit and concentrates on the central issues highlighted by the speaker. The method is well recommended for involving adults in learning activities where the learning objectives are well thought through. Buzz sessions are useful for fostering creative thinking, building confidence in expressing new ideas and promoting communication skills.

Counselling

Counselling implies consultation rather than advising or forcing. It provides appropriate opportunities to adult educators and health workers to assist adults in taking important decisions. The main rules of counselling include:

- Relationship: health educators should pay attention to establishing a good relationship from the beginning with the person they are trying to help.
- Identifying needs: let people identify their own problems and then help them. Use questions to make them clarify their problems.

- Feelings: health teachers should develop understanding and acceptance of the client's feelings – empathy not sympathy, or pity.
- Participation: people should not be persuaded to accept the advice offered but should be helped to understand the roots of the health problems and then to choose the solutions which best suit their situation.
- Secrecy: all information imparted to the health teacher or counsellor in confidence should be kept secret. Otherwise, the trust between the two parties will be lost.
- Information and resources: when counselling, health teachers should provide simple facts and information which help adults to have a clear view of their problems. They may consult community health workers, nurses, midwives, fathers, friends, etc. in this respect.

Problem solving

A person's ability to do something improves with practice. In teaching, problem solving consists of a series of steps that move the student from the point where no solution to the problems exists, to the discovery of some new information or behaviour that leads to a verifiable solution. These steps include:

- defining the problem
- theorizing about solutions
- data gathering
- proposing solutions
- verifying the solution.

It is not necessary to follow these steps in the above order, since the nature and magnitude of the problem dictates the appropriate procedures.

Discussions

The discussion is one of the most common techniques used in health education. The discussion is a dynamic interchange of ideas based on a logical sequence of steps, until an issue is resolved or a conclusion reached. To facilitate a productive discussion the teacher should:

- provide the group with a common background of information about the issue or problem of interest;
- select and use appropriate audiovisual aids;
- initiate the discussion with thought - provoking questions;
- let the students summarize their conclusions and decide for themselves whst has been learned.

Brainstorming

This activity can be led by the health teacher for the group as a whole or divided into small groups as a quick means of obtaining a great number of ideas for later anaylsis or evaluation. The tenor of the activity should be a free flow of ideas and total receptivity. Every idea should be recorded irrespective of its validity. When the ideas have been exhausted, each might be reconsidered and classified as either positive or negative. The teacher acts as the moderator and recorder. Use of the blackboard or overhead projector is an effective means of recording or summarizing class conclusions. Normally a leader and reporter are elected.

Brainstorming is useful as a means of generating ideas needed to define a problem of interest, to identify ways of locating needed data and to theroize about possible solutions. It is a useful technique for developing attitudes and abilities with regard to problem-solving.

Role play

If used with skill, role play is a very powerful instrument for achieving some types of understanding and insight. The role play is, in a sense, an animated case study. A problematic situation is presented, but instead of discussing it, part of the group takes over the roles of those involved in the situation and acts it out to some solution. It is a very useful method for dramatizing the interaction of forces in any dynamic situation and in which the aim is to assist people to grasp complicated problems. It can also demonstrate the impact of tradition, values, attitudes, cultural beliefs, or social pressure on individual behaviour. To learn the role-play techniques, the teacher creates a set of roles and then assigns people to act out the parts.

Field trips

Field trips help to link the knowledge and information adults receive in the class with health activities in the community. Much preliminary planning is needed to make the field trip successful. It can be both a fact-finding endeavour and a self-oriented process.

Tutorials

Use of the tutorial method in health education:

- frees individuals from external dependence upon formal learning and the authority of the expert;
- gives students an opportunity to concentrate on their particular interest within an area of study;
- provides an opportunity for the exchange and testing of ideas acquired during independent study.

It is recommended that a few meetings of the group at the beginning of the study year be held to identify individual issues of concern to the participants and to establish the general principles of work. Tutorials should be used as a means of guiding students and not directing them. Adults should be allowed to express themselves and exchange ideas with their teachers.

Demonstrations

Demonstrations are a pleasant way to share knowledge and skills in health education. They involve a mixture of theoretical teaching and practical work that makes them lively. They help adults learn new skills and can be used with individuals in small training groups. If the group is too large, members will not get a chance to practice the skills or ask questions. Materials such as models, real objects, posters and photographs can be used in a demonstration. A demonstration must be realistic and must fit in with the local culture. The choice of the proper place and the right time is essential.

Case studies

Case studies are based on facts and present events as they really happened. They help adults learn how to solve problems. They are useful with community development committees and in training of community health workers.

Meetings

Meetings are held to gather information, share ideas, take decisions and make plans to solve health problems. Meetings are different from group discussions because group discussions are free and informal. Meetings are held for a special reason and are more organized with regard to time, place, and agenda.

Health talks

Health talks are the most common way to share health knowledge and facts. To make a talk more educational, it must be combined with other methods, especially visual aids, such as posters, slides and flannel graphs. Talks should be tied into the local setting, for example through the use of Koranic verses, Hadith, proverbs, songs, discussion, demonstrations and role play. To prepare a good health talk the following preparations must be made:

- Know the group
- Select an appropriate topic
- List the points to be highlighted
- Think of visual aids
- Practice the whole talk.

Proverbs

Proverbs are short common-sense sayings that are handed down from generation to generation. They grow out of the experiences of people in each culture and constitute advice on how one should behave. In health education proverbs may support or illustrate a point about health that the teacher wants to get across. Discovery of local proverbs is very useful, especially if such proverbs have any relevance to health education.

Fables

Fables are make-believe stories that have been told to children for generations and in which the characters are usually animals. They also show adults what values are important to the community. They can be used with individuals or groups. Adults can use fables in health education for their children, because fables often describe how behaviour affects health.

Stories

Stories can entertain, teach history, spread news and information and also serve as lessons about behaviour. They can be used to give information and ideas, to encourage people to look at their attitudes and values, and to help people decide how to solve their health problems. They can be told to individuals, small groups, large groups, communities and regions through the use of radio and local newspapers.

Visiting lecturers

Visiting lecturers are used often in health education to give brief talks to groups or adults on certain health topics. It is recommended that such lecturers be chosen with care and they should be briefed on the structure and nature of the group of adults they are going to talk to. They should be resource persons such as medical professionals, health workers, community leaders and traditional healers. The latter are used when others are not available in the community.

There are, of course, other methods appropriate to health education, such as songs, drama, and games, but these are more appropriate for children. Still teachers can use them, if adults

respond positively to them. Table 2 illustrates the advantages and disadvantages of some teaching methods and educational media in health education.

TABLE 2: Advantages and disadvantages of certain teaching methods and of different educational media

ADVANTAGES	DISADVANTAGES
1. Lecture	
• Apparent saving of time (for teacher) and resources • Presence of the teacher (showmanship) • Covers a large group of students • Gives a feeling of security	• Keeps the student in a passive situation • Does not facilitate learning how to solve problems • Offers hardly any possibility of checking learning progress • Does not allow for individual pace of learning • Low receptivity
2. Small group activities	
• Permit a teacher/student dialogue (thanks to the availability of the teacher) • Facilitate evaluation	• High cost in personnel and time (unless peer-teaching is used)
3. Demonstration	
• The teacher is present (showmanship) • Gives a feeling of security • Develops the quality of observation • Ensures closer contact with concrete problems • Facilitates the acquisition of practical, intellectual and communication skills • Presents reality, not substitutes • Enables logical step by step presentation • Is attention-catching. • Demonstrates the right way of doing a (complex) task • Is presented facing the audience	• Number of students is limited • Keeps the students in a passive situation (except for observation • Offers little possibility of checking the learning process • High cost in personnel and time • Difficulty in repeating the demonstration in order to acquire competence

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TABLE 2: Advantages and disadvantages of certain teaching methods and of different educational media

ADVANTAGES	DISADVANTAGES
• Makes it possible to ask questions • Limits damage to equipment and material when students do practical work afterwards	
4. Practical work 5. Bedside teaching 6. Field work	
• Puts the student in an active situation • Permits evaluation of degree to which educational objectives (practical and communication skills) have been attained • Develops qualities of observation and decision-making • Ensures closer contact with reality (professional, health situation of country, colleagues and teachers) • Permits comparison between practice and theory • Enables student to develop self-confidence • Increases diversity	• High personnel, transport and material costs • Covers a limited group of students • Sometimes puts the patient in a difficult situation • Poor standardization • Narrow limits of utilization, therefore requiring careful planning
7. Role play	
• Students have an opportunity, in a controlled situation, to develop real communication skills and obtain constructive feedback from peers and peers and teachers • Helps students through emotion-laden situations and provides them with an opportunity to be in somebody else's place and develop empathy and understanding	• Time-consuming and strongly dependent on student's imagination

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TABLE 2: Advantages and disadvantages of certain teaching methods and of different educational media

ADVANTAGES	DISADVANTAGES
8. Books, handouts, programmed learning from books, and stimulation (self-learning packages)	
• Enable student to work at his/her own pace • Facilitate self-evaluation. • Make mass teaching possible with high efficiency • High availability • Facilitate decision-taking (solution of complex problems) • Reduce risks (for patient or society) • Avoid bias transmitted by bad teachers • Allow a good teacher to save time that can then be spent on more complex activities such as interpersonal relations • Can be kept up to date with new scientific developments and contain references to other documents	• Necessitate special educational competence • High additional investment costs (in teachers' time and money) • No group dynamics
9. Real objects and specimens	
• Present reality, not substitutes • Three dimensional • Permit use of all senses in study	• May not be easily obtainable • Inconvenience of size – danger in use • Costly or not expandable • Usually only usable in small groups • Sometimes easily damaged • Problems of storage

/cont...

TABLE 2: Advantages and disadvantages of certain teaching methods and of different educational media

ADVANTAGES	DISADVANTAGES
10. Models and simulation devices	
• Three dimensional and present concept of reality • Size allows close examination • Good for magnified situation (e.g. middle ear mechanism) • Can be used to demonstrate function as well as construction • Can permit learning and practice of different techniques • Some can be made with local material	• Craftsmanship required for local construction • Simulation models often expensive • Usable for small groups only • Models often easily damaged • Never same as performing technique on a patient Beware of faulty learning
11. Graphics (charts, diagrams, schematic drawings), posters, paintings, photographic prints	
• Promote correlation of information • Assist organization of material • Photographs nearer to reality duplicating equipment and than drawings, but association often valuable • Usually easily produced and duplicated (black and white photographs) • Easy to store, catalogue and retrieve	• For small audiences only (unless projected with epidiascope) • For effective use, good trained staff needed
12. Blackboard or flipchart	
• Inexpensive, can be made locally • Usable for wide range of graphic representation • Allows step-by-step build-up, organization of structure or concept	• Back to audience • Audience limited to 50 or so • Careful blackboard drawings erased, not preserved for future use • Considerable skill required or effective use (rarely taught to teachers)

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TABLE 2: Advantages and disadvantages of certain teaching methods and of different educational media

ADVANTAGES	DISADVANTAGES
13. Flannelboard (flannelgraph) (Most of the comments apply also to magnetic board)	
• May be used repeatedly • Usually preparable from locally available materials • Good for showing changing relationships • Holds attention if well used • Can be adapted for group participation	• For limited audience only • Difficult technique to use convincingly
PROJECTABLE MEDIA	
14. Still pictures – Opaque projection (epidiascope)	
• Enlargement of drawn or printed materials for large audiences • Obviate need for producing slides and transparencies • Enlarged image may betransferred to chart or blackboard for copying • Small objects and specimens may be projected	• Demands total darkness for clear projection (except with very expensive models) • Bulky machine, difficult to transport • Electricity required
15. Transparencies for overhead projection	
• Projectable in full daylight to large audiences • Presented facing audience • Relatively easy to prepare with local materials • Subjects can be drawn in advance or developed by stages with the group • Can demonstrate movements, processes, etc. with transparent or coloured perspex models	• Electricity required • Equipment and materials for making sophisticated transparencies expensive • Not usually suitable for photographic material due to cost (although adaptor available to take 35 mm slides) • Usually restricted to teacher use, as it is not easy to adapt for the learner to use

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TABLE 2: Advantages and disadvantages of certain teaching methods and of different educational media

ADVANTAGES	DISADVANTAGES
16. Slides and filmstrips	
• Suitable for large audiences • Relatively easy production and (in black and white) reproduction • Cheapest current forms of visual medium • Easily adaptable to self-learning packages • Equipment available for viewing or projection without electricity source (battery only)	• Fixed order of frames in filmstrip restrict use • Need partial darkness for viewing viewing unless rear screen or daylight screen used • Duplication of colour slides expensive (even impossible in many countries)
17. Microfiches	
• Easy storage and cataloguing of large numbers of visuals • Exchange of information on available collections • Very cheap per image if projection can be assured for large groups • Small and light for easy despatch	• Too small for clear naked-eye viewing • Although inexpensive equipment available for individual use, large group projection equipment not readily available
18. Films (8 mm and 16 mm)	
• Close to reality with movement and sound • (16 mm) suitable for large audiences (8 mm) for small groups only • Compression of time and space • Emotive, can develop attitudes pose problems, demonstrate skills • 8 mm loops useful for individual instruction • Good learning source if preceded by teacher's introduction and followed by discussion	• Does not permit self-pacing • Films costly and difficult to produce • Individual films relatively expensive • Electricity required • Equipment difficult to transport • Darkness needed for viewing (except rear screen use) • Imported film may contain inappropriate information (see item in advantage 6)

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TABLE 2: Advantages and disadvantages of certain teaching methods and of different educational media

ADVANTAGES	DISADVANTAGES
19. Open circuit television	
• Adaptable to large and small audiences in widely distributed area • Capable of gaining and maintaining attention • Can stimulate emotions, build attitudes and develop problems • Can conserve resources of instructors by simultaneous broadcast to many classes	• Programme expensive to produce and demands highly skilled staff • Receiving equipment expensive and difficult to maintain • Electricity required • No immediate interaction or feedback • Learner must adapt to a set programme with no possibility of repeats
20. Closed circuit television and videotapes (including videocassettes and videodiscs)	
• Adaptable to medium and small audiences • Videotape repeatable to fit learning schedules • Film advantages (section 18.) 1, 3 and 4 apply • Valuable for magnification of image, recording intimate situations, micro-teaching, recording of developments in clinical syndromes or in scientific experiments, "bringing the village into the the classroom", recording emergencies, etc. • Portable equipment can function on battery for field recording	• High initial cost of production equipment, and requirement of trained staff • Electricity required; although portable equipment works off battery, this needs charging from power source • Receivers are expensive and require maintenance
SOUND MEDIA	
21. Radio broadcasts	
• Adaptable to large and small audiences in widely separated areas • Conserves resources of instructors by broadcasting simultaneously to many classes	• Special studio facilities and staff required for broadcast (but less expensive and complex than television) • Learners must adapt to fixed schedule, not other way round

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TABLE 2: Advantages and disadvantages of certain teaching methods and of different educational media

ADVANTAGES	DISADVANTAGES
• Capable of gaining and maintaining attention • Reception equipment relatively cheap and will function on batteries • If combined with prepared materials (radiovision) can be improved learning tool	• No immediate feedback and no audience interaction
22. Sound recordings	
• Adaptable to any size of audience • Especially suited to individual and small group learning • Because of stop and playback facilities of tape, can be student paced • Cheap, battery-operated cassette players available, and cassettes relatively cheap • Many uses – to provide sound for slide sequences, for micro-teaching, heart sounds, for posing problems, etc.	• Use for individual learning demands many playback units • Good quality recording demands studio facilities

Source: Guilbert, J.J., *Educational Handbook for Health Personnel*, WHO Offset Publication No. 35, WHO, Geneva (1987).

8. TEACHING AIDS

The purpose of any worthwhile instructional material should be to communicate quickly, clearly and memorably; thus materials should be prepared and used only when they will do the job of communicating better and more quickly than any other available method. They are only teaching aids to facilitate learning and to help the teacher to illustrate and improve the impact of his teaching. The proper use of these materials demands understanding, skill and practice. Each type of teaching aid has its advantages and limitations and its particular indications in certain areas of learning. Teachers should note that audiovisual media are teaching aids and not teaching methods. A teacher must be competent in using them and in choosing the one best suited to the particular day, topic and group of students.

Advantages of using teaching aids

Teaching aids:

- make abstract concepts more concrete
- provide a diversity in the communication of information
- allow the presenter greater variety in the transmission of information
- help to provide as many different ways of receiving information as possible
- help to build common experience for the intended audience.

Guidelines for selection of teaching aids

- The selection and use of teaching aids should be based on the fact that they can do a specific communication job better than the presenter.
- The type of material used should be determined by the type of audience and the information being presented.
- The teacher should select the teaching aid on the basis of what the aid will do to improve the effectiveness and efficiency of transmitting information to his audience.
- The teacher should take into account the following aspects before taking a decision with regard to teaching media:
  - cost
  - vailability and location of materials
  - time and place required (logistics)
  - appropriateness to subject and class
  - simplicity and realism
  - relevance of the culture and language of films/filmstrips and photographs to those of the group
  - preference given to teaching aids with religious and social value and content.

Types of teaching aid

Blackboard

The blackboard (chalkboard) is one of the most conveniently available instructional devices. Blackboards may either be wall-mounted or free-standing and their use is entirely under the

control of the instructor. The most important quality in the blackboard is its simplicity whilst the most common fault in blackboard presentation is poor lettering, whether with regard to size or information. Letter size should be adjusted to the viewing distance from the back of the room. Teachers should not attempt to draw too much on the board at a time, otherwise the class loses interest and becomes distracted. They should also do their best to face the class, while using the board.

Flannelgraph

A flannelgraph is a board covered with flannel cloth on which pictures and words can be pinned to reinforce or illustrate the message to be transmitted. It helps students to see more clearly what the teacher is saying during the lesson. Like posters, flannelgraphs must be seen clearly by everyone. It is not very difficult to make. Participation is possible with a flannelgraph.

Posters

A poster is a large sheet of paper, usually about 60 cm by 90 cm, with words and pictures or symbols that put across a message. A poster can be used effectively to:

- give information and advice
- give directions and instructions
- announce important events and programmes.

The target group can be small or large and may be the whole community. The following rules should be followed in making posters:

- all words should be in the local language
- words should be few and simple
- symbols that are comprehensible to the illiterate should be used
- the use of colour is valuable to attract attention
- only one idea should be expressed in a poster. Too many ideas in one poster confuse people and reduce its impact.

Teachers should try to involve students in making posters. This will interest people and help them learn more about health.

Displays

A display is an arrangement of items which people can look at and learn from. Displays are most successful if they use a variety of materials to attract people. They provide ideas and information related to one theme. They are usually set up where large numbers of people will pass by and see them. They are normally made up of posters, photographs, real objects and models. Displays should be arranged in a logical order so that people can understand and follow. Each item in the display should be explained in words, symbols or pictures because people will have no-one to ask for help in understanding the display.

Photographs

Photographs are a useful educational tool as they can show situations and objects exactly as they are in reality. They can show new ideas as well as new skills being practised. Their chief value in learning is that they help people to see phenomena and events which are familiar and also those which are new to them and cannot be visualized. Also, they enable things to be

easily understood with the minimum of verbal explanation. In the choice of photographs the teacher must observe that:

- the photograph is in itself interesting enough to attract the attention of the students
- it is big enough to be seen from the back of the room
- it is accurate, truthful, up-to-date and relevant to the topic being handled.

Photographs can be displayed on magnetic, flannel and bulletin boards or, to obtain greater magnification, they can be projected by episcope.

Projected materials

Projected materials are simple educational materials that are shown to people using a projector. Projectors are machines that can only be used where there is electricity and an experienced person to use them. Projected materials are useful for underlining the most important points in a talk or lecture. They also help people to learn a new skill provided that discussions or practice are included in the learning situation. Projected materials are useful for groups of 30 people or less but not for large groups as not everyone will be able to see.

There are different types of projector: overhead projectors, slide projectors, opaque projectors, etc. Teachers should learn how to use all of them to properly achieve their educational tasks.

Films

Films are generally accepted as important educational tools because they provide action, colour and sound. They are a useful communication medium. Films today, whether projected on large or small screens, or shown on television, claim to represent the ultimate in the technological development of teaching aids. People can learn about new behaviour, attitudes and values in films. The following types of film have been developed for teaching purposes and to accomplish a variety of educational tasks:

- films designed to stimulate enquiry and discussion
- films designed to create understanding
- films designed to present background information
- films designed to stimulate experience
- films designed to teach operator skills and techniques
- feature films and lecture films.

Films as educational media are very valuable to teachers because of their visual and auditory appeal. They compel attention and help learners to overcome barriers to learning.

Tape recordings

Cassette tape recordings provide health information and strengthen the health message. They are commonly used with learning groups. There are different types of tape programme including lectures, radio programmes and recordings of discussions or plays. The teacher can use them to reinforce his health message. Tapes can be used to reproduce all forms of sound recorded either directly or from pre-recorded gramaphone discs, or from radio and television programmes. The recorded tapes can be stored and used as required on any standard machine.

Slides and filmstrips

Both slides and filmstrips secure a succession of pictures which can be shown, one after the other, to build up a powerful visual illustration of the teachers' words: the basic uses of the media are the same. They must be used with other audiovisuals such as films, charts and sound recordings to produce better results.

Slides are generally easily made if equipment is available for photographing directly on to a slide. Their disadvantage is that they are easily damaged and require special storage boxes.

Filmstrips come in small rolls and slides in sets, both with commentaries or notes to go with the pictures. The adult teacher can choose the most appropriate according to the health topic he is handling.

Radio

Radio is considered to be the most effective media for reaching a very wide audience with important messages. Radio programmes serve many purposes. In adult education special radio programmes are designed to supplement classroom teaching. The area covered by a given radio programme varies widely but has the potential to reach large segments of the population. If either a radio or television station grants time for a health programme, teachers should show keenness in informing their students by making announcements in the class and urging everyone to listen. If possible, teachers should invite adult students to meet in a convenient place so they can listen as a group. Also, they may ask them to come a few minutes before the programme is scheduled to begin, so that they can introduce the topic.

Television

Television has a strong impact on people. It can extend knowledge, influence public opinion and introduce new ways of life. Few people will argue the great potential of television for educating people. Great use is made of television in health colleges and schools, both for enrichment and direct instruction. It is also useful in health education. In fact there is a new aspect of television that has great potential for health education, and this is the use of video films. In some places such video films are shown to small audiences by health teachers and local groups. The overwhelming advantage of television is that it provides access to the homes of millions. Closed-circuit television is also applied in educational situations and can be very useful in health education. Teachers can use scheduled educational television programmes as supplementary instructional material. Documentaries on topics such as environmental pollution, smoking, drug abuse, family planning and different types of health problem are also very useful.

Newspapers and printed materials

The main purpose of newspapers is to spread information. They print news, features and editorials. Health topics can fit into any of these categories. The press can play a very important part in increasing peoples' knowledge about health. There are some magazines especially designed for adult and health education. Such magazines can be useful, especially in the post-literacy stage. Also a variety of printed materials such as circular letters, pamphlets, booklets, journals and books can be used effectively in health education for adults. In preparing printed materials the following points should be taken into consideration:

- purpose and objectives
- audience

- budget
- time schedule
- distribution.

It helps to put the need, purpose, objectives and message all down on paper. Adults could be encouraged to produce their own health "newspaper". It could be a "wall newspaper" as a class project. In this, local artists can be very useful.

Flipchart

A flipchart is made up of a number of posters that are meant to be shown one after the other. In this way several steps or aspects of a central topic can be presented. They are useful in giving information and instructions or recording information, and are best used with small groups. Flipcharts are, in most cases, made by the teachers themselves since they are very simple to make. The individual posters or charts are joined together at the top. Various means are employed in attaching the sheets to a length of wood such as glue, string, nails or tacks. Since the individual charts will be turned over many times, they should be joined with something that will stop them from coming apart or tearing.

A flipchart can tell a story by illustrating each idea in a chart or poster. The average size of flipchart is five posters. Each poster should be discussed in detail before moving to the next one. It is important to observe that each poster should carry only a single, separate idea with short, clear and simple words.

Magnetic board

This is another wind-resistant alternative to the flannel-boards, using a thin piece of plated tin and small magnets or magnetized pieces of iron. An induction coil from an old car can be used for example, or the help of an electrician or a mechanic could be sought. The pieces of magnetized iron are then glued or taped to the backs of the pictures which will then stick to the metal board.

If the magnetic board is painted with black, non-glare paint, it can be used as a blackboard as well.

Flash cards

Flash cards are cards which show a series of pictures and messages and can be used to tell stories or teach skills step by step. They may be arranged in different ways according to what the teacher thinks is most appropriate for the purpose. The size of the card will depend on how they are going to be used, and on the size of the class. Flash cards can be used to:

- teach basic concepts of health care
- start discussions that help people look critically at the physical and social factors that affect their health
- play educational games.

Models

Models like pictures and films, present a life-like appearance of things. With models the representation has the advantage of being three dimensional, and can be better appreciated by being touched and felt by hand. Models add the sensation of "feel" which is often absent from projected visual aids – a model with working parts will demonstrate the workings of the real thing, often in simplified form to show the basic principles. In making models all sorts of

material may be used, but preferably local materials that have been discarded or obtained at low cost.

This list of teaching aids is not exhaustive but it contains most of the teaching aids needed in adult health education. Other teaching aids such as graphs, charts, diagrams, cartoons, wall sheets, cut-away models, drawings, pictures, pictorial illustrations, and programmed learning, can be used in adult education classes if found appropriate to supplement the main list. Table 2 highlights the advantages and disadvantages of the various teaching aids and teaching methods available. Teachers are advised to consider these carefully before making the most appropriate selection.

9. RECRUITMENT, TRAINING AND EVALUATION

The provision of well selected teaching staff of good quality, in reasonable numbers and with the necessary training is essential to the development and formulation of health education for adults and communities. Distinction should be made between education, training and orientation. While education is seen in its generality as a process involving the development of mind, capabilities and character, training is seen in its more concrete and practical perspective resulting in the acquisition of skills. Orientation is a process which is more related to introducing individuals to a new environment, programme or skill. In this respect training of teachers for health education of adults should emphasize the following aspects.

Content

The content should set specific, feasible, observable and measurable aims in relation to the needs of the society. The training curriculum must be functional and comprehensive. Its main elements should include the following topics:

- psychology of adult learning
- methods and techniques of adult education
- methods of selection and use of teaching aids
- principles of primary health care
- a detailed study of the content of the units and activities in the Teachers for Adult Education Guide and the Teacher's Resource Book
- sociology of communities including community development and the basic principles of self-help and participation
- principles and methods of functional literacy and adult education
- practical work and visits.

Teachers

The teaching staff should consist of educationists with a background in both health and adult education.

Trainees

Trainees should be recruited from among experienced teachers with a reasonable background and interest in health education.

Evaluation

Systematic evaluation should be an integral part of the training programme. A built-in feedback mechanism must be used to evaluate both trainers and trainees.

Duration of training

Depending on local facilities, resources and needs a reasonable and average period suggested for the training programme ranges from ten to fifteen weeks. This period covers both the theoretical and practical aspects of the programmes. The training programme should be coordinated between the Ministries of Health and Education. Help may also be sought from

universities and research institutes. The training programme must have a leader who is charged with planning, coordination of resources, supervision of operations and follow-up of participants. He/she can seek advice of a small training committee which can assist in the process of formulating a realistic and useful training programme. The committee can also help in both follow-up of students and evaluation of the programme. The inclusion of an evaluation expert on the committee will surely assist staff members in defining programme goals, the achievement of which can be measured, and in devising procedures to gather evidence about programme effectiveness. In addition, having an evaluation expert as an integral part of the planning team will help to ensure that the activities planned will be likely to facilitate the achievement of programme goals.

The following sequence is a useful guide in training health personnel.

1. State the problem.
2. Define the learning objectives.
3. Find out what the community health workers (or others) already know about the problem.
4. Divide the learning content into what the trainees should know and what they should be able to do.
5. Build on what the trainees already know and can do.
6. Select and list the learning and teaching methods in the order in which they best suit the learning objectives.
7. Assess and evaluate the programmes made by the community health workers (or others).

Source: The Community Health Worker, WHO, Geneva (1987).

10. HEALTH UNITS - ADULT EDUCATION

SECTION A: Basic health understanding
UNIT 1: Responsibility and health

LEARNING OBJECTIVES

- To find out the main problems, concerns and causes of bad health in the community
- To find out who the people are who make important decisions regarding improving health conditions in the community
- To learn that the concept of health, sickness and death is closely related to the beliefs, traditions and faith of the community and that traditional belief does not necessarily run counter to the requirements of modern hygiene

FACTS TO BE LEARNED

- The meaning of responsibility
- To be healthy, people must eat enough good food, drink clean water, work and live in a clean environment, and have healthy habits
- Identification of the health problems and health needs of the community
- Identification of the health facilities existent in the community
- Methods of involving the community in primary health care programmes, both in policy formulation and day-to-day operations
- Understanding the machinery and the different dimensions of health education in the area e.g. staff facilities, teaching locations
- Knowledge of common causes of disease
- Role of the traditional healer in the community, both positive and negative

LEARNING ACTIVITIES

- Introduce the concept of responsibility and health by quoting to the class from the Koran and the Hadith (Sayings of the Prophet) those examples which encourage adults to be responsible for their health
- Explain the meanings of the Sura or Hadith you choose
- Explain the meanings of the words in the text and highlight the wisdom behind the words
- Ask the group members to relate proverbs, fables or stories they know that are relevant to the topic of responsibility and health
- Try to help members of the group to identify the structure of the health facilities in their community
- Invite the community health worker or his equivalent to talk to the class about the different aspects of responsibility and health

/cont...

LEARNING ACTIVITIES (cont.)

- Involve the group in discussing their personal or communal health problems with the community health worker or his equivalent
- Ask questions to enliven the discussion and to involve all members of the group by sharing ideas on the topic of responsibility and health. Take the traditional healer as one of the examples to be discussed
- Try to make a group visit to the community health centre – PRACTICE MAKES PERFECT
- List all ideas on the blackboard

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Role play
- Blackboard
- Photographs
- Field visit
- Any other method the teacher finds useful and appropriate to the topic of the unit

UNIT 2: The human body

LEARNING OBJECTIVES

- To identify the main parts of the human body and their functions

FACTS TO BE LEARNED

- The anatomy of the human body
- The theory of growth and development of the human body
- The needs of the human body: good food, clean water, sleep, sport, recreation, etc.

LEARNING ACTIVITIES

- Start by telling the class that human beings are the creation of God
- Quote from Sura 96 of the Koran , The Blood Clots:
  "Recite in the name of your Lord, the Creator, who created man from clots of blood. Recite! your Lord is the Most Bountiful One, who by the pen has taught mankind things they did not know"
- Explain the meaning of the verses. Tell them that Islamic medicine is based on the Koran, on that which is real and permanent and that life is from the most beneficent, the most Glorious Creator
- Explain to the class that the ultimate goal of man is to live a life of spirituality, a life which is in every sense healthy
- Ask for more quotations from the Koran and the Hadith on the topic
- Display a big wall chart of the human body and explain the name and function of each part of the body. Use a pointer to help emphasize information on the wall-chart
- Identify the areas of growth and development:
  - physical
  - mental
  - emotional
- Discuss the needs of the human body
- Highlight the importance of sport and recreation
- Emphasize the effectiveness of praying in maintaining good physical and mental shape
- Besides fitness, the performance of the prayer helps in cardiovascular health, weight control and stress reduction

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Wall-chart

/cont...

TEACHING METHODS AND TECHNIQUES (cont.)

- Blackboard
- Any other technique or method appropriate and available

SECTION B: Personal health
UNIT 3: Personal clearliness (hygiene)

LEARNING OBJECTIVES

- To understand the effect of cleanliness in the home and the community in achieving a healthy life

FACTS TO BE LEARNED

- That cleanliness is the most basic health habit
- That clean water and clean food are essential for health
- That having a clean latrine at or near the house is essential
- That washing hands before and after eating is very important
- That bathing children and other members of the family in clean or rapidly flowing water is essential
- That since some worms enter the body through the feet, wearing shoes or locally made sandals is important
- That they should never urinate or defaecate in water, or on damp ground
- That spitting is a bad habit because spit contains germs which cause disease

LEARNING ACTIVITIES

Activity 1

- Start the lesson by reciting the Hadith "Cleanliness is one of the components of faith"
- Explain the meaning of the words of the Hadith and then explain the Hadith itself and the wisdom behind it
- Ask the class what they think and how they will react to the Hadith in their home and communal life
- Ask one member of the class to lead a discussion on the Hadith
- Try to involve the whole group in the discussion

Activity 2

- Explain to the class the wisdom behind ablutions and why they are repeated five times a day before every prayer
- Prepare some clean water and perform ablutions in front of the class, explaining every step of the process and its contribution.
- Explain to the class that they clean water by filtering, boiling or disinfecting it. Also discuss with the group how they can protect their sources of water
- The community health worker should also talk to the group about food and why it should be protected until it is eaten
- The community health worker should explain to the class how to store food and how to protect it from rodents, insects, flies and dirt
- Involve the class in discussing these issues

/cont...

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Group visit
- Demonstration
- Posters and photographs
- Film (if available)

IMPORTANT

Teachers and community health workers should set an example of good personal hygiene and healthy living in the community. The community will then imitate their habits.

UNIT 4: Oral health

LEARNING OBJECTIVES

- To learn to take care of teeth and gums, to be able to eat well, speak well and have a good appearance

FACTS TO BE LEARNED

- When people eat too many sweet things or drink sweet drinks, their teeth decay and their gums become unhealthy
- If people always clean their teeth after meals, they will prevent little bits of food from staying between the teeth and damaging them

LEARNING ACTIVITIES

- Explain to the class why the mouth and teeth should be kept healthy, and how to do so
- Make a demonstration by using a toothbrush or a brushstick and toothpaste to clean all the surfaces of your teeth in front of the class
- Explain to the class the dangers of gum inflammation or dental decay and the negative effect of these two diseases on general health
- Advise the class that children should not eat too many sweets, sugar, cakes or have a lot of sweet drinks, especially between meals
- Illustrate, using visual aids, the different causes of dental diseases and their prevention
- Use models and diagrams, if available, to make yourself more clear
- Demonstrate how home-made tooth powder can be made from local ingredients if toothpaste is not available or is expensive
- Emphasize the religious aspects of having a clean mouth and teeth

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Demonstration, models and diagrams
- Photographs

UNIT 5: Care of eyes, ears, nose, skin, hair and feet*

LEARNING OBJECTIVES

5.1. Eyes

- To know how to look after the eyes

FACTS TO BE LEARNED

- People should do everything they can to protect their sight
- Identification of eye diseases and injuries and how they are treated
- Adults and children should eat a balanced diet with plenty of vitamin A which is found in green leafy vegetables, carrots and fruits e.g. papaya and mangoes
- Adults should teach their children clean habits and how to avoid injuring their eyes while playing with their toys or with other children

LEARNING ACTIVITIES

- Start by giving a general talk on sight and how people enjoy life better when they can see things, identify objects and colours, read and write, etc.
- Draw and label the picture of the eye
- Use a pointer to show the class the four main parts of the eye: pupil, iris, cornea and conjunctiva
- Explain briefly the functions of each part
- Demonstrate how to clean the eye and emphasize the importance of washing the eyes every day, especially for children
- Explain the steps to removing a speck from the eye
- Emphasize the fact that people can get eye diseases if they rub their eyes with dirty hands or clothes and if they don't protect their eyes when working
- Identify members of the class who wear glasses and motivate them to tell the class the reasons and benefits of wearing glasses
- Tell the class how to deal with a burn on the eye, whether by fire, heat or chemical as follows:
  - Wash the burned eye at once with a lot of clean water
  - Put tetracycline eye ointment under the eyelids
  - Send the patient at once to the health centre or hospital

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion

/cont...

* Numbering of sub-sections is based on Teacher's Resource Book

TEACHING METHODS AND TECHNIQUES (cont.)

- Demonstration
- Role play
- Illustrations

LEARNING OBJECTIVES

5.4: Nose

- To understand why it is important to detect signs and symptoms of common nose diseases and how to treat them

FACTS TO BE LEARNED

- The common symptoms for nose and throat problems may be observed through:
  - persistent breathing through the mouth
  - enlarged glands of the neck
  - frequent colds
  - persistent nasal discharge and sniffing
  - odour from nose or mouth
- A stuffy or running nose can result from a cold or allergy
- A lot of mucus in the nose may cause ear infection in children or sinus problems in adults

  Emphasize the following:
  - that colds can be very serious if not treated early and properly
  - that children should be treated immediately they get a cold
  - that adults should rest and take some medicine when they catch a cold

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Illustrations
- Displays

LEARNING OBJECTIVES

5.5: Ears

- To understand why it is important to take care of the ears

FACTS TO BE LEARNED

- Identification of common ear diseases
- Ways of handling deaf children

/cont...

FACTS TO BE LEARNED (cont.)

- Identification of the signs and symptoms of ear infection
- How to look after children when they get earache by cleaning pus from the ears every day with cotton wool

LEARNING ACTIVITIES

- Introduce the topic by emphasizing the value of hearing to adults and children
- Try to note behaviour indicative of hearing loss among the study group
- Try to perform hearing screening with the help of a local specialist or a trained community health worker
- Note that hearing screening is performed at intervals of two or three years
- Make a clear illustration of the ear on the chalk board and explain to the class the functions of the main parts
- Use the illustration to explain how separate parts of the ears are cleaned or treated
- Use posters and photographs to reinforce your explanation
- Explain clearly to the class that ear troubles may be observed through:
  - discharge from the ears
  - turning of the head to hear
  - failure to hear well, as indicated by unusual replies
  - failure to respond
- Involve the class in a discussion on each of the above items from their own experience at home and in the community
- Sum up the basic ideas and points made

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Illustrations
- Displays

LEARNING OBJECTIVES

5.6: Skin

- To understand why it is important to detect signs and symptoms of common skin diseases and how to treat them

FACTS TO BE LEARNED

- Skin diseases are serious and should be treated as soon as they appear
- Adults should reduce the risk of getting lumps under the skin
- Skin diseases include rash on the body or the face, sores on body or face, excessively dry or oily skin, nits on hair, bald spots, and frequent scratching

/cont...

LEARNING ACTIVITIES (cont.)

- Explain to the class that the risk of skin disease can be reduced by regular washing of the body with soap and water to get rid of dust and sweat, and by wearing clean clothes
- Tell the class members to report immediately to the health centre any wound, skin disease or bad insect bite. If the patient is feverish, he should be reminded that the most dangerous lumps are those which are felt:
  - around the neck (in front, at the side, or back)
  - in the armpit
  - in the groin
  - in the breast
- Discuss these issues and try to highlight their personal experience with skin diseases and how they treated them
- Show some photographs and pictures illustrating different types of skin disease

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Illustrations
- Displays
- Photographs

LEARNING OBJECTIVES

5.7 & 5.8: Hair and feet

- To understand why it is important to look after the hair and feet

FACTS TO BE LEARNED

- That people should take care of their hair and feet by washing them with soap and water regularly

LEARNING ACTIVITIES

- Remind the class that when they perform their ablutions they practically clean their hair and feet five times a day
- Ask one of the group members to perform ablutions in front of the class
- Prepare clean water
- Ask those members of the class who do not perform ablutions to do so for their own wellness and good health
- Motivate the group to discuss these issues

/cont...

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Role play
- Displays

UNIT 6: Food and nutrition

LEARNING OBJECTIVES

- To identify food needs and local food sources in the community
- To know the relationship between food, nutrition, growth and development

FACTS TO BE LEARNED

- Human beings need food to live, grow, get energy and protect themselves from diseases
- Identification of the four major food groups (animal protein, vegetable protein, carbohydrates and fats)
- Children need a lot of healthy food, care and attention to grow strong and healthy. Otherwise they become sick and stop growing
- Habits that affect health e.g. drinking alchohol, eating junk food and street foods

LEARNING ACTIVITIES

- Introduce the topic by reciting the following quotation from Sura 2 of the Koran, The Cow:
  "Believers, eat of the wholesome things with which We have provided you and give thanks to Allah, if it is He whom you worship. He has forbidden you the flesh of animals that die a natural death, blood and pig's meat"
- Explain the meanings of the words and the text, highlighting the wisdom behind the quotation
- Involve the group in a general discussion on food and the needs of the human body for different types of food
- Ask the students whether they know any other quotations from the Koran and the Hadith on food and health
- List what the students say on the blackboard
- Classify the types of food the students mention under the following categories on the blackboard:
  (a) Foods we need to live: carbohydrates, proteins, fats, vitamins, minerals and water
  (b) Foods we need to grow: cereals and grains, wheat, maize, rice and millet
  (c) Foods we need to give us energy: pure fats (oil, butter, lard); fat-rich foods (nuts, oil seeds, fatty meat, coconut), sugars (sugar, honey, molasses, sugar cane, jaggery)
  (d) Foods we need to protect us: vitamins and minerals or protective helpers. These are found in vegetables (dark green leafy vegetables, tomatoes, carrots and peppers), fruits (mangoes, oranges and papayas) and also eggs, chicken, meat, milk products, fish and fish liver oil

/cont...

LEARNING ACTIVITIES (cont.)

- Explain that group (a) foods are known as Main Foods, group (b) foods are known as Grow Foods, group (c) foods are known as Go Foods, group (d) foods are known as Glow Food
- Summarize the fact that our foods consist of:
  - Main Foods
  - Grow Foods
  - Go Foods
  - Glow Foods
- We have to eat food from each group daily so as:
  - to be able to grow properly (especially our children)
  - to have the energy to work
  - to be protected from some sicknesses (night blindness and anaemia)
- Identify, with the involvement of the group, the local foods available in the community and classify them according to the four food groups mentioned above
- Emphasize the fact that children should be given a balanced diet containing all four types of foods, especially Grow Foods: animal products (milk, meat, chicken, eggs, fish), legumes (beans, peas, groundnuts, soya beans), nuts (almonds, walnuts, cashews) and oil seeds (sesame, sunflower)
- Explain why children should have regular health examinations during the first few years of life
- Ask the assistance of the local community health worker to explain to the class the use of the growth chart and what they can do to make sure that the child grows normally
- Make sure that the members of the class understand that the whole family should know about the child's needs, which include regular sleep, proper feeding, and time to play. They should also know the danger signals of ill health (for example, the child stops growing or has diarrheoa or fever)
- Explain the difference between growth and development: growth means getting bigger; development means being able to do more and more things
- Involve the class in discussing growth and development in regard to their own children
- Summarize the discussion by telling the class that there are four milestones in a child's development:
  - between six and eight months of age in child can sit without support
  - by 18 months a child can walk without support
  - by two years, a child can say single words in common usage, and can show that he knows what they mean
  - between two years and a half and three years of age a child can say three or four words together in a short sentence
- Remember to remind the adult class that in the first four months of life breast-milk is the best food for babies

/cont...

LEARNING ACTIVITIES (cont.)

- Also remind the class that children should be weighed regularly
- Invite the community health worker to talk to the class about children's food and to illustrate to the class how and where children can be weighed in the locality
- Tell the class that there are habits that we develop that are very harmful to our health
- Quote alchohol, junk foods and street foods as the most common and serious habits which should be broken
- Emphasize the fact that Islam forbids the drinking of alchohol. Alchohol has brought much suffering to man health-wise. Not only can alcohol harm the health of those who drink (through diseases such as cirrhosis of the liver), but it also harms the family and community in many ways, through loss of judgement when drunk, and of self respect when sober. It leads to much unhappiness, waste and violence, often affecting those the alcoholic loves the most
- Show the class photographs and other illustrations showing liver cirrhosis and try to explain in simple words what it means to the individual's health
- Explain the economic dangers to individuals who spend money on alchohol. Make it clear that this money should have been spent on the family for buying food, medicine, clothes etc.
- Involve the class in a general discussion on the evils of alchohol, describing their own experiences with friends, neighbours, relatives or perhaps themselves
- Encourage the class to organize an anti-alchohol campaign in the community
- Supply them with posters, photographs and all available materials which will support the campaign and make it successful
- Mosques should be used during the campaign, especially the Friday sermons

TEACHING METHODS

- Lecture
- Group discussion
- Role play
- Photographs, posters and other illustrations
- Demonstration
- Films (if available)

UNIT 7: Social and mental health

LEARNING OBJECTIVES

- To understand the different aspects of social and mental health

FACTS TO BE LEARNED

- That emotional disturbances such as stress, sorrow, nervousness, irritability, anxiety or lack of acceptance socially, cause serious physical and mental problems and make life very difficult

LEARNING ACTIVITIES

- Start by developing a good communication process within the class
- Encourage all members of the class to participate and communicate clearly on issues of social and mental health
- Tell the class that mental disorders are those that affect peoples' minds, feelings and behaviour
- Ask the class to identify people with mental disorders in the community and tell them to encourage such people to try to solve their own problems with the help of their relatives, friends or neighbours. Tell the class they can easily recognize people with mental disorders. In most cases they are violent, angry looking, lost, not well dressed, cry without reason, threaten to kill themselves, have lost their memory, run away from home, drink too much alchohol or take drugs, don't eat, etc.
- Tell the class that healers or religious leaders often treat and advise people who have mental disorders
- Try to keep in touch with these healers and religious leaders and offer them your help or ask their help when you need it
- Indicate that people with mental disorders should be given food and drink and be treated kindly
- Involve the group in a detailed discussion

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Role play
- Models

UNIT 8: Safety

LEARNING OBJECTIVES

- To learn to identify hazards and develop measures to prevent accidents and to secure regular inspection of such measures, to check their continuing effectiveness and use

FACTS TO BE LEARNED

- Accidents are common among children and young people. Some are serious and may kill. Many accidents leave scars or make people handicapped for life

TEACHING ACTIVITIES

- Tell the class that among small children, who crawl and toddle unsafely in and around the house, the most common accidents are:
  - cuts, burns from fire and scalds from boiling water or boiling oil
  - falls, with wounds or fractures from climbing or running
  - poisoning from drinking kerosene, corrosives (potassium chloride) or insecticides, eating rat poison, poisonous berries, pills, tablets etc.
  - drowning in rivers, lakes, ponds, wells, etc.
- REMIND the class that among older children and teenagers road traffic accidents are more common. Reinforce the fact that adults should look after their children properly, particularly to prevent home accidents
- Discuss with the class precautions which the community can take to minimize the risk of accidents. For example the community can:
  - fill in old, empty wells
  - put fences or barriers around dangerous places
  - warn people by signs
  - provide rescue services
- Collect information on accidents that have happened in the community
- Discuss the reasons why these accidents happened
- Discuss with the class proposals for evading such accidents in the future
- Encourage the students to form an accident committee
- Discuss with the leaders of the committee how to make the roads and other dangerous places safe for the people
- Discuss with the committee how to make children more aware of the risk of accident

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Study visits

/cont...

TEACHING METHODS AND TECHNIQUES (cont.)

- Posters
- Photographs
- Films

UNIT 9: Lifestyle

LEARNING OBJECTIVES

- To learn how best to live and handle day-to-day health needs and problems sensibly, effectively and satisfyingly

FACTS TO BE LEARNED

- Lifestyle diseases include heart diseases, psychological diseases, psychosocial illnesses, accident-related injuries, drug abuse, sexually transmitted infections, AIDS and some cancers. They are as deadly as other kinds of diseases
- The sensible and limited use of medicines is one of the important objectives of health education
- Food, not medicine, is the key to good health, especially for people who are weak and hungry. Adults should buy food not vitamins
- Smoking, alchohol and drugs are very dangerous to health

LEARNING ACTIVITIES

Activity 1: Shaping lifestyle

- Start by listing practices and habits which are generally accepted as unhealthy
- Discuss why they are unhealthy by giving reasons
- Invite the group to ask questions and discuss each habit or behaviour separately
- List all the negative elements mentioned by the students
- Quote some of the known proverbs which emphasize aspects of good behaviour and praise good health e.g. "Health is an eternal treasure"
- Encourage the group to quote verses from the Koran, Hadith or proverbs which praise good health and good habits and criticize harmful habits in the family and the community
- Divide the class into two groups – one to list the good habits and the other to list the bad habits
- Make the members of the group exchange positions and continue the process
- Show some photographs and other illustrations which explain clearly the damage to health caused by poor lifestyle e.g. heart disease.
- Refer to Unit 9.1. in the Teachers' Resource Book for more examples

Activity 2: Medicines and their use

- Emphasize the fact that drugs can be used to relieve pain, treat disease and save lives
- Explain in a simplified form the interrelationship between disease and drugs. Emphasize that medicines are drugs which help cure us of disease, treat symptoms and protect us through immunization
- Draw the attention of the class to the great value and importance of immunizing children and pregnant women

/cont...

LEARNING ACTIVITIES (cont.)

- Ask the group whether their children are immunized
- Make it very clear to the group that medicines should be prescribed by a medical doctor or someone who is authorized to do so
- Tell the class that there are six diseases which can be prevented by immunization (vaccination and immunization mean the same thing). These infectious diseases are tuberculosis, diphtheria, whooping cough, tetanus, poliomyelitis and measles
- Check with the community health worker the local names for these diseases and use the local names when explaining to the class
- Show photographs and illustrations of these diseases
- Invite the community health worker to talk to the class about medicines
- Encourage members of the class to ask him questions

Activity 3: Smoking

- Smoking causes many diseases including lung cancer. Moreover, it costs money. Adults must be discouraged from smoking. Smoking is very harmful to all, but especially to these categories: young children, persons with medical problems (asthma, allergies, emphysema, bronchitis and cardiac problems), workers exposed to industrial hazards and pregnant women
- Utilize all opportunities to provide the impetus for a comprehensive anti-smoking campaign. Persuade the members of the adult class to join, support or organize an anti-smoking campaign in the community. Provide or make posters, photographs and other anti-smoking materials to be used by adults in the anti-smoking campaign to raise awareness about the hazards of smoking

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Role play
- Illustrations
- Posters
- Photographs
- Displays
- Models

SECTION C: Community health
UNIT 10: Public cleanliness (sanitation)

LEARNING OBJECTIVES

- To learn that public cleanliness is a prerequisite for healthy living and well-being and that it is the responsibility of all members of the community

FACTS TO BE LEARNED

- The house is the centre of family life and clean houses protect health
- Public cleanliness is the duty of the whole community and community leaders should be able to identify the main problems, concerns and causes of bad health in the community
- Communities must be helped to identify what they want to improve and how to get it done

LEARNING ACTIVITIES

Activity 1: Improving our community

- Start by introducing the Hadith "Cleanliness comes from faith"
- Explain the meaning of the Hadith in detail
- Ask members of the class if they recall any other quotations from the Koran or the Hadith which praise and encourage cleanliness
- Ask for proverbs or stories from the locality which praise cleanliness
- Explain in detail the dangers caused by lack of cleanliness to the community, especially to children
- Draw a map of the local community and show on it the areas which demand public effort for communal cleanliness: school, market, stream, roads, health centre, etc.
- Ask the learners if they want to add to the map, assuming that they know the community better than you do

Activity 2: Making a soak-pit

- Explain why a soak-pit at home is healthy and important
- List the materials necessary for making a soak-pit
- Show some photographs of communal effort in constructing a school soak-pit
- Encourage class members to help each other in making a soak-pit at home
- Participate with others in making a communal soak-pit
- Invite the local community health worker to discuss with each member of the class ways and means of making a soak-pit at his or her house

Activity 3: Refuse disposal

- State the reasons why indiscriminate disposal of refuse is unhealthy and damaging to the community

/cont...

LEARNING ACTIVITIES (cont.)

- Describe ways and means to safely dispose of refuse at home and in public places
- Utilize metal bins with lids to dispose of solid waste materials at home

Activity 4: Control of vectors in the village

- Explain that a vector is an insect or animal that carriers disease and passes disease on to people
- Explain that many serious illnesses are passed on to humans by vectors such as:
  - insects (e.g. mosquitoes, flies)
  - animals that live in water (e.g. snails)
  - land animals (e.g. rats and dogs)
- Ask the community health worker about the vectors which are common in the area and the diseases caused by them
- Discuss with the class the information you receive from the community health worker and make it clear to the adult class that mosquitoes, flies, snails, rats and dogs can carry diseases which they may pass on to people
- Tell the class that mosquitoes can carry malaria and other diseases such as yellow fever, dengue fever, haemorrhagic fever etc. House-flies can carry the germs of diarrhoea
- Also tell the class that water animals carry worms which may cause blood in the urine
- Also make it clear that land animals like rats carry diseases and that dogs can be very dangerous as they may have rabies
- Emphasize the fact that it is very important to destroy or limit the breeding-places of vectors. Mosquitoes breed in rainwater that collects in things such as old cans, old jars, broken bottles and old tyres. They also breed in holes in the ground and in trees, ponds, open wells, lakes and marshes (swamps)
- Advise the class that:
  - people should make sure that their latrines are kept clean and the pits are kept covered when not in use
  - wells and springs should be kept covered.
  - ponds, pools and ditches where mosquitoes and snails can breed should be treated and filled.
- show illustrations and photographs which you can borrow from the community health worker. ask him if he has a film to show to the class

Activity 5: Control of bedbugs, cockroaches, and rats

- Explain to the class that bedbugs, cockroaches and rats carry diseases
- List the hiding places of bedbugs, cockroaches and rats
- Identify activities that will protect our houses and our children from bedbugs, cockroaches and rats
- Discuss the local traditional methods used in controlling bedbugs, cockroaches and rats and the effectiveness of these methods
- List the suggested methods on the blackboard. Emphasize the fact that home cleanliness is the best method of controlling these vermin

/cont...

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Photographs
- Blackboard
- Role play
- Demonstration
- Illustrations
- Films
- Posters

UNIT 11: Water and health

LEARNING OBJECTIVES

- To learn that a clean water supply is essential for community health

FACTS TO BE LEARNED

- Many diseases are caused by dirty or unsafe water
- To be healthy, people need clean water for:
  - drinking
  - preparing and cooking food
  - washing the body
  - washing clothes
- Clean water comes from a protected tap, spring, well or borehole. Water for drinking from any other source should first be treated to make it safe. When it cannot be boiled, it should be filtered
- Dirty water causes diarrhoea and other diseases, especially in children

LEARNING ACTIVITIES

Activity 1: Sources of water

- Start by quoting the Koran where rain water is mentioned in several Suras. Refer to the following quotation from Sura 16, The Bee:
- "It is He who sends down water from the sky, which provides drink for you and brings forth the crops on which your cattle feed"
- Also quote from Sura 25, Al-Furqan:
  "And We sent down pure water from the sky"
- Explain the meanings of the two Suras and encourage adults to participate in discussion.
- Tell the class that clean water is essential for performing ablutions
- Let the group identify the sources of water in the community
- Explain to the class that all living things need water: humans, animals, and plants
- Tell the class that people may draw water from a pond, a river a spring, a well or a rainwater tank

Activity 2: Drawing water from a pond

- Tell the class that it is very necessary to boil water drawn from a pond or to filter it before it is used
- Advise the class that they should stop their children from bathing in the pond
- Explain that unboiled pond water can be used for watering cattle or gardens but not for drinking or cooking

/cont...

LEARNING ACTIVITIES (cont.)

Activity 3: Water from a river

- Tell the class that river water should be boiled, filtered or disinfected before drinking
- Tell them also that they can bathe or wash their clothes only where the river leaves the village and that they should only let the animals drink the water further down the river

Activity 4: Water from a spring

- Start by telling the class that spring water is usually clean
- Also tell the class that a spring should have a fence all around, or a ditch or a cemented stone wall, as well as a pipe and a cover
- Explain the above mentioned points from the illustration

Activity 5: Water from a well

- Start by telling the class that water from a well is usually clean if the well is properly protected
- Illustrate that a well is properly protected if:
  - it is at least three metres deep
  - it is lined inside with stones
  - there is a stone wall around it
  - it has a removable cover
  - people do not let dirt get into it

Activity 6: Water from a rainwater container

- Explain to the class that rainwater collected in tanks for drinking and cooking should be protected
- Tell them the tank should be kept covered, and cleaned at the beginning of the rainy season
- Water should enter the tank through a screen filter to keep out leaves, dirt and insects
- Water should be taken from the tank through a tap or with a hand-pump

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Demonstrations
- Photographs
- Illustrations
- Role play
- Group visits
- Films

UNIT 12: Our living environment

LEARNING OBJECTIVES

- To learn that a healthy environment is a clean one and that environmental pollution endangers human life

FACTS TO BE LEARNED

- Air, land and water are the three basic aspects of the environment
- It is important to try to conserve natural resources, for example by not wasting water
- The air can be polluted by car exhausts, forest fires and industrial emissions
- A clean and safe environment can enhance the individual's life physically, mentally and socially

LEARNING ACTIVITIES

Activity 1: Clean air

- List the kinds of air pollution (harmful impurities in the air) that you have noticed in your town or village
- State next to each kind the source of it
- Describe each kind
- Indicate in what way it can be harmful to people, animals and plants
- List ways in which air pollution can be contained or minimized in the community
- Design a poster with the help of the class, displaying appropriate messages on air pollution and directed at the community
- Burning refuse and home waste (plastics, etc.)
- Discuss the negative aspects of the burning of refuse and home waste (plastics, etc.)

Activity 2: Noise pollution

- Explain to the class that noise caused by cars and car horns, aeroplanes, trains, industry etc. causes unease to many individuals in the community
- Involve the class in discussing ways and means of minimizing noise in the community
- List the sources of noise in your community and encourage the class to propose ways and means to contain it
- Explain why airports are placed some distance from urban areas
- Design a poster urging people to prevent noise pollution. Make the adult class share in the ideas of the poster

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion

/cont...

TEACHING METHODS AND TECHNIQUES (cont.)
• Illustrations • Posters

SECTION D: Health information
UNIT 13: First aid*

LEARNING OBJECTIVES

- To understand that accidents cause deaths among children and adults which can be prevented

FACTS TO BE LEARNED

- Following certain safety rules helps children and adults avoid hazardous situations and prevents accidents
- To help correct potential hazards, certain safety measures should be taken at home: e.g. knives should be stored properly, matches should be kept out of the reach of children, electrical cords should not run under carpets and rugs, use of slippery throw rugs should be avoided and dangerous chemicals and medicines should be kept out of the reach of children
- Even when rules are followed, accidents still occur and it is important to know what to do in case of an accident. The golden rule: Always call for help. Knowledge of first aid methods is essential

13.1: Fever

- A person whose temperature is over 37.5°C has a fever. A child under school age whose temperature is over 38°C may be very ill
- Fever, like diarrhoea, makes the patient lose a lot of water
- People get fever when their body is attacked by very small living things called germs. Germs live in the air, soil, water or infected animals and people

LEARNING ACTIVITIES

- Explain to the class how to take someone's temperature (Annex 1)
- Tell them that a patient with fever must take the necessary medicine immediately
- Tell them that a patient with fever should drink plenty of water, because he will lose a lot of water through sweating
- Tell the class they should send the patient to hospital immediately if, as well as fever, he has any of the following complaints:
  - stiff neck
  - severe pain
  - unconsciousness
  - yellow colour in the eyes
  - severe diarrhoea
  - convulsions

/cont...

* Numbering of sub-sections is based on Teacher's Resource Book

TEACHING METHODS AND TECHNIQUES

- Talk
- Demonstrations
- Role play

FACTS TO BE LEARNED

13.2: Nose bleeds

- nose bleed can be very dangerous and it should be stopped immediately

LEARNING ACTIVITIES

- Tell the class that a person with a nose-bleed should:
  - sit down and not lie down
  - pinch the nose with the fingers for 15 minutes or put cotton wool in the nose
  - not blow the nose for at least an hour
- Make a practical demonstration of the above steps
- Ask the class to do the same demonstration you did
- Show some photographs or other illustrations to make the picture more clear

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Role play
- Demonstration
- Photographs

FACTS TO BE LEARNED

13.3: Poisoning

- Poisoning is common in children, especially between the ages of one and four years
- Poisoning can be prevented
- Parents should keep poisonous materials out of reach of children e.g. DDT, lindane, sheep dip and other insecticides, and rat poison

LEARNING ACTIVITIES

- Tell the class that there are many poisonous substances in houses and their surroundings
- Note that alcohol and drugs are poisonous. Tobacco is also a poison when smoked regularly over a long period of time

/cont...

LEARNING ACTIVITIES (cont.)

- Tell the class that the signs of acute poisoning include
  - burns on the lips and in the mouth and throat, caused by chemicals
  - vomiting and diarrhoea
  - paralysis
  - being semi-conscious or unconscious
  - being unable to breathe
- Explain to the class that if the patient is conscious and has no burns on the lips or the mouth, he should be made to vomit
- Also tell the class that if the patient is unconscious and has burns on the lips or in the mouth he should be sent immediately to the health centre or the hospital
- Demonstrate the vomiting process to the class and show them the illustrations
- Advertise widely, using posters, the dangers of alchohol, drugs and tobacco

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Demonstration
- Posters
- Photographs

FACTS TO BE LEARNED

13.4: Wounds, cuts and bruises

- All wounds bleed, are painful and can easily become infected
- All wounds should be carefully cleaned and then protected with a bandage or a clean cloth
- In cases where patients are losing a lot of blood, the bleeding should be stopped
- If wounds smell bad they are infected and should be treated carefully, preferably in the health centre or the hospital
- Always wash your hands with soap and water before and after treating a wound

LEARNING ACTIVITIES

- Tell the class how to examine a wounded person
- Demonstrate the first aid steps to stop bleeding
- Select posters or photographs showing different types of wounds and how they are treated
- Demonstrate how to tie a bandage
- Tell the class that if there is a broken bone, the patient should be sent to the health centre

/cont...

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Role play
- Demonstration
- Photographs
- Film

FACTS TO BE LEARNED

13.5: Rabies

- Rabies is a disease of animals. A human gets infected when bitten by an animal that is infected with rabies
- Immediate action should be taken after a bite by an infectious animal
- Rabies can be transmitted by dogs, cats, foxes, wolves or jackals
- Rabies is transmitted to man via the saliva left behind in the wound

LEARNING ACTIVITIES

- Explain to the class that when an animal acts strangely, looks sad, restless or irritable, it probably has rabies
- Tell the class that other signs of animals with rabies include foaming at the mouth, not eating or drinking and looking wild
- Remind the members of the class to take great care in handling any animal that seems sick or acts strangely. Even if the animal does not bite, its saliva can cause rabies if it gets into a cut or scratch

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Demonstrations

FACTS TO BE LEARNED

13.6: Burns

- Burns are caused by fire, hot or burning objects, boiling water or oil, electric shock and some chemicals (such as acids and alkalis)
- Care of the burned area is the priority

/cont...

LEARNING ACTIVITIES

- Discuss with the class measures to prevent burns
- Tell the class if a large area of the skin is burned the patient should be sent immediately to the hospital or health centre
- Demonstrate the first aid steps to be taken in case of burns

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Demonstration

FACTS TO BE LEARNED

13.10: Fractures

- Fractures are treated in different ways depending on which bone is broken
- All patients who have a suspected fracture must be sent to the health centre or hospital for final diagnosis and proper treatment
- If a person has had a fall or a violent blow, there is probably a broken bone in the limb

LEARNING ACTIVITIES

- Demonstrate to the class, using posters and photographs, the different types of fractures in the different parts of the body
- Make sure that the illustrations you present to the class show clearly how different parts of the body are handled
- Point out to the class that to prevent broken bones from moving, one should use bandages and splints to stop the joints above and below the fracture from moving
- Demonstrate to the class how to carry a patient with a fracture properly. Stress that the patient should not be moved more than is necessary when placing him on the board
- Draw pictures of different types of fracture

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Role play
- Demonstration
- Posters
- Photographs
- Pictures

/cont...

FACTS TO BE LEARNED

13.11: Bites

- All bites can be dangerous and may cause death. They should be treated as quickly as possible
- All bites (and wounds) carry the danger of infection, especially tetanus, and should be thoroughly cleaned
- If the patient receives first aid immediately, a snake bite is not dangerous

LEARNING ACTIVITIES

- Tell the class that calm, rest and no alcohol will help to slow down the speed of distribution of the poison to the rest of the body
- Explain that the wound should be cleaned with soap and water, and painted with iodine. Demonstrate this exercise
- Tell the class it is very important to take the person immediately to the hospital or health centre
- Demonstrate how to tie a bandage above a snake bite wound as first aid. Explain that this must not be left on far more than half on hour

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Demonstration

UNIT 14: How diseases spread

LEARNING OBJECTIVES

- To learn how disease agents enter the body and how the body defends itself

FACTS TO BE LEARNED

- There are infectious and non-infectious diseases
- Infectious diseases are those that spread from one person to another. These diseases include tuberculosis, tetanus, some kinds of diarrhoea, gonorrhoea, colds, influenza, measles, chicken-pox, rabies, warts. These diseases are caused by bacteria, virus or fungus
- Non-infectious diseases do not spread from person to person. These diseases include rheumatism, heart attack, epileptic fit, stroke, migraine, cataract and cancer. These diseases have many different causes but they are never caused by bacteria or virus

LEARNING ACTIVITIES

- Define non-infectious disease and infectious disease
- Provide examples of infectious and non-infectious diseases
- Describe bacteria, virus and fungus
- Explain what parasites are and give examples of parasites that are harmful to human beings
- Participate in conducting a survey on common sicknesses prevalent in the community
- List the means and ways by which the body defends itself against disease agents
- Discuss with the group the precautions to be taken by the family to protect their children and themselves from diseases
- Identify with the group the infectious and non-infectious diseases in the community
- List their local names

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Role play
- Group visit
- Diagrams
- Posters

UNIT 15: Needs and facilities in the community

LEARNING OBJECTIVES

- To find out community health needs and the health services available

FACTS TO BE LEARNED

- Methods and techniques of surveying a small community
- Methods of identifying natural leaders in the community
- Identification of the main health problems in the community and detecting their causes
- How to elect a community health committee
- Methods and techniques of involving members of the community in solving their health problems

LEARNING ACTIVITIES

- Participate in conducting a health survey related to the health problems of the community
- Motivate the class to participate in conducting a health survey related to health services in the community. Involve the local community health worker in the survey
- Discuss the findings with the class and encourage the class to make proposals and form a local health committee
- Draw and label a map showing health service facilities in the community and the neighbouring area
- Draw a health map of the village or town and locate the available health centres and personnel
- List the names of the local health professionals on the blackboard and help the class to identify their roles and where they live
- Finish by preparing an up-to-date chart of health facilities and health personnel available in the community
- Discuss the chart with the students

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Group visit
- Chart
- Map
- Blackboard

UNIT 16: Caring for sick children

LEARNING OBJECTIVES

- To learn how to handle sick children

FACTS TO BE LEARNED

- Most children get sick sometimes
- Well-fed children get sick less often than badly fed children
- Full immunization prevents most of the diseases that kill very young children
- A sick child needs more care than a sick adult. Never leave a sick child alone

LEARNING ACTIVITIES

- Explain to the class what the most common and most serious illnesses in children are. Identify, with the help of the community health worker, the seasonal diseases which affect children in the community
- Tell the class that immunization is vital to children and explain when and where children can be immunized (refer to Unit 17)
- Demonstrate how to feel for the body temperature of someone who is sick
- Demonstrate the correct way of keeping a sick child clean
- Explain that a sick child should:
  - be given plenty of liquids to drink
  - receive mashed food
  - rest in a quiet and clean place
  - be kept clean by bathing with clean, cool water

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Demonstration
- Posters
- Photographs

UNIT 17: Immunization

LEARNING OBJECTIVES

- To learn that immunization prevents death and is vital to the lives of children

FACTS TO BE LEARNED

- The six common infectious diseases which can be prevented by immunization are:
  - tuberculosis
  - diphtheria
  - whooping cough
  - tetanus
  - poliomyelitis
  - measles
- All children under one year of age need to be immunized against the six common diseases

LEARNING ACTIVITIES

- Find out the local names of the six common infectious diseases
- Describe the major signs and symptoms
- Prepare and explain an immunization schedule. Involve the group in discussion
- Name the different vaccines and the diseases which are prevented by them
- Discuss with the group the best sites for vaccination in the community. Remind them that the sessions should be organized in a sheltered place with water, soap, light, tables, chairs and benches
- Involve the local community health worker

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Group visit
- Charts
- Posters
- Models

UNIT 18: Diarrhoea

LEARNING OBJECTIVES

- To learn treatment and prevention of diarrhoea

FACTS TO BE LEARNED

- When a person passes at least three watery stools in a day, he has diarrhoea
- A patient with diarrhoea loses water and salt, may become dehydrated and very weak, and may die if not treated
- For treatment, the patient should drink a mixture of water, salt and sugar. The patient should continue to eat so as not to lose strength

LEARNING ACTIVITIES

- Explain to the class that diarrhoea is caused by germs that enter the body by means of dirty drinking water, dirty food, unsafe food and dirty hands
- Describe to the class the above four ways in which they may get diarrhoea
- Prepare the solution that prevents dehydration (water+salt+sugar)
- Demonstrate the signs of dehydration using models made by you and the class
- List the names of foods locally available which should be given to persons with diarrhoea

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Demonstration
- Models
- Posters
- Charts

UNIT 19: Common skin infections and infected wounds*

LEARNING OBJECTIVES

- To learn how to treat common skin diseases

FACTS TO BE LEARNED

- There are many skin diseases and problems which include boils and abscesses, chicken-pox, ringworm, scabies, small sores with pus, white spots on the face and the body, etc.
- Skin diseases can be caused by germs or insects, which attack the skin directly, by a fungus, or by injury, burns or chemicals

LEARNING ACTIVITIES

19.1: Boils and abscesses

- Define an abscess or a boil
- Demonstrate how to apply a hot compress to the affected part

19.2: Chicken-pox

- List the signs and symptoms of chicken-pox
- State the preventive measures to be taken to manage a child with chicken-pox

19.4: Ringworm

- Demonstrate the areas of the body where the infection occurs
- List the preventive methods to be taken to control the spread of this infection
- Communicate to parents information related to identifying, preventing and managing infection due to ringworm
- Tell the class that the patient should sleep alone and keep away from others until the skin is healed

19.5: Scabies or itch

- Demonstrate the areas of the body where lesions occur
- List the preventive measures to be taken to control and stop the spread of this infection e.g. cleaning the body every day, changing clothes, clean bedclothes, keeping finger-nails short

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Demonstration

/cont...

* Numbering of sub-sections is based on Teacher's Resource Book

TEACHING METHODS AND TECHNIQUES (cont.)

- Photographs
- Posters and charts
- Blackboard

UNIT 20: Common infections due to worms and parasites

LEARNING OBJECTIVES

- To learn how to treat and prevent infections due to worms and parasites

FACTS TO BE LEARNED

- There are many types of worms and other tiny animals (parasites) that live in people's intestines and cause diseases
- The common worms seen in the stools are roundworms, threadworms and tape worms
- Malaria is an infection of the blood caused by mosquitoes

LEARNING ACTIVITIES

- Explain to the class how amoebas are transmitted
- Describe how worms spread
- Explain to the group the harmful effects of worms
- Show illustrations of different types of worms
- Describe the symptoms of malaria and how it is treated
- Name the malaria drug available and commonly used in the community
- Ask the class to name the local methods used for treating malaria. List them and ask the group to learn them
- State the rules to be followed to avoid malaria infection
- Relate malaria to rainfall

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Demonstration
- Photographs and posters
- Blackboard
- Illustrations

UNIT 21: Common respiratory infections

LEARNING OBJECTIVES

- To learn how to treat and prevent common respiratory infections

FACTS TO BE LEARNED

- Treatment of the respiratory tract infections is important because of their frequent occurrence and their tendency to be complicated by secondary bacterial infections
- Diseases caused by respiratory infections include asthma, colds and influenza, coughs, pneumonia, sore throat, tonsillitis and rheumatic fever

LEARNING ACTIVITIES

21.1: Asthma

- Describe asthma
- List the signs of asthma
- Describe the preventive measures to be followed
- Show the class how to determine whether a child has asthma
- Explain to the class that an asthmatic patient should see the doctor and seek advice

21.2: Colds and influenza

- Describe the symptoms of colds and influenza
- Describe the preventive methods to be followed
- List guidelines to be followed by a person who has a cold or influenza
- Identify local methods of treating colds and influenza
- List these on the blackboard and ask the group to identify the most effective of the local methods
- Tell the class that aspirin or paracetamol are effective treatments for colds and influenza

21.3: Coughs

- Explain to the class that coughing is not a sickness in itself, but a sign of many sicknesses that affect the throat, lungs and bronchi (the network of air tubes going into the lungs)
- Name the common illnesses that cause coughs
- Demonstrate how to breathe hot water vapours
- Demonstrate how to drain mucus from the lungs

21.4: Pneumonia

- List the signs and symptoms of the disease
- Demonstrate the signs and symptoms of pneumonia and the rules to be followed to alleviate the disease in children

/cont...

LEARNING ACTIVITIES (cont.)

21.5: Sore throat, tonsillitis and rheumatic fever

- Explain that these diseases often begin with the common cold
- State the signs and symptoms of sore throat, tonsillitis and rheumatic fever
- Describe the rules to be followed to alleviate these diseases
- Demonstrate procedures for gargling with warm salt water
- Ask the class what they normally take if they catch one of these diseases
- Discuss the different ideas and list them
- Emphasize that children are most often victims of these diseases
- Tell the class to obey the following instructions if they catch one of these diseases:
  - cover the mouth when coughing and sneezing
  - use a handkerchief or paper for disposal of nasal secretions and sputum
  - do not spit on the ground, whether inside or outside the house
  - do not share cigarettes, drinking bowls or eating utensils

TEACHING METHODS AND TECHNIQUES

- Lecture
- Discussion
- Demonstration
- Blackboard
- Photographs
- Posters

UNIT 22: Other diseases

LEARNING OBJECTIVES

- To learn about AIDS, allergic reactions, epilepsy, genito-urinary infections and hepatitis, and how these are treated

FACTS TO BE LEARNED

22.1: AIDS

- AIDS, Acquired Immunodeficiency Syndrome, is a relatively new disease
- AIDS is caused by a virus that breaks down the body's immune system and leads to fatal infections and some forms of cancer
- Up to now there is no vaccine and no cure for AIDS
- The AIDS virus, known scientifically as HIV, human immunodeficiency virus, can be transmitted by an infected person to another through sexual contact, both homosexual and heterosexual, by transfusion of contaminated blood or blood derivatives, and by infected needles and piercing instruments
- It can also be transmitted from an infected mother to her foetus or newborn baby
- The infection **cannot** be transmitted by casual daily contact at home, in the workplace or streets, by sharing utensils or clothes, or by food, water or air. Insects or insect bites cannot transmit the virus

LEARNING ACTIVITIES

- Explain what is meant by AIDS
- Emphasize the physical, social and psychological results of infection with AIDS
- Illustrate how drugs pave the way to AIDS
- Involve the class in discussing the seriousness of AIDS to individuals, families and the community
- Show photographs of people afflicted with AIDS. Draw the attention of the class to the seriousness of the disease
- Keep repeating that this disease has no vaccine and no cure, but nevertheless is preventable
- Stress the routes of infection and how infection **cannot** be contracted

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Photographs
- Posters
- Available illustrations

/cont...

FACTS TO BE LEARNED

22.2: Allergic reactions

- An allergy is a reaction that affects only certain persons when things they are sensitive (or allergic) to are:
  - inhaled
  - eaten
  - injected
  - touched
- An allergy is not an infection
- Persons prone to allergy often suffer more at certain times of year, according to the climate and annual changes in nature

LEARNING ACTIVITIES

- Explain the different allergic reactions: itching, running nose, irritation in the throat etc.
- List the signs and symptoms of an allergic reaction
- Explain that medicines can cause allergy and that such medicines should be avoided

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Demonstrations
- Illustrations

FACTS TO BE LEARNED

22.3: Epilepsy (fits)

- Epilepsy is a mental disorder which causes collapse and unconsciousness
- When a young child with a high fever has a fit this is usually **not** epilepsy

LEARNING ACTIVITIES

- Explain how to recognize an epileptic fit. Find the local name
- Demonstrate what to do when someone is having a fit
- Draw a picture to show how a person who is having a fit should be laid down

TEACHING METHODS AND TECHNIQUES

- Lecture
- Demonstration

/cont...

TEACHING METHODS AND TECHNIQUES (cont.)

- Illustrations
- Photographs

FACTS TO BE LEARNED

22.4: Genito-urinary infections

- The human body is sometimes attacked or infected by outside elements or organisms, causing general local infections or resulting in boils, sores and local irritations

LEARNING ACTIVITIES

- Explain what is meant by: sores, boils, rashes
- Name diseases which result from sexual contact. Highlight the dangers of these diseases to newly-born children
- Involve the class in relating quotations from the Koran and the Hadith which forbid illicit sexual relations. Also list local proverbs and adages
- Encourage members of the class to give talks on the subject

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Role play
- Demonstrations
- Blackboard
- Illustrations

FACTS TO BE LEARNED

22.5: Hepatitis

- Hepatitis is a virus infection which harms the liver. It passes from the stools of one person to the mouth of another by way of contaminated water or food; this is called Hepatitis A
- There is another type of hepatitis called Hepatitis B which passes from the blood of one person to the blood of another by way of contaminated blood or needles

LEARNING ACTIVITIES

- List the signs and symptoms of hepatitis
- Describe the preventive measures to be followed

/cont...

LEARNING ACTIVITIES (cont.)

- Explain to the class that children with yellow eyes and dark brown urine might have hepatitis
- Illustrate clearly the steps of hepatitis treatment

TEACHING METHODS AND TECHNIQUES

- Lecture
- Group discussion
- Role play
- Demonstrations
- Illustrations

REFERENCES

The source materials for the health units are primarily:

1. WHO/UNICEF/UNESCO/IESCO, Prototype Action-oriented School Health Curriculum, Teacher's Resource Book, WHO, Alexandria (1990)
2. WHO, The Community Health Worker, WHO, Geneva (1987)

Annex 1
IMPORTANT TECHNIQUES

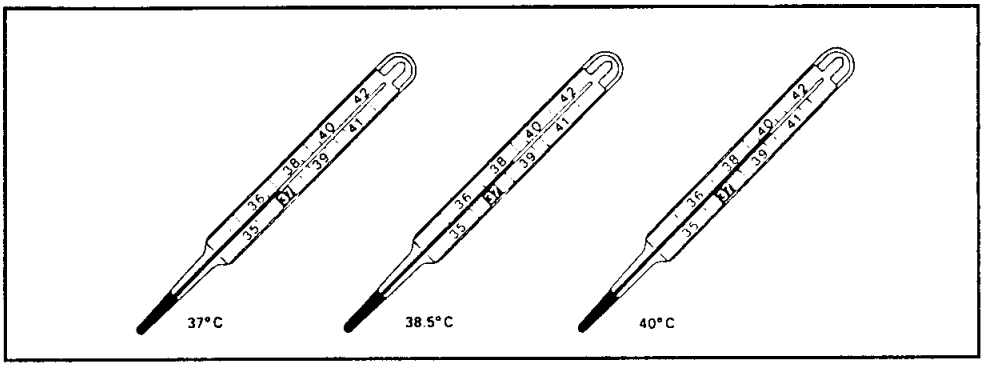
Taking the temperature

There are three common ways of taking a person's temperature: (a) by placing the thermometer in the mouth; (b) placing the thermometer in the armpit; and (c) putting the thermometer in the anus.

Taking temperature in the mouth or in the armpit

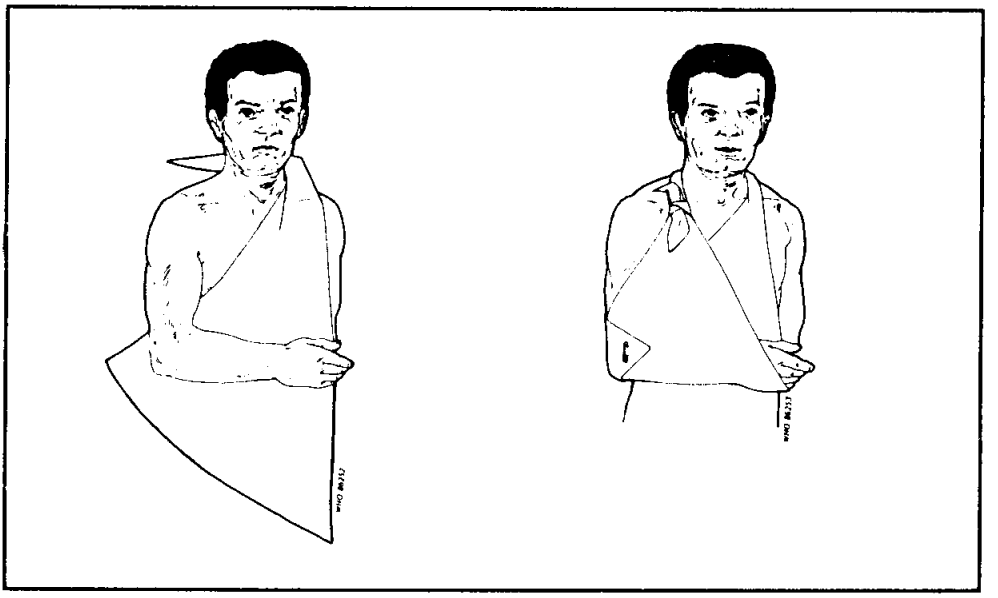
1. Make sure that the column of mercury inside the thermometer is below about 35 degrees centigrade. If it is not, shake the thermometer until it has gone down.
2. Ask the patient to place the small part of the thermometer under his tongue and keep his mouth closed, or in his armpit and hold his elbow against his body.
3. Leave the thermometer in place for about 2 minutes.
4. Take the thermometer out and read the figure in line with the top of the column of mercury inside the thermometer, if the figure is above 37.5 degrees centigrade the patient has a fever; the higher the figure, the greater the fever.
5. Clean the thermometer with some cotton wool and soapy water (not hot water). Shake the thermometer so that the mercury goes down towards the small part. Put the thermometer away so that it does not fall on the ground and break.

What temperatures do these thermometers show?

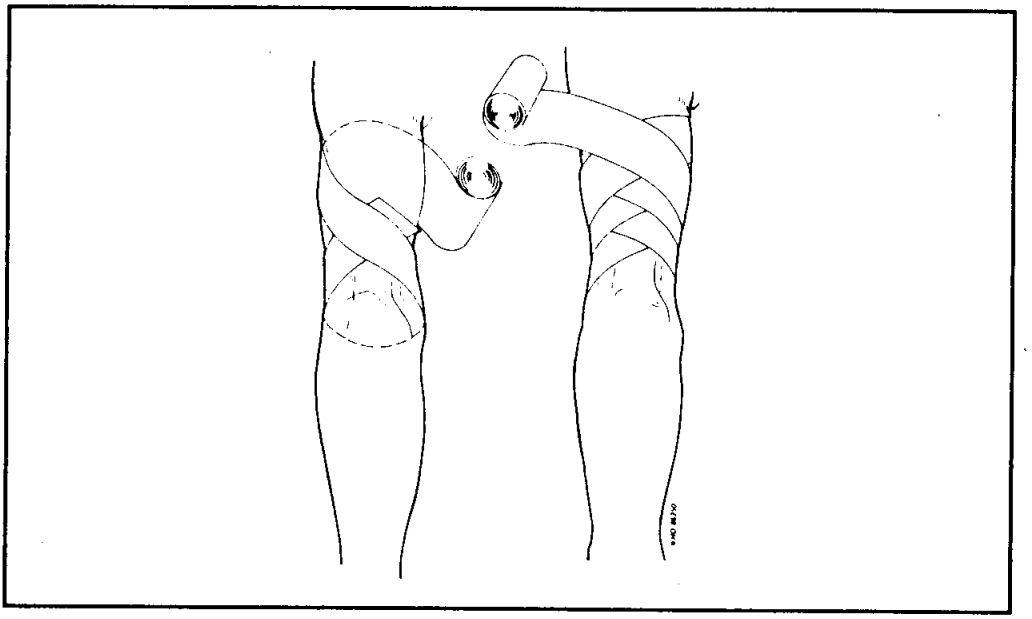


How to tie bandages on different parts of the body

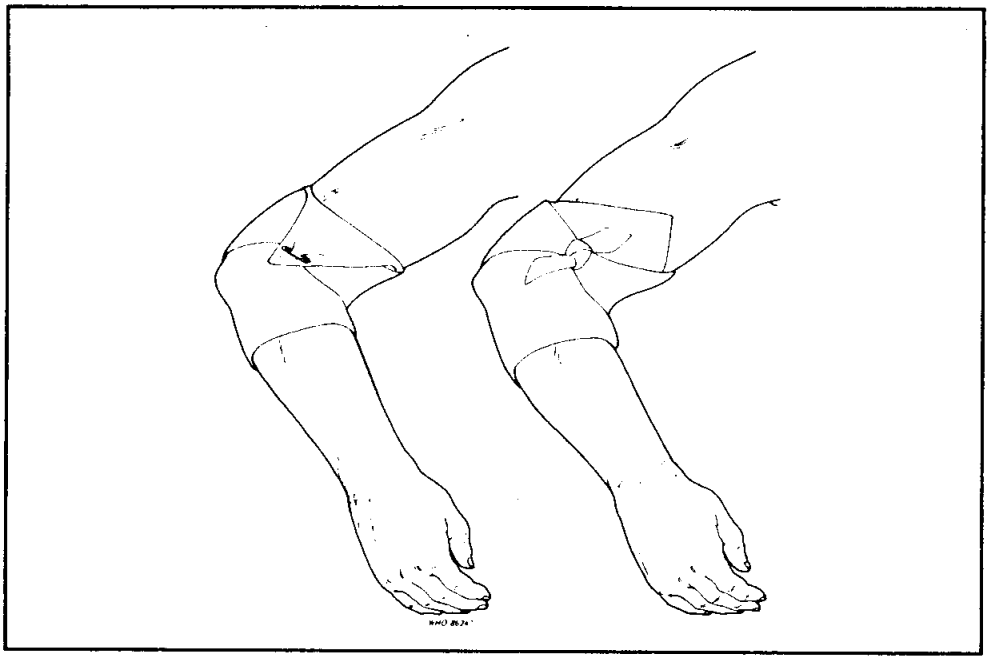
Arm sling



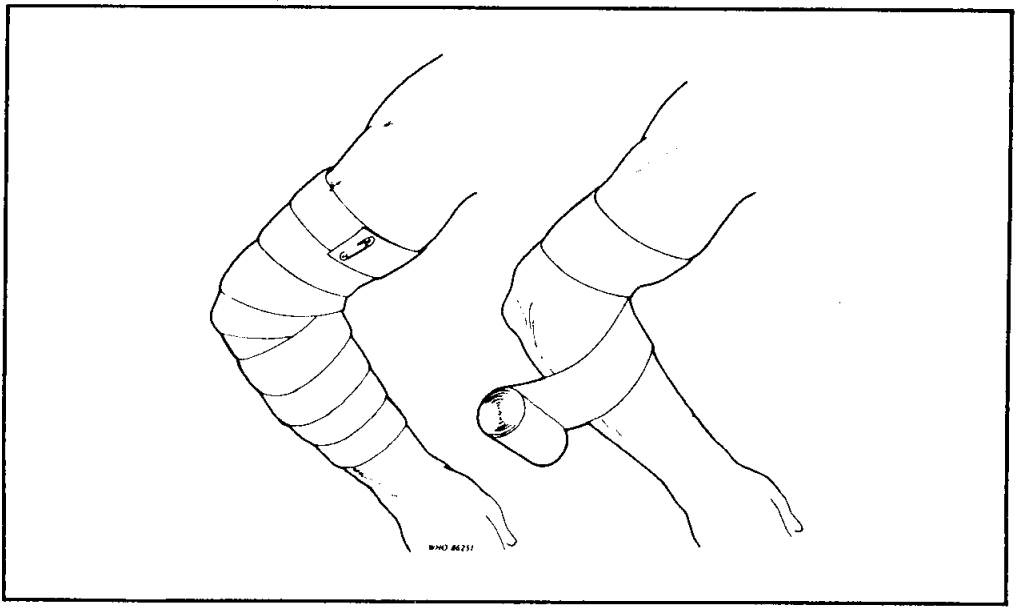
Roller bandage for elbow



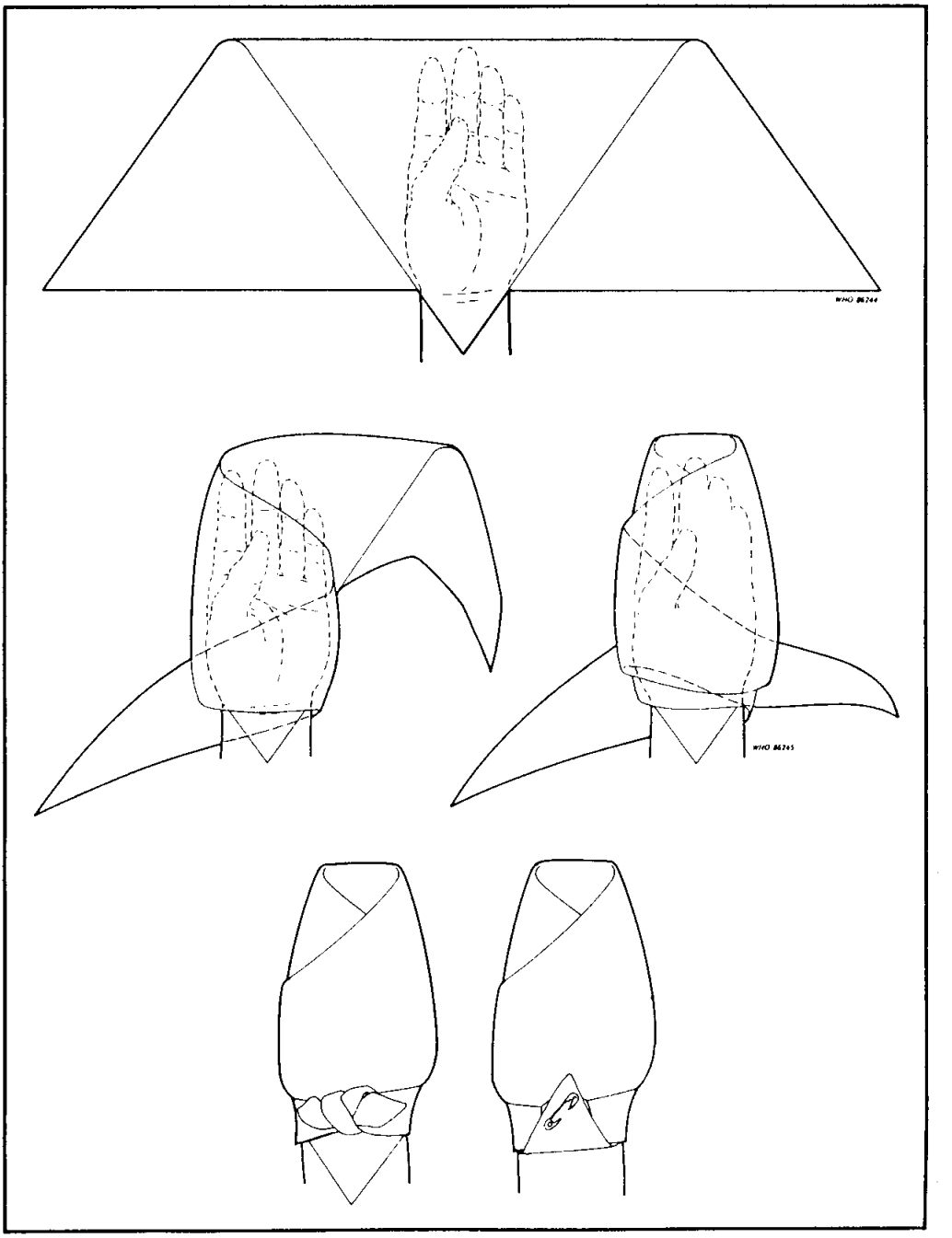
Elbow bandage



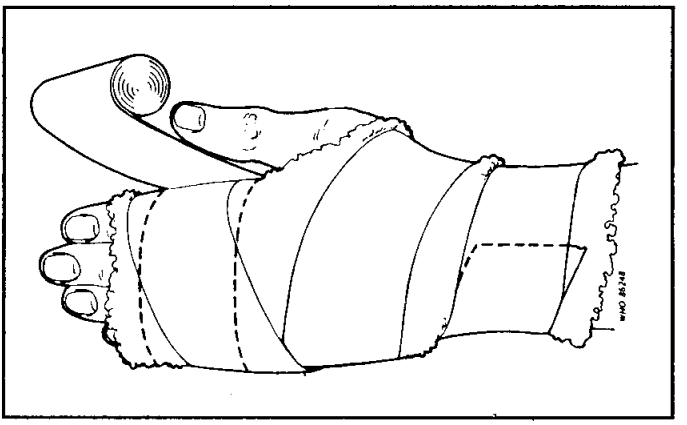
Roller bandage for forearm



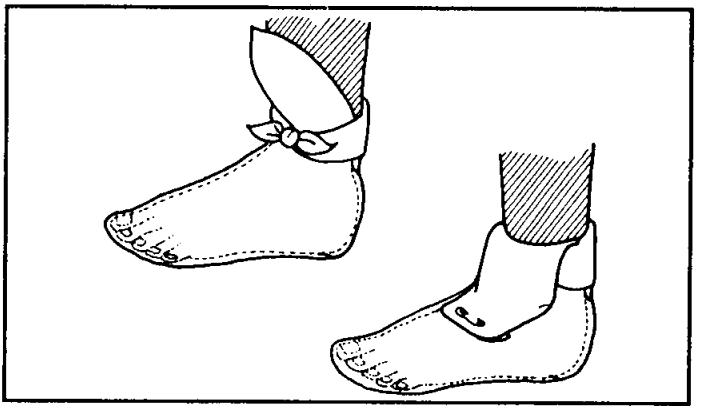
Hand bandage



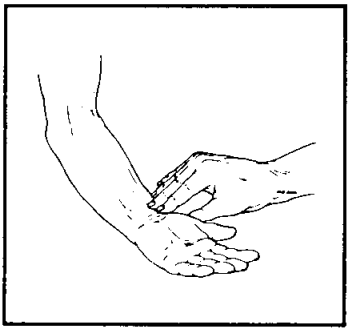
Roller bandage for hand



Foot bandage



Counting the pulse



1. Have a watch that has a second hand in front of you.
2. Place two fingers of your right hand above the patient's wrist on the same side as his thumb, as shown in the drawing.
3. Press very slightly. You should feel a regular beat; this is the pulse.
4. Count it for a full minute looking at your watch.

The number of beats you count in 1 minute is the pulse rate. Normally it is between 70 and 80 beats per minute. Pulse rate increases with:

- effort – so take the pulse when the patient has rested

- fever
  38 degree centigrade = around 100
  39 degree centigrade = around 120
- dehydration – a pulse rate of 130 without fever may be a sign of severe dehydration
- some diseases of the heart

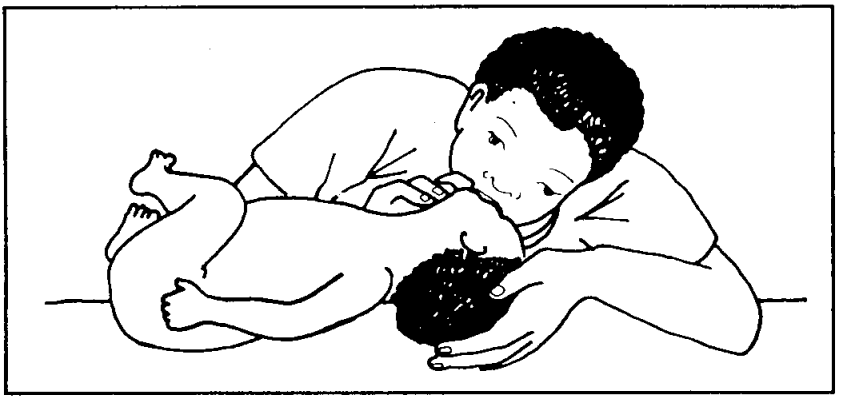
How to give mouth-to-mouth resuscitation (artificial respiration)

If a newborn baby is not breathing but the heart is beating, he must immediately be helped to breathe or he will die. The method described below may also be used to help older children or adults to breathe again if their breathing stops after falling into water or after an electric shock, for instance.

For a newborn baby

1. Clean the mouth, nose and throat quickly and gently to allow air to pass easily into the chest.
2. Lay the baby on its back with its head tilted back as indicated in the illustration.
3. Cover the mouth and nose with your mouth.
4. Blow small breaths gently into the chest about 25–30 times a minute, so that the chest rises. Do not blow hard or you may harm the baby's chest.
5. Pause to see if it has started breathing, and blow gently again. Continue to blow gently until the baby is breathing regularly.
6. Air may pass into the child's belly. If you see the belly swell up, press on it from below to push the air out.

The baby may start breathing regularly almost at once, or you may have to continue to blow up his chest for about 15 minutes if the heart is still beating.



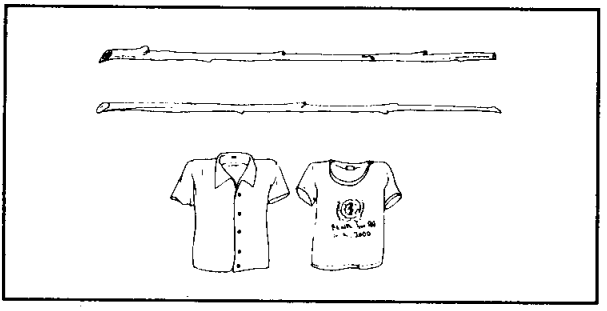
For an older child or adult

1. Same as for a baby.
2. Same as for a baby.

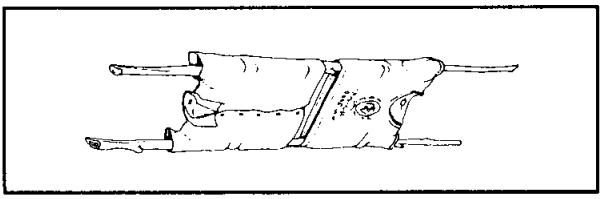
3. Cover the patient's mouth with your own mouth, pulling up his lower jaw with one hand to clear the air passages to the chest.
4. Blow air into the patient about 15–20 times a minute, using the full pressure of your chest to fill his. This means you take a deep breath and blow every 3 or 4 seconds.
5. Lift your head and allow the air to escape, checking to see whether the patient has started to breathe. Continue until breathing starts. You may have to do it for more than one hour.

How to make a stretcher

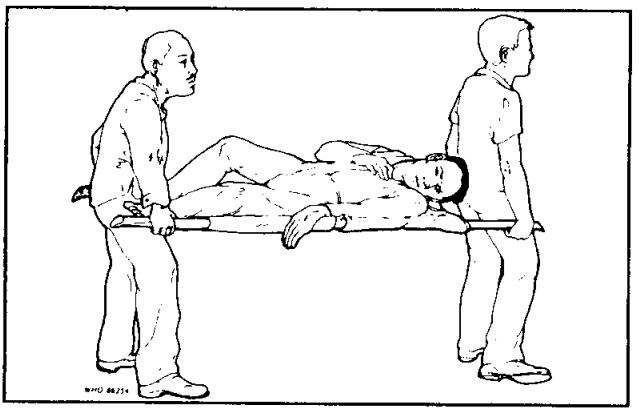
1. Take 2 sticks, each 2 metres long, and 2 shirts with their buttons fastened.



2. Slip the sticks through the sleeves of the shirts as shown below.



3. The stretcher is ready. Now you can carry the patient comfortably to the hospital or health centre.



How to make and use a water filter (household size)

Making the filter

1. Get a barrel or any other container that is at least 1 metre deep.
2. Remove the top of the container (if it has one).
3. Scrub and clean it on the inside and outside.
4. Fix a tap near the bottom of the container, if possible, by welding.
5. Place the container on bricks or stones so that a pail or jug can be placed underneath the tap to catch the water.
6. Get some round stones, about 2–4 cm in diameter, and place them in the container around the opening where the tap has been put. Place the stones in such a way that the opening to the tap is not blocked off completely.
7. Get some gravel or stones about the size and shape of peas (about 1/2–1 cm in diameter). Put a layer of these, 15–20 cm deep, in the bottom of the container so that the stones around the tap inlet are covered.
8. Add a layer of sand 50 cm deep. The sand should be quite fine, with most of the particles ranging in size from 0.2 to 1 mm. Flat rocks may be placed on top of the sand to prevent it getting stirred up into the water.

Starting up the filter

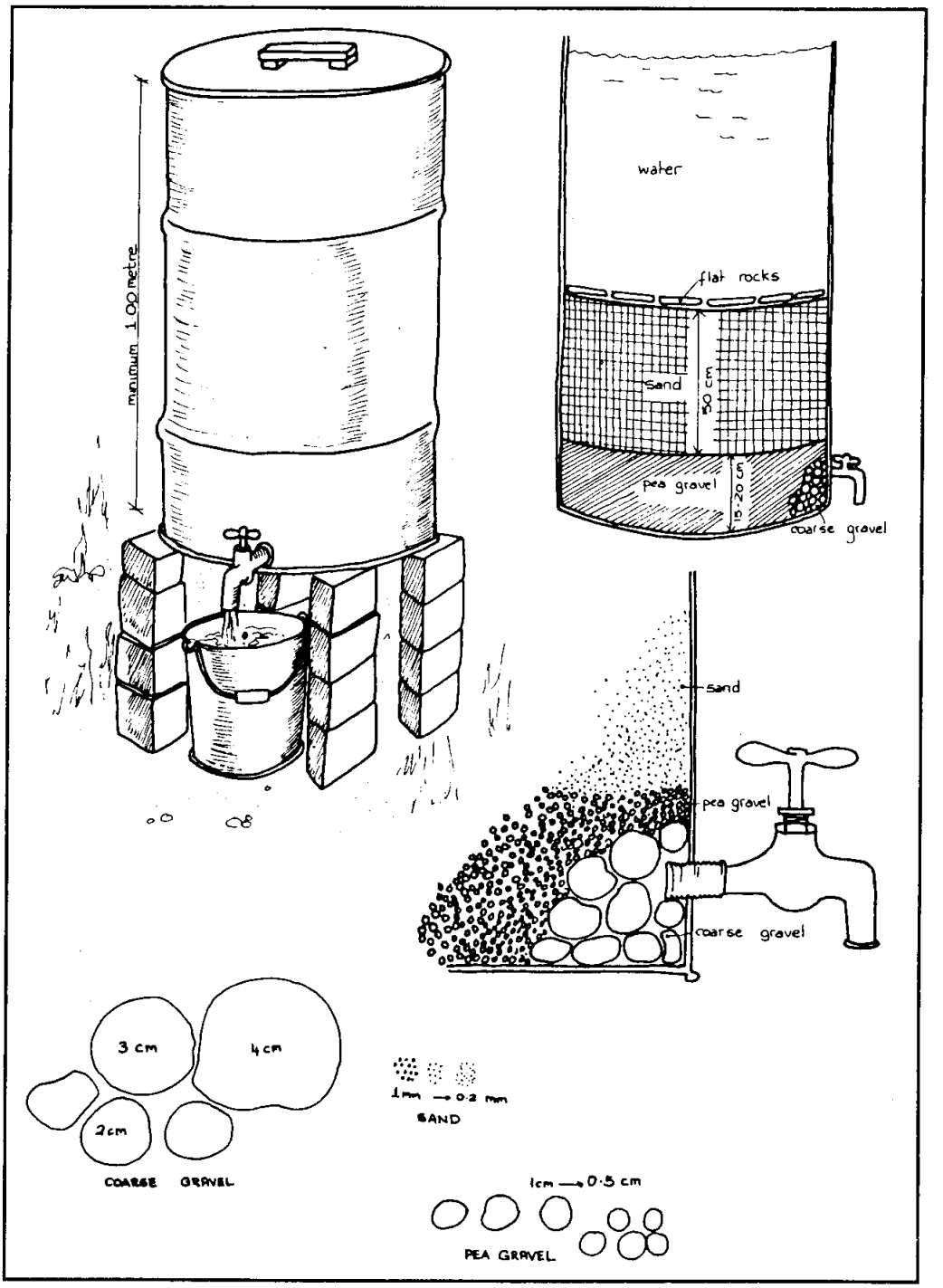
9. Close the tap at the bottom of the container.
10. Pour water into the container. Do this carefully so that the sand at the top does not get stirred up. Fill the container until the water is 2–3 cm from the top.
11. Draw off a pail of water at the tap and pour it into the top of the container. The water should be drawn off quite slowly (at a rate of about 1 litre per minute if the container is the size of an oil barrel).
12. Repeat this 15–20 times, or until the water coming out of the tap is clear. Leave the filter for one or two days, making sure that the sand is always covered with water.

Using the filter

13. Draw off water at the tap at the bottom of the container. Rate of withdrawal should be 1–2 litres per minute.
14. As water is drawn off, use another pail to fetch water from the pond or stream. Use this water to fill the container, making sure always to have water over the top of the sand.
15. The top of the filter should be kept covered except when water from the river or pond is being added. This is to keep out insects, animals, birds and dirt, as well as to cut down water loss by evaporation.

Cleaning the filter

16. After about two weeks to a month the water will flow only slowly from the tap. When this happens, the top surface of the filter needs to be cleared.
17. Take water from the tap without adding more pond water over the sand.
18. Watch the water level drop over the sand and notice when the water level is the same as the level of the sand.
19. After that level is reached, take out another 10 litres of water (if the container is the size of an oil barrel). Then close the tap.


minimum 1.00 metre
water
flat rocks
sand
30 cm
pea gravel
5-20 cm
coarse gravel
sand
pea gravel
coarse gravel
3 cm
4 cm
2 cm
COARSE GRAVEL
1mm → 0.2 mm
SAND
1cm → 0.5 cm
PEA GRAVEL

20. Scrape off a layer of sand about 2 cm thick (about the thickness of your thumb).
21. Carefully refill the container with water as in step (10) above.

Long-term maintenance

22. After four or five cleanings, the layer of sand will become too thin.
23. At the next cleaning, draw down the water level as instructed in (17) and (18) above.
24. Now take out about 25 litres of water so the water level is 10 cm below the surface of the sand. Save this water to put it back into the filter.
25. Take out the sand down to the water level and save it in pails or gourds or a basket.
26. Refill the filter with clean sand and then replace the sand you saved in (25) above as the top layer. Smooth the surface of the sand.
27. The water you saved in (24) above should then be carefully poured back into the container.
28. Fill the container with more water to within 2–3 cm of the top.
29. Water taken from the tap should then be safe for drinking.

How to disinfect drinking-water with bleaching powder

Materials required

- A clean bottle of 1–litre capacity, preferably of brown or green coloured glass and having a tightly fitting stopper or cork
- Bleaching powder
- A teaspoon
- One litre of clear water.

Preparing a stock solution

1. Put three teaspoonsful of bleaching powder in the bottle.
2. Add clear water to the bottle until it is about half to three-quarters full.
3. Put the stopper on the bottle and shake it until any lumps of bleaching powder are broken up.
4. Fill the bottle to the top with clear water and shake the bottle a few times to mix the contents.

Note: This stock solution will look cloudy at first but after a while a white powder will settle at the bottom of the bottle. This does not matter because the white powder does not contain any disinfectant.

Store the stock solution in a dark place away from sunlight.

Disinfecting drinking water

1. If the water to be disinfected is clear and colourless, add one teaspoonful of the stock solution to each 10 litres of water (1.5 mg of Cl_2 per litre).
2. If the drinking water is cloudy or coloured or muddy-looking, use two teaspoonfuls of stock solution for each 10 litres of drinking water (3 mg of Cl_2 per litre).
3. After adding the stock solution stir the water with a clean stick.
4. Let it stand for 20 minutes to allow the chlorine enough time to disinfect the water.