



Government of Malawi

HEALTH SURVEILLANCE ASSISTANT

Training Manual Facilitator's Guide



MINISTRY OF HEALTH

HEALTH SURVEILLANCE

ASSISTANT

FACILITATOR'S GUIDE

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ABBREVIATIONS

ADC	Area Development Committee
AFASS	Acceptable, Feasible, Affordable, Safe and Sustainable
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Clinic
APH	Ante-partum Haemorrhage
ARI	Acute Respiratory Infection
ART	Ante-retroviral
ARV	Ante-retroviral Virus
CAC	Community Action Cycle
CBDA	Community Based Distribution Agents
CBMNH	Community Based Maternal and Neonatal Health
CHBC	Community Home Based Care
CTC	Community Based Therapeutic Care
DHS	Demographic Health Survey
DOT	Directly Observed Treatment
EBF	Expressed Breast Feeding
EED	Expected Date of Delivery
EHP	Essential Health Package
ENA	Essential Nutritional Action
FP	Family Planning
HII	High Impact Interventions
HIV	Human Immunodeficiency Virus
IPT	Intermittent Preventive Treatment
TT	Tetanus Toxoid
ITN	Insecticide Treated Nets
MTCT	Mother to Child Transmission
LAM	lactation Amenorrhea Method
LMP	Last Monthly Period
MMR	Maternal Mortality Rate
MTP	Medical Termination of Pregnancy
NMR	Neonatal Mortality Rate
NNT	Neonatal Tetanus
PHC	Primary Health Care
PMTCT	Prevention from Mother to Child Transmission
RHU	Reproductive Health Unit
STI	Sexual Transmitted Infection
TA	Traditional Authority
IDSR	Integrated Disease Surveillance and Response

PREFACE

Health Surveillance Assistants (HSAs) are grass root health care providers in Malawi. They spearhead provision of community essential health package (c-EHP). Malawi decided to increase the number of HSAs to cater for 1000 population per HSA. This then resulted in every district to have a training site in addition to the three designated centers (Mzimba, Mponela and Mwanza). It is therefore the wish of the Ministry that there should not be any difference between an HSA trained in one district from another or centre. In addition, most health policies in recent years have changed and hence new interventions have been added in the curriculum.

Facilitator's guide has been developed to facilitate HSA trainers to deliver the topics in an organized manner. The facilitator guide was developed after the curriculum. The curriculum was developed from the contribution of trainers' experiences who presented strong and weak areas of the previous curriculum. HSAs Core Team members formulated for developing the documents had several workshops to review and adapt the curriculum. Participation included practicing HSAs, tutors, HSAs immediate supervisors, MOH health program senior staff and the UN Agencies. Lastly the curriculum was finalized by a consultant hired by UNICEF.

The facilitators guide is an accompanying document to the curriculum and is organized in modular format. The course shall be delivered for twelve weeks due to the new topics added and to ensure that the HSAs have the required competencies to manage health issues at the community level. For the better usage of this book, time has been allocated for each topic. We expect that the trainers using the new curriculum will produce more competent HSAs who can work in any community in Malawi. We wish the user of this book to continue providing constructive comments so that the community based health services of the Ministry of Health are effectively delivered in all areas of the nation. Finally, provision of the health services at the community level will contribute a lot towards a healthy nation.

Hon. Prof Moses Chirambo
Minister of Health, MP

ACKNOWLEDGEMENTS

I would like to thank all who provided their time, effort, and experience to the successful development of this document. I would like to take advantage of this opportunity to recognize the positive contribution that Health Surveillance Assistants make in the provision of health services as the first line health service providers in Malawi. Their role in encouraging communities and individuals to seek care at health facilities before conditions deteriorate is noted with great appreciation. Implementation of various health initiatives and programmes both at health facility and community levels is made possible with the successful engagement of HSAs. The development of this curriculum will undoubtedly boost their knowledge, skills and morale.

I would also like to thank the tutors from the existing HSA training institutions in Mzimba, Mponela and Mwanza for their effective contribution in the review process of this curriculum. Likewise I offer my sincere thanks to the many disease control program managers, and the entire Directorates of Preventive health, Clinical, Nursing and Planning services for availing themselves and making it possible for the review workshops to take place, which sometimes were conducted at short notice. I am also grateful to the task force for coordinating the process and repackaging the document in line with the Essential Health Package (EHP). Special thanks are also being extended to the consultant from the Malawi College of Health Sciences who provided most of the technical input.

I am greatly indebted to our development partners, i.e. UNICEF for providing financial assistance and WHO for the invaluable technical support. Finally, I would like to wish all players a successful and fruitful implementation of the HSAs training program.

CV Kang'ombe
Secretary for Health
Ministry of Health

INTRODUCTION TO THE MANUAL

THE USER OF THE MANUAL

This manual has been developed to assist trainers of Health Surveillance Assistants. A Health Surveillance Assistant (HSA) is a Primary Health Care worker serving as a link between a Health Facility and the community. After undergoing the basic training a HSA is capable of;

- Motivating, informing and assisting individuals, families and communities in the promotion and maintenance of personal and environmental health.
- Detecting potential and real health hazards in the community and referring them appropriately to a health facility.
- Detecting and reporting disease outbreaks.
- Working directly with village and community leaders; to identify and forming community support groups; i.e. health committees, volunteers, and other local service providers.
- Collaborating with Health Facility workers
- The aim of this manual is, therefore, to guide trainers as they teach Health Surveillance Assistants to acquire appropriate knowledge, attitudes and skills in maternal and neonatal health care at the community level.

After undergoing the training a Health Surveillance Assistant should be able to;

IN COMMUNITY HEALTH

- Conduct community assessment and village inspection within the assigned catchment area
- Identify community health needs within the assigned catchment area
- Conduct disease surveillance within the assigned catchment area
- Respond appropriately on disease outbreaks
- Facilitate the formation of village health committees and other support groups
- Supervise village health committees and other community home based health care activities
- Encourage community participation in village health activities
- Report any health problems identified within the community

IN FAMILY HEALTH

- Promote proper care of pregnant women before, during and after delivery
- Educate families on family planning methods
- Conduct child growth monitoring activities
- Conduct immunization activities
- Advise the community on proper nutritional practices
- Educate the community on key care practices for accelerated child survival and development of the under-five children
- Promote the elimination of harmful reproductive health practices
- Provide guidance to the youth through youth friendly health services

IN ENVIRONMENTAL HEALTH

- Facilitate the promotion of environmental hygiene and sanitation
- Facilitate the provision of safe water supply
- Educate families and communities on proper food hygiene practices
- Inspect public facilities in accordance with the Public health act for maintenance of hygiene
- Apply recommended insecticides to prevent and control vectors and vermin at the household level

IN THE PREVENTION AND CONTROL OF COMMON COMMUNITY DISEASES

- Conduct health education to families and the community on the prevention and control of common occurring community diseases
- Conduct village clinics for treatment of minor ailments
- Refer severe cases to the nearest health facility for proper treatment
- Conduct patient and clients follow-up within the assigned catchment area

IN MANAGEMENT AND ADMINISTRATION

- Write monthly plans and reports
- Record data collected in relevant registers
- Observe the Malawi Public Service Regulations as they perform their duties.
- Maintain equipment utilized on the job

THE LAY OUT OF THE MANUAL

This guide has been developed following the objective, question and content format as outlined in the training manual. It has been divided into three units and these units are very essential in the care of the provision of Primary Health Care. Each unit has learning objectives to guide the trainer present the material as it has been presented in the participant manual

Module 1: Preventive Health
Module 2: Family Health
Module 3: Basic Management and Administration

A GUIDE TO THE USER

This manual is a guide to the trainers, of Health Surveillance Assistants, as they implement the Health Surveillance Training Program. As a trainer be aware that “people may forget what they are told but will remember what they do”, so emphasize participatory approach methodology. Remember when teaching please start from;

- Known to unknown
- Simple to complex
- Single to integrated

Specific instructions are provided under each session. As a trainer you are not restricted to the teaching methodologies outlined under each session, use other methodologies as dictated by the prevailing situation.

MODULE 1: PREVENTIVE HEALTH

INTRODUCTION

The aim of this module is to provide knowledge, attitude and skills to enable the learner apply the principles of Primary Health Care and Essential Health Package to competently assess the community's health status in order to motivate and supervise the communities in identifying health related problems and applying necessary interventions for health prevention and promotion.

This module has seventeen units. Each unit has specific objectives and content covering each specific objective.

- Unit 1: Primary Health Care (PHC)**
 - Unit 2: Essential Health Package (EHP)**
 - Unit 3: Community Assessment**
 - Unit 4: Disease Surveillance**
 - Unit 5: Community Mobilization**
 - Unit 6: Village Health Committee**
 - Unit 7: Community Based Health Care**
 - Unit 8: Village and School Sanitation**
 - Unit 9: Vector and Vermin Control**
 - Unit 10: Water Supply**
 - Unit 11: Food Hygiene**
 - Unit 12: Personal Hygiene**
 - Unit 13: Village Inspection**
 - Unit 14 : Common Diseases**
 - Unit 15: Patients and Clients Follow-Up**
 - Unit 16: Interpersonal Communication and counseling**
 - Unit 17: Health Education**
-

UNIT 1: PRIMARY HEALTH CARE (PHC)

INTRODUCTION

Primary Health Care was proclaimed by World Health Organization as means of providing basic health services, specific preventive programs and other elements. The shortcomings of the community to be involved in their health and other health related decisions and activities have largely been observed in the inability of health workers to understand, listen and learn from the people.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Describe the Primary health care concept
2. Explain the Primary health care principles
3. Outline the Primary health care elements

Time allocation: 4 hours

Materials needed: Markers, Flip chart, LCD and computer

Teaching and Learning Methodology: Lecture discussion; Brain storming; Group discussion

- Participants will be expected to have individually read through the content before the session.
- Start the first session by outlining the objectives and making a brief lecture on the definition of PHC
- Finally discuss with the participants in a brain storming session to come up with the concepts, principles and elements of PHC. The responses should be listed on a flip chart for further reference in other sessions.

1. THE PRIMARY HEALTH CARE CONCEPT

The concept of PHC is based on the understanding that, the basic health services provided to the community must be;

- ◆ Affordable
- ◆ Accessible
- ◆ Sustainable
- ◆ Acceptable
- ◆ Promotive to Self determination and Self reliance

2. THE PRIMARY HEALTH CARE PRINCIPLES

To effectively plan, practice and carry out the basic health related activities in the community, to ensure the desired motivation of the community to take up roles in shaping their health, the Health Surveillance Assistant, during the delivery of health services, has to observe that there is;

◆ **Equity**

This means that the basic essential services provided should be equally distributed among the community members.

◆ **Community Involvement**

This means that the community should actively participate in identification, and prioritization of the problem areas, planning, implementation, monitoring and evaluation of the health interventions. This principle provides an opportunity to allow the communities own the services and health related activities. It also promotes the concept of sustainability, acceptability and self determination.

◆ **Multi-Sectoral Collaboration**

This principle encourages the involvement of other community based workers in the health related community activities. Multi-Sectoral Collaboration principle enables the maximization of human, material and financial resources to effectively implement both health- related and no-health related community activities. It also gives the opportunity to communities including Civil Society to seek recognition of their role in governance of health services, particularly community based, public health and other health related interventions.

◆ **Appropriate Technology**

This principle looks at the provision of health services and implementation of activities using methods and materials that are locally available within the community. It promotes the concept of affordability, accessibility, sustainability and self reliance.

3. THE PRIMARY HEALTH CARE ELEMENTS

Primary Health Care approach emphasizes the use of priority health interventions as an entry point to strengthen national health system with a view of achieving the Millennium Development Goals (MDG). The Primary Health Care elements are as outlined below;

- ◆ Health education and Health promotion
- ◆ Water and Sanitation
- ◆ Prevention and Control of common diseases
- ◆ Maternal health
- ◆ Immunization
- ◆ Child Survival, Growth and development
- ◆ Food and adequate Nutrition
- ◆ Provision of Essential Drugs
- ◆ Treatment of minor ailments
- ◆ Mental Health
- ◆ Oral Health

UNIT 2: ESSENTIAL HEALTH CARE PACKAGE (EHP)

INTRODUCTION

The Malawi government in the name of the Ministry of Health implements Primary Health care through Essential Health Package. One of the principles of Essential Health Package is to make services free regardless of point of delivery. This principle addresses the interrelationship among health determinants for resource poor settings where health inequalities and limited access to health care are more critical

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Explain the concept of Essential Health Package
2. Outline the objectives of Essential health Package
3. Identify the levels of health delivery system where Essential health Package is used.
4. Describe the Essential Health Package delivered at the community level
5. Outline the selected essential health interventions

Time allocation: 3 hours

Teaching Materials required: Markers, Flip chart, LCD and computer

Teaching and Learning Methodology: Lecture discussion, Brain storming and Group Discussions

- Participants will be expected to have individually read through the content before the session.
- Start by lecturing on the definition of EHP.
- Then discuss how EPH relates with PHC
- Then proceed with the objectives as outlined

1. CONCEPT OF ESSENTIAL HEALTH PACKAGE

Essential Health Package is defined as services or interventions delivered as a package to reduce transaction costs to both the patient and service provider. The package consists of the following;

- ◆ **Clustering of Cost-effective Interventions**
This is the delivery of combined priority interventions in order to reduce the total cost of the interventions by reducing the cost to patients obtaining the services as well as the costs of providing services.
- ◆ **Integration of Health Interventions**
This brings together interventions that can be delivered with the same level of technological sophistication and through the same facility or level of the health delivery system

◆ **Prioritization of Illnesses and Conditions**

The EHP addresses the major causes of death and illness and it focuses on those health conditions and service gaps that disproportionately affect the rural poor.

◆ **Prioritization of Limited Resources**

Through the EHP it is possible to focus limited resources to a narrow range of effective interventions rather than attempt to provide all services ineffectively.

2. OBJECTIVES OF ESSENTIAL HEALTH PACKAGE

The EHP concept of the Malawi government was developed to achieve the following objectives;

- ◆ To Contribute to Reduction of Poverty
- ◆ To Improve the Efficiency of Public Funded Health Delivery Institutions
- ◆ To Improve Equity of Access to Health Services
- ◆ To Introduce a Tool for Priority Setting
- ◆ To Initiate the Basis for Sector Wide Approach (SWAp)

3. LEVELS OF HEALTH DELIVERY SYSTEM FOR ESSENTIAL HEALTH PACKAGE.

The levels of the health delivery system at which EHP is delivered are;

- ◆ Community Level
- ◆ Health Center Level
- ◆ District Hospital Level

4. ESSENTIAL HEALTH PACKAGE DELIVERED AT THE COMMUNITY LEVEL

In all the three levels the following services are delivered;

◆ **Promotive**

Promotive activities include;

- Community mobilization for health activities
- Information, Education and Communication including Behaviour change communication
- Environmental management
- Water and Sanitation services
- Nutrition
- Distribution of Insecticide Treated Nets

◆ **Preventive**

Preventive measures include the following activities;

- Immunization of children under one year of age
- Provision of basic Antenatal Clinic services

- Family Planning
- Growth monitoring
- Educating the community on the importance of Intermittent Preventive Treatment in pregnancy
- Re-treatment of bed nets
- Creating awareness among the communities on Safe motherhood

◆ Curative

The curative activities within the community include the following;

- Basic diagnosis of minor ailments
- Home treatment of minor ailments
- Provision of presumptive treatments with SP to pregnant women
- Overseeing community based care services e.g. Directly Observed Treatments
- Treating some opportunistic infections and palliative care of HIV and AIDS patients
- Mass treatment where indicated

◆ Rehabilitative

- Home-based care of chronically ill patients
- Patients and clients follow-up

5. SELECTED ESSENTIAL HEALTH INTERVENTIONS

In Malawi the focus of essential health interventions is on the following areas;

5.1 Family Health Interventions

- ◆ Family Planning
- ◆ Antenatal Care
- ◆ Care during Delivery
- ◆ Care after Delivery
- ◆ Immunizations
- ◆ Improving Nutrition
- ◆ Growth Monitoring
- ◆ Elimination of Harmful Reproductive Health Practices

5.2 Environmental health Interventions

- ◆ Village Sanitation
- ◆ Vector and Vermin Control
- ◆ Safe Water Supply
- ◆ Food Hygiene practices

5.3 Common Community Diseases Interventions

- ◆ Prevention and Control of Common Community Diseases
- ◆ Provision of essential drugs for minor ailments

5.4 Community health interventions

- ◆ Promotion of Community Participation in Health Related activities
- ◆ Community Home Based Care

6. HIGH IMPACT INTERVENTIONS (HII) FOR ACCELERATED CHILD SURVIVAL IN DEVELOPMENT IN MALAWI.

Let the participants be aware that apart from the selected health interventions there are also those that are considered as High Impact Interventions for Accelerated Child Survival and Development, and these are;

6.1. For Prevention:

- Insecticide-Treated bed nets (ITN)
- Intermittent presumptive treatment (IPT) of malaria in pregnancy
- Breastfeeding
- Complementary feeding
- Immunization
- Antenatal care and clean delivery
- Vitamin A
- Water and sanitation

6.2. For Treatment:

- Oral Re-hydration therapy (ORT)
- Timely and adequate treatment of malaria
- HIV/AIDS and Paediatric ART
- Antibiotic for sepsis, pneumonia and dysentery
- De-worming

6.3. For Social and Mental Development

- Child protection
- Early Learning and Stimulation

UNIT 3: COMMUNITY ASSESSMENT

INTRODUCTION

Communities have often not been approached appropriately, that is, they have been approached with superior- subordinate mentality leading to inadequate communication and poor relations. Under such a situation the desired motivation of the community becomes either impossible or restricted. Community assessment therefore helps in terms of planning any essential programmes designed to meet health related needs in the community and instill community empowerment.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to;

1. Display good community relations when conducting community assessment
2. Conduct community assessment
3. Identify the types of information to be collected during community assessment
4. Record data collected using the current recording system
5. Write a report after community assessment

Time allocation: 4 hours theory and 12 hours practical

Teaching materials required: Flip chart, Markers, LCD and computer

Teaching and Learning Methodology: Lecture discussion, Group discussions, Brain storming, Role play

- Inform the participants that this unit is practically oriented unit, which requires the acquisition of clinical skills
 - During the lecture discussion allow participatory methodology by encouraging questions and letting the participants attempt to answer the questions before you clarify the confusions. Allow some role plays in interviewing skills and refer the participants to the procedure of conducting community assessment in their manual. Bear in mind that they may not have done IPCC at this stage.
 - Arrange for practical experience after completing the classroom sessions
-

1. COMMUNITY RELATIONS WHEN CONDUCTING COMMUNITY ASSESSMENT

Community relation is the ability to create an environment that is conducive to the health worker and the community for the purposes of achieving a common goal. Health workers can best achieve this in the way they communicate with and behave in the community.

Skills necessary for good community relations

- ◆ Communication skills
- ◆ Leadership skills

- ◆ Group dynamic skills
Impact of Health Surveillance Assistant behaviour in a community
- ◆ Role modeling
- ◆ Behaviour change

2. CONDUCTING COMMUNITY ASSESSMENT

2.1. The purpose of community Assessment

◆ Problem identification

A problem is said to be the “gap” between what is happening and what is desired. This exercise of identifying a problem should be conducted together with the community. This is so, to avoid becoming overburdened with problems, raising people’s unnecessary expectations that they can be achieved, and getting side-tracked and identifying problems that are not community problems.

◆ Prioritization of problems

You can not work on all problems at the same time. This process should also be done with community participation. The list should be narrowed to the most important areas accepted by the community. The problem should be considered to be; “**Important**” to the community working on it. It should be “**feasible**”, the size and complexity being affordable in terms of management. It should be “**beneficial**” to the community, the solving of the problem should be worth the cost and effort required. There should be clear support for changes and improvements in the current process.

2.2 Methods of Conducting Community Assessment

◆ Observations

This can be achieved by using a check list with the following;

- Who is affected and who is not?
- Where do they live?
- What are current beliefs and practices?
- How do those people most affected by the health issue interact with the rest of the community?
- Are people already organized around this or a related issue?

◆ Interviewing

Information about the community could be collected through interviews by initiating contact with the community and doing so with respect in the following lines;

- How is the community organized?
- What are the traditional groups, roles and functions?
- How do they relate to each other?
- How are issues of Politics, Leaders, Economy, History, Geography and Health Systems related to health problems?
- Traditional and formal?
- What do you need to know about local customs?

◆ Administering questionnaires

Information can be gathered through questionnaires using the guidelines given above under interviews

◆ Using available records

The available records to can used to collect data for use in community assessment and these include the following among others;

- Health Information Management Systems
- Village Health registers

2.3 The Procedure of Community Assessment

- ◆ Community entry process
- ◆ Mapping the community
- ◆ Data collection
- ◆ Data analysis and Interpretation
- ◆ Community diagnosis
- ◆ Feedback to the community
- ◆ Priority setting
- ◆ Report writing

3. TYPES OF INFORMATION TO BE COLLECTED DURING COMMUNITY ASSESSMENT

There is a lot of information that can be collected in the community during the community assessment exercise. The information can be grouped into four main categories as follows;

3.1 Community Demography

- ◆ Elements of community demography
- ◆ Variables used in community demography

3.2. Vital Statistics

◆ Types

Information collected to describe the health status of the population of the community is known as **Health Statistics** while information that describes important events of the community is known as **Vital Statistics** and these are;

- Births
- Deaths
- Marriages

◆ Sources

The information can be obtained from the following sources;

- Outreach clinic
- Household
- Records on sanitation
- Nutrition surveys
- Community leaders/members

3.3. Social Economic Status

- ◆ Income levels
- ◆ Educational levels
- ◆ Religion
- ◆ Infrastructures such as schools, boreholes, roads
- ◆ Food security

3.4 Availability of Amenities

- ◆ Dwelling houses
- ◆ Kitchens
- ◆ Water source
- ◆ Latrines
- ◆ Bath shelters
- ◆ Dish racks
- ◆ Animal kraals
- ◆ Refuse pits

4. DATA RECORDING SYSTEMS

Currently the data collected is recorded using the tools outlined below;

- ◆ Health Management Information System Forms (HMIS)
- ◆ Village Inspection Registers

5. WRITING A REPORT AFTER COMMUNITY ASSESSMENT

The purpose of the report

- ◆ Record keeping
- ◆ Feedback to supervisor
- ◆ Feedback to stakeholders/ community

Format for community assessment report

- ◆ Title
- ◆ Date of assessment
- ◆ Areas of assessment e.g. sanitation, growth monitoring
- ◆ Methods used
- ◆ Data collected
- ◆ Problems identified
- ◆ Plan of action

UNIT 4 : DISEASE SURVEILLANCE

INTRODUCTION

Disease Surveillance is defined as an ongoing systematic collection, collation, analysis and interpretation of data; and dissemination of information for action. It is a watchful and vigilant approach for gathering information on health problems and their determinants with the intention of taking action in order to improve or maintain the health of the people.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to;

Outline the types of disease surveillance

1. Explain the importance of disease surveillance
2. Describe the key components of disease surveillance
3. Identify cases using the standard case definitions
4. Identify the Integrated Disease Surveillance and Response priority diseases
5. Interpret disease surveillance data
6. Respond to suspected outbreaks
7. Report on disease outbreak

Time allocation 4 hours

Materials needed: Markers, Flip chart, LCD and computer

Teaching and Learning Methodology: Lecture discussion, Brain storming, Group discussion

- Participants will be expected to have individually read through the content before the session.
- Start by making a brief lecture on the definition of disease surveillance
- Finally discuss with the participants in a group discussion session to come up with the contributing factors to deaths in their communities in addition to the four delays as indicated in the manual. The identified contributing factors should be listed on a flip chart for further reference.

1. TYPES OF DISEASE SURVEILLANCE

There are basically two forms of conducting disease surveillance and these are;

- ◆ **Passive**
This type of disease surveillance involves the collection of data as part of routine provision of health services
- ◆ **Active**
This type of disease surveillance involves the collection of data from communities through surveys or mobilizing communities to some central point where data may be collected.

2. IMPORTANCE OF DISEASE SURVEILLANCE

The importance of disease surveillance is to do with the planning process and therefore it is the first tool in reducing morbidity and mortality. The importance focuses specifically on;

- ◆ Providing for quick identification of health problems
- ◆ Priority setting
- ◆ Early and adequate response to epidemics
- ◆ Resource mobilization and allocation
- ◆ Prediction and early detection
- ◆ Early and adequate response
- ◆ Allowing for early treatment and control
- ◆ Enabling the putting in place quick control measures.
- ◆ Enabling the timely notification to higher authorities for necessary support.
- ◆ Monitoring and evaluation of intervention programs

3. KEY COMPONENTS OF INTEGRATED DISEASE SURVEILLANCE AND RESPONSE (IDSR)

The streamlining of several surveillance activities from different vertical disease control programmes taking advantage of similar surveillance functions, skills, resources, and target population in order to make best use of scarce resources is known as Integrated Surveillance and Response (IDSR). The following are the Key components of IDSR at the community level;

- ◆ Interpretation of disease data
- ◆ Case Investigation
- ◆ Case detection
- ◆ Case registration
- ◆ Case reporting
- ◆ Response to suspected outbreaks

4. STANDARD CASE DEFINITIONS

Case definition is a standard set of criteria for deciding whether an individual should be classified as having the condition of interest or not. In a clinical setting, a set of criteria is used to make a diagnosis in order to prescribe appropriate treatment.

Case definition is important because it is an efficient way of tracking trends of disease in an area and it allows Health Surveillance Assistants to compare data between different areas.

- ◆ **Standard case definitions for health workers**

The definitions for health workers should be displayed and used by health workers in all health facilities. These should be pinned where health workers work for easy access when there is a need for reference

- ◆ **Simplified case definitions for lay persons**

This should be used to detect cases in communities and refer them to nearest health facility.

5. INTEGRATED DISEASE SURVEILLANCE AND RESPONSE PRIORITY DISEASES

The integrated disease surveillance and response priority diseases are classified into three categories and these are;

5.1. Epidemic prone disease

- ◆ Cholera
- ◆ Dysentery (bloody diarrhea)
- ◆ Measles
- ◆ Bacterial meningitis
- ◆ Plague
- ◆ Viral haemorrhagic fever

Disease targeted for elimination

- ◆ Poliomyelitis/Acute flaccid paralysis
- ◆ Neonatal tetanus
- ◆ Leprosy

Diseases of public health importance

- ◆ Malaria
- ◆ Tuberculosis
- ◆ New AIDS patients
- ◆ Pneumonia in under- five children
- ◆ Schistosomiasis
- ◆ Sexually transmitted infections

6. INTERPRETATION OF DISEASE SURVEILLANCE DATA

The interpretation of the data will depend on the analysis done and it will answer the questions like; who is affected, where is the disease occurring and when the disease started? Therefore the interpretation should follow the following steps

6.1 Summarize the data

The data collected is summarized in tables, maps, charts, graphs by;

◆ **Person**

Person, characteristics to see who is most affected by the disease include age, sex, etc

◆ **Place**

Place, to see areas most affected to target action may be by village, water point sources, etc

◆ **Time**

Time, to see progression of the disease may be by week, month or year.

6.2 Fatality rates

These fatality rates are as used in disease surveillance

◆ **Prevalence**

This is defined as a proportion of cases for a particular condition in the surveyed population of interest and this includes both new and old cases

◆ **Incidence**

This is defined as a proportion of cases for a particular condition in the population of interest and this excludes old cases. In outbreaks, this is also called **Attack rate**

◆ **Case fatality rate**

This is defined as a proportion of cases that have died for a particular condition among the total cases reported for the disease and this assesses how well the case management has been.

7. RESPONDING TO SUSPECTED OUTBREAKS

Responding to suspected outbreaks should be guided by the following;

7.1. Possible indicators of an outbreak

- ◆ Reports from the community
- ◆ Observation of actual cases reporting to a health facility
- ◆ Observing actual cases as one comes across them

7.2. Measures to prevent secondary infection at the treatment sites and community

The use of barrier nursing such as;

- ◆ Isolation of patients
- ◆ Restriction of access to patient wards or place of isolation

7.3. Response before an epidemic

- ◆ Develop the plan of action for epidemic preparedness and response for ones catchment areas.
- ◆ Mobilise required materials for common outbreaks in the area
- ◆ Conduct community mobilisation activities to alert communities on how to report and control any suspected outbreaks.
- ◆ **Strengthen surveillance.**

7.4. Response during an epidemic

- ◆ Mobilise the community and involve them in implementing preventive measures
- ◆ Institute and monitor the implementation of outbreak control measures.
- ◆ Reinforce surveillance
- ◆ Where possible set up treatment camps in the community with necessary logistics and supplies

7.5. Response after an epidemic

- ◆ Conduct epidemic reviews with the communities and identify areas for improvement
- ◆ Advise the community to sustain preventive measures
- ◆ Conduct active surveillance in an area after the end of an outbreak for a time corresponding to 2 maximum incubation periods. e.g. 2 incubation period of VHF is 42 days

8. REPORTING ON DISEASE OUTBREAK

A detailed report on diseases outbreak is a very important communication mechanism and should comprise the following main parts;

◆ Observations

This is in the form of using the forms of Case details and to describe details for possible Risk Factors.

◆ Actions taken

Using the descriptive details for what was done immediately on the cases and risk factors.

◆ Recommendations

Using the descriptive details for suggestions of further action

Using descriptive or a special form for requested supplies.

UNIT 5: COMMUNITY MOBILIZATION

INTRODUCTION

Community mobilization is a capacity-building process through which individuals, groups, organizations or communities plan, implement, and evaluate activities in a participatory and sustainable manner to improve their health and other needs, either on their own or initiated or stimulated by others. In other words it is referred to as "Capacity building for change."

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Describe the concept community mobilization
2. Prepare for community mobilization
3. Organize the community for community involvement and participation
4. Set priorities for health issues with core groups
5. Plan together with the community
6. Act together with the community
7. Evaluate together with the community

Time allocation

4 hours theory

Teaching materials required

Flip chart, Markers, LCD and computer

Teaching Methodology

Lecture discussion, group discussions

- Participants will be expected to have individually read through the content before the session.
 - Start by outlining the objectives and making a brief lecture on the concept of community mobilization
 - Finally discuss with the participants in a lecture discussion session to cover the objectives, this may not be one session. The subsequent sessions should link with previous sessions.
-

1. THE CONCEPT COMMUNITY MOBILIZATION

The concept of community mobilization has specific aspects that need to be considered to make the mobilization of the community a success and these are as follows;

1.1 Characteristics of Community Mobilization

Community mobilization is an activity that is characterized by;

- ◆ Development of an ongoing dialogue
- ◆ Creation of community organizations
- ◆ Empowering of the community
- ◆ Promotion of community participation

- ◆ Working in partnership with all community sectors the village heads, religious leaders, political and various committees etc.
- ◆ Supporting creative potential of the community
- ◆ Linkage of communities with external organizations
- ◆ Committing of enough time to work with community

1.2. Key Elements of Community Mobilization

The key elements that will clearly define Community mobilization are;

- ◆ Community participation
- ◆ Sustainability
- ◆ Ownership
- ◆ Dialogue of knowledge
- ◆ Power
- ◆ Equality
- ◆ Human rights
- ◆ Health
- ◆ Culture
- ◆ Gender
- ◆ Education
- ◆ Leadership

1.3. The seven phases of Community Action Cycle (CAC)

Like any other programs working in the community, community mobilization also goes through seven phases of Community Action Cycle in a sequential order and the sequence is as follows;

- ◆ Preparing to mobilize
- ◆ Organizing the community for action
- ◆ Exploring issues and setting priorities
- ◆ Planning together with the community
- ◆ Acting together with the community
- ◆ Evaluating together with the community
- ◆ Preparing to scale-up with the community

1.4. Introduction of the Community Action Cycle to the communities

The Community Action Cycle (CAC) needs to be introduced to the community timely to stimulate and motivate community participation for the purposes of instilling ownership and sustainability. To achieve these very important PHC elements CAC should therefore be introduced to the communities during the following specific times;

- ◆ During community meetings on health issues affecting the community
- ◆ During the community entry process

1.5. The key implementer of Community Action Cycle

For effective implementation of the community action cycle there is a need to identify and assign key implementers of the action cycle at different phases

The Community, the Area Development Committee (ADC), the Village Development Committee (VDC), the Village Health Committee (VHC) and the Task force will implement the following five phases;

- ◆ Phase 2: Organizing the community for action
- ◆ Phase 3: Exploring issues and setting priorities
- ◆ Phase 4: Planning together with the community
- ◆ Phase 5: Acting together with the community
- ◆ Phase 6: Evaluating together with the community

The District Health Management Team (DHMT) is primarily involved in the implementation of the following two phases

- ◆ Phase 1: Prepare to mobilize
- ◆ Phase 7: Prepare to scale-up

2. PREPARING FOR COMMUNITY MOBILIZATION

The preparation for community mobilization involves the following five preparatory activities.

2.1. Conducting a community assessment on a selected health issue

Community Assessment is a process conducted to gather information about the health issue in a respective community and the data collected is compared regarding the community's health status. The community involved is defined by articulating a Community Mobilization goal.

2.2. Stating the purpose of community assessment

As was discussed in Community Assessment unit; Community assessment helps in terms of planning any essential programmes designed to meet health related needs in the community and it also helps instill community empowerment

2.3. Identifying methods of assessment

- ◆ Observation
- ◆ Interviews
- ◆ Questionnaires

2.4. Developing a Team (program team)

Team development could depend on the roles to be performed and as such depending on the roles the team members can perform the following;

- ◆ Mobilizing
- ◆ Organizing
- ◆ Capacity building or training
- ◆ Partnership
- ◆ Liaison
- ◆ Advising

- ◆ Advocating
- ◆ Direct Service Provision
- ◆ Marketeering

2.5. Participatory Facilitation

For participatory facilitation to be effective in mobilizing the community it requires a good facilitator with specific attributes and the following are some of the attributes;

- ◆ Should respect community views
- ◆ Should have good communication skills
- ◆ Should appreciate that behaviour change is a process and cannot take place over night
- ◆ Should realize that collective implementation and experience is a powerful tool for learning and change
- ◆ Should appreciate that learners are a rich and diverse source of information and knowledge

Participatory facilitation consists of all the activities that need to happen before initiating the program in a community and this implies the following;

- ◆ Establishing a team of people to develop a strategy and program materials to support the strategy
- ◆ Gathering information about different communities to determine where to focus efforts
- ◆ Identifying resources and constraints to implement the strategy
- ◆ Developing community mobilization plan
- ◆ Developing a bigger team of people to help facilitate the process

3. ORGANIZING THE COMMUNITY FOR COMMUNITY INVOLVEMENT AND PARTICIPATION

Organizing the Community for action aims to raise community awareness about the health issue and its importance to the community and this has five steps that have to be followed.

3.1. Integrating the Community with Health issues

In integrating the community it is important to organize people who will be most interested in and will benefit most from participating in the program and the following steps should be considered;

- ◆ Enter the community with the issue
- ◆ Orient the community to the issue
- ◆ Build relationships, trust, credibility, and a sense of ownership with the community
- ◆ Invite community participation especially of the vulnerable groups
- ◆ Establish a Community Action Group from the community

Orienting the general Community

The following should be considered for community orientation;

- ◆ Introductions of the Participants and Community Mobilization team

- ◆ Brief discussion on the process the community mobilization team proposes to use in orienting the community
- ◆ The role of the community in the issue
- ◆ An introduction and a discussion of the Ministry of Health; what it does and what it can not do.
- ◆ A presentation of the national goal of the issue at hand
- ◆ A discussion of how the participants will work together including a presentation of the community action cycle (CAC)
- ◆ How different people will participate at different times in the process
- ◆ Determine next steps, when and where the next meeting will be conducted

Building trust respect and credibility with the community

The following can help build trust, respect and credibility with community members;

- ◆ Honesty: only make promises that can be kept; clarify what can be done and what cannot be done
- ◆ Integrity
- ◆ Respect
- ◆ Politeness

Inviting the community for participation

The process of inviting people to participate in health issues involves the identification of;

- ◆ People and groups who are most affected and interested in the issue
- ◆ People who mostly directly experience the effects of the problem and who need to be involved in providing appropriate solution

Developing a core group or health action group

A decision must be made whether to work with an existing group or to form a new one. The following activities could be used to identify members for a new group;

- ◆ Self selections, people with common characteristics
- ◆ Recruitment by volunteer leaders
- ◆ Nomination by community leaders
- ◆ Public promotion by holding a public event and recruit group members from among attendees

4. SETTING PRIORITIES FOR HEALTH ISSUES WITH CORE GROUPS

Setting of priorities with core groups requires going through three specific steps

4.1. Exploring health issues

Share and discuss with the participants real data from district, data to be applied in real village situation, on the health issue to be tackled like mortality and morbidity surrounding the issue. If possible how this district or catchment area data compares with the rest of the country, Africa and other places so that participants see relative magnitude of problem in their community.

4.2. Analyzing the information

As villagers may have difficulties in writing and reading, picture cards, different symbols and colours can be used to express and analyze the problems.

4.3. Setting priorities

To rank these problems for the purpose of prioritizing, people should discuss the problems, debate, use pair wise ranking, or vote according to their preference.

5. PLANNING TOGETHER WITH THE COMMUNITY

To begin the planning together phase, program team and specific task committee members should discuss and reach agreement on what the purpose of the planning phase is.

5.1. The elements of “planning together” phase

Begin by reminding participants that the ultimate goal of this phase is to produce a community action plan that includes the following elements;

- ◆ What you would like to achieve
- ◆ How you would achieve it and with what activities
- ◆ Who will be responsible for each activity and how the person is going to be identified
- ◆ What resources you will need and how you will obtain them
- ◆ When and where you will implement your activities
- ◆ How you will monitor your progress and how you will determine whether you have achieved your intended results or not

5.2. Designing the planning session

Designing the planning session requires the development of objectives. An objective is a measure of determining how an activity has been achieved. A strategy is a means of implementing the activity to achieve the intended objective, in other words it is a means of achieving an objective. Since an objective is a measure it has to be “SMART” that is, it has to be;

- ◆ S = Specific
- ◆ M = Measurable

- ◆ A = Achievable
- ◆ R = Realistic
- ◆ T = Time bound

5.3. Creation of a community action plan

To facilitate the creation of a community action plan the facilitator should perform following activities as preparatory for the action phase;

- ◆ Deciding on time and place of meeting
- ◆ Making plans for inviting participants
- ◆ Deciding on materials and how to get them
- ◆ Preparing other facilitators
- ◆ Practicing how to deliver a lesson if necessary
- ◆ Assembling data and visual materials

6. ACTING TOGETHER WITH THE COMMUNITY

Acting together with the community is very important as it is one of the principles of PHC. This stimulates the community to be involved and motivates them to actively participate in health related activities. This also empowers the communities to take charge of the community activities like;

- ◆ Participatory Monitoring of community progress
- ◆ Identification of problems and potential conflicts that may arise during mobilization
- ◆ Problem-solving as well as coming up with strategies for community problem-solving
- ◆ Advising the communities on the way forward
- ◆ Mediation of conflicts

7. EVALUATING TOGETHER WITH THE COMMUNITY

Evaluating together with the community is another aspect of community involvement. The evaluation process will create awareness among the community members on how evaluation contributes to health programmes

Determining those who want to learn from the evaluation

This can be achieved by;

- ◆ Defining the purpose of the Evaluation
- ◆ Listing the participating groups in Evaluation

7.2 Formation of evaluation representatives

This can be achieved by;

- ◆ Comparing External and Internal Evaluators

- ◆ Use of Criteria for selecting evaluation team members which is the same as criteria for selecting Team members

7.3 Conducting participatory evaluation

This exercise will have to consider the following;

- ◆ Seven key questions your evaluation plan should answer
- ◆ Three basic points to keep in mind when preparing the evaluation plan
- ◆ Methods, tools and instruments to use
- ◆ Evaluation logistics
- ◆ Essential tips for conducting a participatory evaluation

7.4 Provision of feedback to the community

This focuses on the purpose of community feed back

7.5 Documentation of lessons learnt

The documentation of lessons learnt should focus mainly on;

- ◆ Who needs what information?
- ◆ How do we present the formation to our various stakeholders?
- ◆ Preparation of the information
- ◆ Documentation of recommendations for the future
- ◆ Sharing of lessons learnt

7.6 Preparing to re-organize

During this phase there is a need to reflect back on the issues that were considered during the initial evaluation such as;

- ◆ Importance of evaluations
- ◆ Some essential tips to keep in mind when conducting an evaluation
- ◆ Methods, tools and instruments to be used for gathering information for the evaluation
- ◆ Importance of giving feedback of results to the broader community and other stakeholders

EVALUATION OF THE SESSIONS
<ul style="list-style-type: none">▪ Evaluate the session by asking the participants the following questions;<ul style="list-style-type: none">• How will they orient the community on community involvement and participation?• How will they work with various community leaders and groups to prioritize and solve community problems?• What steps will they follow when entering the community?▪ Summarize by going through the responses given by the participants together with the participants

UNIT 6: VILLAGE HEALTH COMMITTEE

INTRODUCTION

A Village Health Committee is a group of ten or more persons, elected by members of the community, to help lead the community in health promotion activities. A Village Health Committee is a means of utilizing key actors in the community in enhancing community participation.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Outline the composition of Village Health Committee
2. Describe the functions of the Village Health Committee
3. Describe the qualities of membership of Village Health Committee
4. Explain when a Village Health Committee can be utilized
5. Form a Village Health Committee
6. Train members of a Village Health Committee
7. Motivate the members of a Village Health Committee
8. Supervise the village Health committee

Time allocation: 6 hours theory and 4 hours of laboratory hours

Materials needed: Markers, Flip chart, Chalk board and chalk

Teaching and Learning Methodology: Lecture discussion, Brain storming

- Participants will be expected to have individually read through the content before the session.
- Start by making a brief introduction of the session by outlining the objectives
- Finally discuss with the participants in a brain storming session to come up with what they understand on Village Health committee. The responses should be listed on a flip chart for further reference in the subsequent sessions.

1. COMPOSITION OF VILLAGE HEALTH COMMITTEE

The Village Headman is an ex-official member and the committee shall comprise of the following members;

- ◆ The Chairperson
- ◆ The Vice Chairperson
- ◆ The Secretary
- ◆ The Vice Secretary
- ◆ The Treasurer

- ◆ The Vice Treasurer
- ◆ Four other Members

2. THE FUNCTIONS OF THE VILLAGE HEALTH COMMITTEE

The Village Health Committee members having been chosen from the community are role models and as such they are supposed to be exemplary in their behaviour and demonstrate appropriate health practices so that they are able to fulfill their functions of;

- ◆ Helping to raise the standard of sanitation in the community
- ◆ Reporting to health workers whenever there are health related problems in the community
- ◆ Mobilizing the community members participate in health promoting activities.
- ◆ Assisting the health worker carry out some health activities in the community
- ◆ Bridging the community and the health workers

3. THE QUALITIES OF MEMBERSHIP OF VILLAGE HEALTH COMMITTEE

The members of Village Health Committee could be men or women and as role models of the community they must have following qualities;

- ◆ Trustworthy: in what ever responsibilities entrusted on them
- ◆ Literate especially the secretary of the committee
- ◆ Availability at all times of need so that the committee continues to function

3. UTILIZATION OF A VILLAGE HEALTH COMMITTEE

Based on the principles of PHC the village health committee should be used at all times if activities are to be well owned by the community. Therefore, the committee should be used during;

- ◆ During problem identification
- ◆ During planning.
- ◆ During decision making
- ◆ During implementation.
- ◆ During monitoring
- ◆ During evaluation.
- ◆ During re-planning.
- ◆ During supervision.

4. FORMATION OF A VILLAGE HEALTH COMMITTEE

The procedure of forming a village health committee is like the formation of any other committee, this should follow the following steps;

- ◆ Initial Consultation with the village headman
- ◆ Conducting the election using the laid down procedure

- ◆ Opening prayer
- ◆ The Village Headman welcome remarks
- ◆ Formal introduction
- ◆ Health Worker remarks on the desired qualities of the members of the committee
- ◆ Appointment of a person to oversee the election process
- ◆ Final remarks by the Health Worker on functions of Village Health Committee members
- ◆ Closing remarks by the Village Head
- ◆ Closing Prayer.

5. TRAINING MEMBERS OF A VILLAGE HEALTH COMMITTEE

5.1. Identification of areas of training

The following are the most important areas to train Members of Village Health Committee;

- ◆ Functions and responsibilities
- ◆ Leadership skills
- ◆ Primary health care activities
- ◆ Other health interventions

5.2. Identification of other committees that would work together with the Village Health Committee

To address the PHC principle of multi-sectoral collaboration, there is a need to identify other committees within the community that would work together with the Village Health Committee such as;

- ◆ Farmers
- ◆ Women clubs
- ◆ Youth clubs
- ◆ Water committees
- ◆ Community Based Distributing Agents (CBDA)
- ◆ School committees
- ◆ Other support groups

5.3. Identification of resources

An effort must be made that most of the resources to be utilized by the Village Health Committee should be resources that are readily available within the community

5.4. Preparation for the training

Preparation for the training of Village Health Committee members in their functions and health related activities in their community should follow the following basic steps;

- ◆ Identification of the training needs
- ◆ Identification of the resources for training such as staff, materials, money, transport etc
- ◆ Preparation of the training time table

5.5. Conducting the training

The training process should emphasize the adult learning principles which is more participatory as opposed to teacher traditional lecture method

6 MOTIVATION OF THE MEMBERS OF A VILLAGE HEALTH COMMITTEE

Members of a Village Health Committee need to be motivated and encouraged to perform their functions and this can be achieved by;

6.1 Making Frequent Visits

The frequency must be determined as either, monthly routine or whenever something crops up and these could be;

- ◆ **Formal visits**

These visits are usually planned

- ◆ **Informal visits**

This type takes advantage of your presence in the community.

6.2 Conducting Training

The members of the committee need to be trained using;

- ◆ **On-going training during visits**

This is usually conducted by Health Surveillance Assistant during their visits in the community and it is more reliable than the planned training because;

- It does not have budget constraints
- It takes shorter time, two to three hours.
- It is more effective since a single job skill may be discussed and as such there will be enough time to reinforce the skill acquisition
- It is not time controlled as is the case with scheduled lessons

- ◆ **Planned training**

This can be conducted by the Health Surveillance Assistant or any other facilitator who may have identified as planned

7. SUPERVISION OF THE VILLAGE HEALTH COMMITTEE

Supervision is defined as the act of watching performance of work, and providing guidance and support. Supervision is particularly important for the members of the village health committee because there could be other aspects of health issues that they may not be familiar with and the members would benefit from the supervision.

7.1 The Purpose of Supervision

The purpose of supervision is basically to motivate and to ensure that the members of the committee work efficiently and effectively, and become competent on their work and this is achieved by;

- ◆ Monitoring performance of work
- ◆ Providing guidance and support

The Importance of Supervision

The purpose of supervision broadly outlines the importance of supervision. The importance therefore is that supervision;

- ◆ Ensures efficient and effective staff performance
- ◆ Promotes continuing improvement of work
- ◆ Motivate staff
- ◆ Identifies of gaps early and improvements done in time

Skills of Supervision

The skills of supervision include the following;

- ◆ **Conceptual skills**

This defines what should be done

- ◆ **Technical skills**

This defines how it should be done

- ◆ **Interpersonal skills**

This defines ability to interact with others

Types and Styles of Supervision

- ◆ **Types of Supervision**

- **Facilitative**

- The supervision that is conducted as one performs the activities together with those being supervised

- **Interference**

- The supervision that is interruptive. The supervisor does not take part in the activities being performed by those being supervised.

- ◆ **Leadership Styles of Supervision**

During supervision some leadership styles can be utilized to make the supervision more effective and these are;

- **Autocratic**

This is usually conducted when immediate results are required, on staff that has limited knowledge and or skills and when dealing with unreliable staff

- **Anarchic (laissez-faire)**

This is when the supervisor is not concerned with the outcome, has trust on staff and this could be appropriate if staff is competent and reliable

- **Democratic**

This allows for the sharing of ideas and encourages creativity. It is good for competent and experienced staff.

Preparation for Supervision

During the preparatory phase, the following steps must be followed;

- ◆ Study necessary documents
- ◆ Identify priorities
- ◆ Determine resources
- ◆ Prepare a supervisory check-list where appropriate

Activities During Actual Supervision

The following activities outline the actual activities during the supervision;

- ◆ Observation of actual work performance
- ◆ Observation of documents
- ◆ Identification of gaps
- ◆ Encouragement and advice

Follow-up Supervision

During the follow-up supervision the following activities must be performed;

- ◆ **Preparatory phase**
 - Re-checking previous notes to determine what is expected during your follow –up visit.
 - Organizing support resources
- ◆ **Actual supervision**
 - Observing performance as it is being done during the supervision
 - Taking short notes for all actions during follow-up visit

UNIT 7: COMMUNITY BASED HEALTH CARE

INTRODUCTION

The community based health care workers have a responsibility to initiate, implement and supervise community based health care. It is therefore imperative that Health Surveillance Assistant understands the whole concept of community home based health care. Community Home-Based Care is defined as the care provided to chronically or terminally ill patients in the home such as those suffering from HIV and AIDS, TB and cancer; including those affected by other illnesses, the vulnerable and groups at risk.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Outline the Community Based Health Care providers
2. Explain the models of Community Based Health Care
3. Explain the components of Community Based Health Care package in Malawi
4. Describe the benefits of Community Based Health Care
5. Describe the roles of Health Surveillance Assistants and Community Health Providers in Community Based Health Care

Time allocation: 2 hours

Materials needed: Markers, Flip chart, Chalk board and chalk

Teaching and Learning Methodology: Lecture discussion, Group discussion, Brain storming

- Participants will be expected to have individually read through the content before the session.
- Start by outlining the objectives and making a brief introduction of the session emphasizing the fact that the HSA has a major role in providing care in the community
- Finally discuss with the participants in a lecture discussion session to cover all the objectives

1. COMMUNITY HOME BASED CARE PROVIDERS

Community Home Based Health Care is given in the home, using locally available resources with support from the formal health workers such as Health Surveillance Assistants, Nurses and Medical Assistants by;

- ◆ Family members
- ◆ Community members

2. MODELS OF COMMUNITY HOME BASED CARE

Models of community home based health care are basically classified into two;

2.1. Integrated Community Home Based Care Model

This is a combination of facility and community-based models whose services are provided in an integrated manner. It may also include Orphan care and income generation activities delivered together at household level. In this model;

- The training, supervision and supplies for home-care, relies on local health facility
- Patients are referred to health facility from the homes in case of problems
- Care is provided by trained and professionally supervised community care givers

2.2. Community Day Care Model

Adults and children living with HIV and AIDS use the center during the day and obtain services such as symptom monitoring, drugs, recreation and counseling. It gives opportunity to the family caregivers to;

- To rest from the care burden
- Remain employed
- Take care of other needs in the family

3. COMPONENTS OF COMMUNITY HOME BASED CARE PACKAGE IN MALAWI

In Malawi a comprehensive Community Home Based Care package consists of the following interventions;

3.1. Promotive

- ◆ Psychosocial and spiritual care
- ◆ Transfer of skills to the primary care giver
- ◆ Nutrition education and food supplementation where feasible
- ◆ Assistance with social economical needs of family and food security

3.2. Preventive

- ◆ Infection prevention and control in the home
- ◆ Counseling and testing HIV

3.3. Curative

- ◆ Identification and management of common minor health ailments in the home
- ◆ Monitoring of patients on ARV drugs and TB treatment

- ◆ Palliative care
- ◆ Referral of patients who develop complications under Home Based care
- ◆ Referral of patients with opportunistic infections and other severe conditions and diseases to appropriate services

3.4. Rehabilitative

- ◆ Care of orphans
- ◆ Care of vulnerable children

4. BENEFITS OF COMMUNITY BASED HEALTH CARE

There are many benefits of Community Based Health Care to the community, health facilities, families and individuals that include the following;

- ◆ Allows a patient to be taken care by relatives
- ◆ Allows family members to take care of their relative while doing other household chores
- ◆ Promote long-term family, support and strengthening family community bonding
- ◆ Encourages other community members to participate in caring for the patient
- ◆ Reduces expenses in traveling by the patient and family
- ◆ Allows patients to continue with treatment under supervision
- ◆ Reduces overcrowding in hospitals
- ◆ Helps to integrate care with HIV and AIDS education that promotes acceptance of disease by the patient family members and community

5. THE ROLES OF COMMUNITY HEALTH WORKERS IN COMMUNITY HOME BASED CARE

4.1. Health Surveillance Assistants (HSA)

In the Community Home Based Care programs, Health Surveillance Assistants are a link with health care facilities and communities. Their roles are as follows:

- ◆ Supervise volunteers & primary health care givers in the provision of basic nursing care in the home.
- ◆ Provision of psycho-social support to patient and clients and their families
- ◆ Refer patient and client for further care to health and other support services and groups as required.
- ◆ Keep records pertaining to community home based care in the catchment area
- ◆ Educate people about CHBC related issues and other health issues.
- ◆ Support treatment adherence for patients on long term drugs.
- ◆ Monitor storage and utilization of drugs and supplies for the community care providers.
- ◆ Supervise community health care providers on patient care issues.

4.2. Community Health Care Providers or Volunteers

Primary Health care advocates community participation in the provision of community health care services. Other community health care providers or volunteers are part of community involvement have the following roles.

- ◆ Identification and recruitment of patients requiring CHBC
- ◆ Provision of basic patient care
- ◆ Ensuring a safe and health home environment for the patient
- ◆ Seeking assistance from community resources as required
- ◆ Managing simple ailments such as cough, fever, diarrhea, vomiting, skin problems etc
- ◆ Provision of psycho-social support
- ◆ Nutrition counseling to patients, clients and families
- ◆ Referring patients and clients to health and other support services
- ◆ Keeping patient's records on care given
- ◆ Provision of monthly reports to immediate supervisor
- ◆ Monitoring side effects and compliance for patients on long term drugs including ARV drugs
- ◆ Discharging patients who longer require basic nursing care
- ◆ Conducting follow up visits for CHBC patients and clients
- ◆ Facilitating the mobilization of community transport for referral of patients from community to health facilities

EVALUATION OF THE SESSION

- Summarize the session by asking the participants the following questions ;
 - What are the main activities of Home Based Care?
 - What would be the role of HSA in contributing to the provision of Home based care after completing this training?
- Let participants respond individually
- Ensure positive reinforcement after each response
- Do not allow the participants to use their manuals as they respond to the questions
- Finally summarize by giving the answers to the questions refer to the HSA tasks in the manual

UNIT 8: VILLAGE AND SCHOOL SANITATION

INTRODUCTION

Sanitation is a term applied to methods and technologies used for appropriate collection, transportation and disposal of human waste, community wastewaters and solid waste as well as provision of safe water in order to prevent disease transmission and create a safe environment. Sanitation therefore, involves provision of safe water, maintenance of structures that remove, transport and dispose wastes. Such structures are latrines, drains, bath shelters, refuse pits, sewers, safe water points and related structures.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Describe the basic requirements for good village and school sanitation
2. Explain proper waste and excreta disposal
3. List common diseases and conditions associated with poor sanitation
4. Explain to the community the siting of excreta and waste disposal facilities in the village
5. Cast a Sanitation slab

Time allocation: 6 hours theory and 16 hours practical

Materials needed: **Class Session;** Markers, Flip chart, Chalkboard and Chalk, Posters on clean home, PHAST manual
Practical Sessions; Model of good and bad villages, PHAST tools, Cement, Steel reinforcement bars, wire, River sand, Quarry stones, Water, Shovel, Building trowels

Teaching and Learning Methodology: Lecture discussion, Group discussions, Demonstrations

- Participants will be expected to have individually read through the content before the classroom session.
 - Start by outlining the objectives make brief lecture on the on the objectives, emphasizing on the importance of a practical skill acquisition.
 - Arrange for a two village visit, one being a good model, while the other being of a bad model. It is important not to disclose which one is good or bad model. This should be left to the participant to conclude after the visit has been completed.
 - Arrange a discussion in a plenary after the visit for the participants to present their observations. The observations should be listed on a flip chart for further reference.
 - Finally discuss and demonstrate on the procedure to be followed in casting and installing a sanitation slab
-

1. THE BASIC REQUIREMENTS FOR GOOD VILLAGE AND SCHOOL SANITATION

The basic requirements for good village and school sanitation are;

- ◆ Sound and satisfactory environmental conditions
- ◆ Protected water sources
- ◆ Hand washing facilities and urinals
- ◆ Good drainage facilities

2. PROPER WASTE AND EXCRETA DISPOSAL

Proper waste and excreta disposal is a very important preventive measure for diseases associated with poor sanitation;

2.1. Importance of proper waste and excreta disposal

The following are some of the importance of proper waste disposal

- ◆ Helps to prevent diseases
- ◆ Helps to prevent the breeding of vectors such as flies and rodents
- ◆ Helps to prevent environmental pollution
- ◆ Helps to prevent litter

2.2. Methods of proper excreta disposal

Excreta can properly be disposed by;

- ◆ Burying the waste in emergency situations
- ◆ Use of ordinary latrines
- ◆ Use of improved sanitation e.g. san plats and dome slabs
- ◆ Use of water closets for those who can afford
- ◆ Use of urinals in schools

2.3. Methods of proper waste disposal

The following are proper waste disposal;

- ◆ Use of refuse pits
- ◆ Composting or Burying
- ◆ Burning of waste
- ◆ Appropriate burying of dead bodies e.g. Cholera deaths and animals
- ◆ Use incinerator e.g. in schools

3. COMMON DISEASES AND CONDITIONS ASSOCIATED WITH POOR SANITATION

The common diseases and conditions associated with poor sanitation are;

- ◆ Diarrhea
- ◆ Gastro-enteritis

- ◆ Cholera
- ◆ Hookworm
- ◆ Bilharzia
- ◆ Typhoid,
- ◆ Bacillary and amoebic dysentery
- ◆ Ascariasis
- ◆ Infectious hepatitis
- ◆ Poliomyelitis

4. EXCRETA AND WASTE DISPOSAL FACILITIES IN THE VILLAGE

Waste disposal facilities should be sited on the windward side and never uphill to the water source. The following are the recommended siting and measurements of excreta and waste disposal facilities in the village;

Pit latrine

- ◆ **Siting**
Pit latrines should be 10 m away from the house and kitchen.
- ◆ **Measurements**
Pit latrine hole should be 90cm x 150cm x 500cm

Refuse pit

- ◆ **Siting**
Refuse pits should be 10 m away from the house and kitchen
- ◆ **Measurements**
Household refuse pit should be 4' x 4' x 4' (120 x 120 x 120 cm)

5. CASTING A SANITATION SLAB

Sanitation slab is a concrete slab with a central hole and a corresponding cover also known as a drop- hole cover

5.1. Types of San Plants

- ◆ There are two main types of sanitation slabs;
 - Dome shaped sanitation slab, that is, it has a round roof with a circular base
 - Concave shaped sanitation slab, that is it has a surface that is curved inwards like the outside of the ball
- ◆ **Measurements**
 - 110 cm wide, round san slab is placed on a the pit without the support of logs this covers the entire hole

5.2. Advantages of san slab

- ◆ It is smooth and easy to clean
- ◆ It has foot rests which makes it easy to use at night
- ◆ It has a drop hole which allows children to use it
- ◆ It is hygienic and keeps both smell, flies and cockroaches away since it has a tight fitting lid
- ◆ It is long lasting and can be re-used

5.3. Materials for casting san slab

- ◆ Cement
- ◆ Quarry stones
- ◆ River sand
- ◆ Water
- ◆ Steel reinforcement bars
- ◆ San slab
- ◆ Drop hole
- ◆ Foot rest moulds
- ◆ Building trowel
- ◆ Pointing trowel
- ◆ Shovel
- ◆ Straight edges

5.4. Procedure for casting san slab

- ◆ Prepare a mixing bay
- ◆ Dry mix cement, sand and quarry stones in the mixing bay in the 1: 2: 3 ratio
- ◆ Add water slowly and continue mixing to a paste of required consistency
- ◆ Select a leveled ground slightly bigger than the circumference of the slab preferably under a shade
- ◆ Put a thin layer of sand or a sheet of plastic paper
- ◆ Put the san plat mould on the layer of sand/plastic paper
- ◆ Determine the centre point using strings from mid points of opposite lengths
- ◆ Underneath the crossing point, place the drop hole mould fitting the mark on the mould
- ◆ Wet the drop hole mould and the san slab mould
- ◆ Bring in the paste of concrete covering almost half of the required thickness
- ◆ Place reinforcement wires on the concrete
- ◆ Fill the san plat mould with concrete slightly above the required thickness
- ◆ Ram the concrete to achieve a compact fill
- ◆ Smoothen the top to remove excess stuff
- ◆ Continue working until you achieve an evenly smooth surface
- ◆ Apply smooth finish
- ◆ After allowing a 20 minutes of settlement , tap the sides until the mould is detached from the concrete then remove the mould
- ◆ Repeat the above step to remove the drop hole mould
- ◆ Bring a foot rest mould in line with the drop hole
- ◆ Scratch a few line on the marked for foot rests

- ◆ Remove the foot rest mould
- ◆ Mark the slab with a number for identification
- ◆ Apply shade on top of the san slab
- ◆ Advise people to start watering the slab from the next morning until it matures in 7 days time
- ◆ After about 24hrs, prepare another mixture with cement and sand (1:4) to provide foot rest and drop hole cover
- ◆ Bring back the foot rest mould in line with the drop hole
- ◆ Use the paste to fill the sites of the foot rests on the mould
- ◆ Ram and prepare these foot rests to a smooth finish
- ◆ Remove the foot rest mould
- ◆ Move away the unwanted stuff and ensure the foot rest remains smooth
- ◆ For the drop hole cover- a thin layer of plastic paper is put around the drop hole then concrete paste is put to fill the drop hole (observe that the sides of the drop hole should not have stones)
- ◆ Bring in a wire rod to act as reinforcement and also acts as a drop hole cover handle
- ◆ Add more paste and ram accordingly to achieve appropriate thickness of the cover
- ◆ Work on it to required smoothness and mark the drop hole cover as appropriate for identification
- ◆ If need be, support the wire with an external stick

5.5. Installation procedure of a san slab

For the 60 cm wide, square san slab, no extension is required as the san slab is placed on logs on an existing pit latrine. But the standard procedure is as follows;

- ◆ Extend the edges of the pit to about 15 cm to a depth of about 30 cm.
- ◆ Fill the extension with brick work to the original level
- ◆ Allow the brick work to settle for 2 days
- ◆ Slowly place the slab on top of the brick work
- ◆ Advise on how to construct the super structure on the slab

SESSION EVALUATION

Give two assignments to the participants:-

1. To describe the procedure of casting a sanitation slab including the items needed; this is to be performed individually
2. Let the participants be divided into groups and cast a sanitation slab

Summarize the session by evaluating the performance of both theory and practical work

UNIT 9: VECTOR AND VERMIN CONTROL

INTRODUCTION

Vectors are anthropoids and insects that play host to a disease causing organism like mosquitoes, tsetse flies and house flies among others, while vermin are nuisance insects and rodents like rats, cockroaches that cause harm to animals and plants and may also play an intermediate role in disease transmission. The control of these vectors and vermin plays a major role in disease prevention and control.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. List common vectors
2. Detect signs of vector and vermin infestations in the houses
3. List examples of diseases transmitted by common vectors and vermin
4. Use local methods in controlling vectors and vermin
5. Apply Insecticides/Pesticides

Time allocation: 4 hours theory and 6 hours practical

Materials needed: **Classroom sessions;** Markers, Flip chart, Posters on different vectors, actual vectors (realia)

Practical session; Chemicals, Insecticides and Pesticides, Spraying pumps, Protective regalia

Teaching and Learning Methodology: Lecture discussion, Brain storming, Group discussion, demonstrations

- Participants will be expected to have individually read through the content before the session.
- Start by outlining the objectives; make a brief lecture discussion on vector and vermin control emphasizing on the need to acquire skills on spraying of insecticides and pesticides
- Finally discuss and demonstrate on the procedure to be followed in spraying.
- Demonstrate in a practical session how to prepare and spray to control vectors and vermin

1. COMMON VECTORS AND VERMIN

The most common vectors in the households are;

- ◆ **Vectors**
 - House flies

- Cockroaches
- Mosquitoes
- Bedbugs
- Itch mites
- Fleas
- Ticks
- Lice
- ◆ **Vermin**
 - Snails
 - Rodents
 - Bats

2. SIGNS OF VECTOR AND VERMIN INFESTATIONS IN THE HOUSES

The following are the common signs of infestation of vectors and vermin;

- ◆ Droppings
- ◆ Rat runaways
- ◆ Gnawed wood
- ◆ Sound
- ◆ Presence of larva

3. DISEASES TRANSMITTED BY COMMON VECTORS AND VERMIN

The following are examples of diseases transmitted by common vectors and vermin

- ◆ Malaria – mosquito
- ◆ Schistosomiasis – Water snail
- ◆ Sleeping sickness – Tsetse fly
- ◆ Onchocerciasis (River blindness) – Black fly
- ◆ Relapsing fever – Lice
- ◆ Plague – Rats

4. LOCAL METHODS OF CONTROLLING VECTORS AND VERMIN

The common local methods of controlling vectors and vermin within the community are;

- ◆ Maintenance environmental sanitation
- ◆ Use of hot water
- ◆ Use of traps
- ◆ Use of clubs for rodents
- ◆ Use of maize husks
- ◆ Personal Hygiene practices

5. APPLICATION OF INSECTICIDES AND PESTICIDES

Chemicals, Insecticides and Pesticides used

There are various chemicals, insecticides and pesticides used in the control vectors and vermin, the following are commonly in the community;

- ◆ Doom
- ◆ Cislin
- ◆ Fenitrothion
- ◆ Actellic
- ◆ Fendona
- ◆ Storm
- ◆ KO-TAB

Classification of Chemicals, Insecticides and Pesticides

The chemicals, insecticides and pesticides are classified as;

- ◆ **Knockdown**
 - Doom
 - Storm
- ◆ **Residual**
 - Cislin
 - Fenitrothion
 - Actellic
 - Fendona
 - KO-TAB

Safety measures on the use of the chemicals

The following are the safety measures on the use of insecticides;

- ◆ Read the label
- ◆ When applying remove or cover food and utensils
- ◆ Wear protective clothing
- ◆ Do not eat or drink while spraying
- ◆ Bath thoroughly the whole body afterwards
- ◆ Wash clothing thoroughly
- ◆ Wash the equipment after use
- ◆ Bury empty containers and dead vectors safely
- ◆ Keep all insecticides out of children's reach
- ◆ Store away from food stuff

Preparation of chemical solutions

The procedure for preparing chemical solution for spraying is as follows;

- ◆ Read instruction
- ◆ Check expiry dates
- ◆ Measure the chemical
- ◆ Measure the water

- ◆ Add to make a mixture

Forms of applying insecticides and pesticides

The forms of applying insecticides and pesticides are;

- ◆ Dusting
- ◆ Spraying
- ◆ Baiting
- ◆ Dipping

Spraying of houses and any other vector and vermin breeding places

When spraying houses with chemicals follow the following procedural steps;

- ◆ Check the parts of the sprayers
- ◆ Put on gloves, masks and head gear
- ◆ Spray finely on walls from top downwards in uniform sweep
- ◆ Spray on skirting (along base of wall) in food room
- ◆ Clean pump using clear water until pump nozzle is clean
- ◆ Store pump and drugs properly,

EVALUATION OF THE SESSION
<ul style="list-style-type: none">▪ After the session ask the participants to demonstrate the following as an evaluation of the session<ul style="list-style-type: none">• Demonstrate how to prepare a chemical solution taking into account all the precautions in the procedure• Demonstrate how to spray houses or vector and vermin breeding places

UNIT 10: WATER SUPPLY

INTRODUCTION

As the saying goes, "Water is Life" the provision and use of safe water promotes the health of people and contributes to the prevention and reduction of waterborne diseases in the community. This module therefore aims at providing the learner with basic knowledge and skills in improvement of the quality of water in order to enable the learner educate the community on the selection of safe water sources, protection of water sources and water quality improvement.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Outline diseases and conditions associated with poor water supply
2. Advise on selection of safe water sources
3. Organize the protection of water sources
4. Conduct water chlorination
5. Educate on water quality improvement
6. Train the community on water source protection

Materials needed: Classroom session; Markers, Flip chart, Pens

Practical session; Clay pots, drum filter, Measuring tape, teaspoon, tablespoon, 1 litre/5 litre container, weighing balance, calcium chloride, high test Hypochlorite

Teaching and Learning Methodology: Lecture discussion and Group discussions, Demonstration, Role Play

- Participants will be expected to have individually read through the content before the session.
- Briefly lecture and discuss with the participants on water supply
- In a braining storming session ask the participants to describe the common diseases associated with poor water supply. Have the answers written on flip chart and discuss them at the end, making corrections where necessary
- Emphasize to the participants that the only major preventive measure is the provision of safe water
- Then proceed with the session following objectives by objective

1. DISEASES AND CONDITIONS ASSOCIATED WITH POOR WATER SUPPLY

Water is a source of diseases because most of the occurring community diseases are water borne, water washed, water based or water related vector borne diseases. The following are the common diseases and conditions associated with water pollution:

1.1. Water Borne Diseases

These are diseases that are transmitted when water which is contaminated with infectious disease causing organisms is consumed. Improved water quality such as boiling, treatment with chemicals and filtration can help reduce the transmission of water borne diseases. Examples are;

- ◆ Cholera
- ◆ Typhoid
- ◆ Diarrhea

1.2. Water Based Diseases

These are diseases in which the causative organism must spend a portion of its life cycle in an aquatic animal before developing into infective larvae. They are transmitted when infective larvae are consumed with drinking water or when they penetrate the human skin. Improved sanitation helps to restrict these organisms from getting into the water. Examples of such diseases are;

- ◆ Schistosomiasis
- ◆ Guinea worm

1.3. Water Washed Diseases

These are diseases that are spread when personal and domestic hygiene is inadequate. This can be due to inadequate supply of water. Infective organisms are transmitted through dirty hands, utensils, food, towels etc. These are aggravated when excreta disposal is indiscriminate and domestic water supply is inadequate. Improved supply of water quantity can reduce the transmission of these diseases. Examples of such diseases are;

- ◆ Trachoma
- ◆ Scabies

1.4. Water Related Vector Borne Diseases

These are diseases in which the organism is spread by the bite of insects, especially mosquitoes, part of whose life cycle is spent in water and which in some cases live in polluted water that provide breeding places for these insects. It is necessary to eliminate sources of water where mosquitoes breed to reduce the occurrence and spread these diseases. Examples of these diseases are;

- ◆ Malaria
- ◆ Yellow fever

2. SELECTION OF SAFE WATER SOURCES

2.1. Sources of village water supply

The common sources of village water supply are;

- ◆ Rain
- ◆ Surface water

- ◆ Underground water

2.2. Water quality surveillance on existing water source

Water quality surveillance on existing water sources should emphasize on the following aspects;

- ◆ Quantity of water
- ◆ Source of pollution
- ◆ Distance from user
- ◆ Water quality testing
- ◆ Ease of protection

The water quality testing uses H₂S water testing kit, and the procedure is as follows;

- Take a water sample e.g. from a tap, using H₂S bottle
- Keep the water sample for at least 24hrs
- Check for colour change of the sample
- Dark colour signifies contamination with E. coli

2.3. Characteristics of good water quality

Good water quality should be;

- ◆ Free from turbidity (suspended matter)
- ◆ Free from pathogens
- ◆ Free from toxic substances
- ◆ Free from taste, colour and odors

2.4. The criteria for selecting safe water source

The selection of a water source should be based on the following criteria;

- ◆ Adequate supply
- ◆ Easily accessible
- ◆ Free from sources of pollution
- ◆ Ease quality improvement

3. THE PROTECTION OF WATER SOURCES

Protection of water source is very important in maintaining safe water supply within the community and these are activities that should be done together with the members of the community so that they are trained for the purposes of sustainability.

3.1. Inspecting wells and springs for defects

The activities involved in inspecting of wells and springs for defects are as follows;

- ◆ Check for cracks
- ◆ Check for broken apron and drainage
- ◆ Check for overflowing soak away pit
- ◆ Assess cleanliness of well

- ◆ Check stagnant water around the well
- ◆ Check for measurements provided to prevent damage of the well or spring.

3.2. Protecting springs

The following are the steps for protecting springs;

- ◆ Dig around the spring to find the eye
- ◆ Place loose stones against the eye
- ◆ Construct concrete box around the spring
- ◆ Make removable cover
- ◆ Provide screened outlet pipe
- ◆ Construct a concrete stance
- ◆ Provide drainage and soak away pit

3.3. Protecting wells

The following are the steps for protecting wells;

- ◆ Clear the site
- ◆ Mark diameter (about 1 meter)
- ◆ Dig to required depth
- ◆ Lay stones at the base of well to avoid closing eye of the well
- ◆ Line up the walls of the well up to one meter above ground level
- ◆ Fill sides with stones
- ◆ Make an apron around the well
- ◆ Provide drainage and soak away pit
- ◆ Chlorinate the water before use
- ◆ Install a pump if available or cover with a lid

3.4. Maintaining a protected well or spring

- ◆ Check for defects and rectify promptly
- ◆ Teach community how to operate and maintain the new source

4. WATER QUALITY IMPROVEMENT

4.1. Water chlorination

Water chlorination is one of the methods of making water safe for use in the homes. The method uses chlorine for the treatment of water.

- ◆ **Materials and supplies for chlorination**
 - Calcium Chloride (Chloride of lime 35 %) or High Test Hyperchlorite (HTH 70%) or Liquid water guard and powdered water guard
 - Tea spoon and table spoon
 - 1 litre jar or 5 litre container

- ◆ **Preparation of a 1% chlorine stock solution**
 - Measure 11 tablespoons full of CaCl_2 5.5 table spoons of HTH
 - Add it to 5 litre of clean water
 - Stir up the mixture to obtain a 1% stock solution
 - Wait for sediments to settle
 - Decant the solution
 - Dispose the sediments by burying
 - Store the solution in a cool dark place

- ◆ **Alternatively**
 - Measure 1 litre of clean water
 - Measure 40g CaCl_2 (35%) or 15gm HTH (70%)
 - Add the powder to 1 litre of H_2O
 - Stir the mixture to obtain a solution
 - Allow for sediments to settle
 - Decant the solution
 - Dispose the sediments by burying
 - Store the solution in a cool dark place

- ◆ **Adding a 1% chlorine stock solution to a well or pot**
 - Measure the volume of raw water to be chlorinated
 - Add 3 drops of 1% stock solution to every 1 litre of raw water or 1 teaspoon to 20 litres of raw water
 - Wait for 1 hour contact time or 30 minutes in case of emergency before consumption

4.2. OTHER METHODS FOR IMPROVING WATER QUALITY

Apart from chlorination there are methods of water quality improvement

◆ Storage

The three pot system. Water is kept in a pot for 24 hours to allow for sediments to settle and then you decant and let the water to stand for another 24 hour period, repeating the same procedure for three times

◆ Boiling

Water should be boiled for at least one minute to kill E-coli and microorganisms that normally live in water at room temperature

◆ Filtration

Pour the water through a clean cloth or sand media to filter the sediments.

How each method improves the quality of water

It is important to advise people on the proper collection, distribution and storage of safe water. The following are means of how each method improves the quality of water.

Chlorination: this kills pathogens

Storage: this allows sediments to settle

Filtration : this removes debris

Boiling: this kills pathogens

5.3. Proper water handling

The community needs to be advised on the proper handling of water to maintain safe water in the homes and this through the;

Use of appropriate methods of water collection

Proper care of water during transportation

Use of clean storage containers,

Appropriate behavior in distribution and usage of water that is two cup system

6. TRAINING THE COMMUNITY ON WATER SOURCE PROTECTION

The community should be trained on water source protection especially the springs and wells Protection.

Materials required

As outlined in 3.2

Procedures to be followed

As outlined in 3.3

EVALUATION OF THE SESSION

Evaluate the session by asking the participants to;

- Review the methods used in improving water quality
- Explain the criteria for selecting safe water sources
- Outline risks of not protecting water sources
- Explain how the different methods of improving water quality work
- Explain the storage of water to maintain its quality and safety

UNIT 11: FOOD HYGIENE AND SAFETY

INTRODUCTION

Food hygiene is defined as food handling practice or action that. It is a very important practice because it prevents food contamination and this contributes to health promotion and prevention of diseases.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Explain the importance of Food Hygiene Practices
2. Outline diseases associated with poor food hygiene
3. Conduct food hygiene inspection

Time allocation 6 hours theory and 9 hours practical

Materials needed: **Classroom sessions;** Markers, Flip chart, Illustrations (leaflets, posters),
Practical sessions; Various food items (good and bad) canned foods,
Report forms, dried foodstuffs, and fresh foodstuffs

Teaching and Learning Methodology: Lecture discussion, Group discussions, Demonstration and Role Play

- Participants will be expected to have individually read through the content before the session.
 - Briefly lecture and discuss with the participants on food hygiene and safety
 - In a brainstorming session ask the participants to list diseases associated with poor food hygiene. Have the answers written on flip chart and discuss them at the end, making corrections where necessary
 - Emphasize to the participants the importance observing proper food handling the food to avoid diseases and then proceed with the session of demonstrating food inspection on various food stuffs
-

1. THE IMPORTANCE OF FOOD HYGIENE PRACTICES

The importance of maintaining food hygiene is;

- ◆ Prevention of food borne diseases
- ◆ Maintenance of quality of food

2. DISEASES ASSOCIATED WITH POOR FOOD HYGIENE

The following are diseases associated with poor food hygiene practices;

- ◆ Cholera
- ◆ Dysentery (Bacillary, amoebic)
- ◆ Tuberculosis
- ◆ Typhoid
- ◆ Food poisoning
- ◆ Round worms (Ascariasis)

3.0 FOOD INSPECTION

Food inspection is the process of finding out the wholesomeness of food or detecting defects in the food, other than meals to make sure that the food is safe for human consumption

3.1 Inspection of Food

◆ **Common foods on Malawian markets**

The following are common foods among others on Malawian markets;

- Fish
- Meat
- Fruits (mangoes, bananas, etc)
- Maize
- Legumes (beans, groundnuts)
- Baked items (scones, bread etc)
- Milk (fresh, dry)
- Vegetables

◆ **The common defects on specific foods**

The following are the common defects on specific foods found in Malawi;

- Weevils
- Decomposition
- Discoloration
- Mould
- Withered fresh leaves, vegetables)
- Common infestations

◆ **Methods used for inspecting food**

Common methods used for inspecting food are;

- **Palpation**
This method uses touching and feeling. You feel for crepitations if these are present then the food may not be safe for human consumption

- **Percussion**

This is method that uses striking with a finger on the tin or two tins together. Listen to the sound if sound is high pitched then it is normal and the food may be safe for human consumption but if the sound is drum like then it is abnormal and the food may not be safe for human consumption

- **Observation**

This is a method that uses eyes to check for swollen or concaved shape in case of a tin it indicates abnormality, withering of vegetables, rotten meat, fish or fruits; this may be an indication that the food is not safe for human consumption

- **Smelling**

This method uses the sense of smell to check for rotten meat, fish or fruits. If a bad smell has been smelt it may be indication that the food may not be safe for human consumption

- ◆ **Action to be taken after inspecting the food**

The action to be taken after inspecting the food will be in the form of;

- Advise the on how to make the food safe for human consumption
- Condemning the food
- Refer for further re-assessment or advice

- ◆ **Reporting the findings and action taken after food inspection**

The findings and action taken after food inspection must be reported to appropriate authorities and the report should include the following;

- Date and time of inspection
- Food inspected
- Quantity of food with defect or in bad conditions
- Defects detected and conditions identified
- Action taken

3.2 Inspection of Food Premises

Food premises is a place where food is stored, prepared and served for consumption

- ◆ **The characteristics of good food premises**

Good food premises are characterized by a building which;

- Is in good state of repair
- Has adequate safe water
- Has good drainage system
- Has good ventilation and good lighting

◆ The importance of food premises inspection

The importance of food premises inspection is basically to;

- Improve hygiene standards
- Prevent the spread of diseases

◆ Features to be checked during food premises inspection

In all food premises there are specific features that to be checked to make the process complete. Therefore during food premises inspection check for;

- The condition and cleanliness of the walls, floor, roofs, doors, windows and furniture
- Infestations
- Proper disposal waste and refuse
- The presence of adequate and safe water supply

◆ Defects in food premises

The following defects in food premises need to be recognized during the inspection;

- Poor drainage system
- Lack of excreta and refuse disposal facilities
- Lack of vector or vermin proofing
- Inadequate ventilation and lighting
- Dirty, peeled off walls
- Chipped floors
- Broken windows
- Leaking roofs

◆ Procedure of food premises inspection

The proper procedure for inspecting food premises should start by introducing yourself, then asking the owner to take you round checking the following;

- Business license
- Food storage facilities
- Condition of building
- Condition of furniture
- Condition of the surrounding or sanitary facilities
- Food handlers, medical certificates
- The advise on the spot accordingly

Inspection of the food handler

◆ General body cleanliness

- Taking daily bathe
- Oral cleanliness
- Washing of beddings and clothes

- Cutting nails and hair short
- Proper hair dressing
- Washing hands

◆ Proper food handling

- Washing hands before handling the food
- Use of clean utensils

Writing an inspection report

After conducting the inspection a report must be made available to appropriate authorities and the report should include the following;

- Name of the food premises
- Name of the owner
- Date of inspection
- Defects and other conditions of the building identified
- Advice given
- Date of follow up or notice

EVALUATION OF THE SESSION
<ul style="list-style-type: none">▪ After the session the evaluation should be emphasized on the skills of food inspection. Allow the participants to demonstrate individually on the following skills;<ul style="list-style-type: none">• How to palpate• How to elicit a percussion note▪ Allow them to individually describe food and premises defects looked for on food inspection▪ Then finally summarize by briefly reviewing the objectives one by one

UNIT 12: PERSONAL HYGIENE

INTRODUCTION

Personal hygiene is an important aspect in the promotion of health, prevention of diseases and enhancement of social status in the community because it complements other aspects of sanitation. Personal hygiene is therefore defined as a general cleanliness of the body and clothes observed by an individual.

SPECIFIC OBJECTIVES

By the end of the unit the learner should be able to;

1. Advise people on good personal hygiene
2. Outline diseases and conditions associated with poor personal hygiene

Time allocation: 2 hours

Teaching Materials needed: Markers, Flip chart, Chalkboard and Chalk, and Posters

Teaching methodology; Lecture discussion, Brain storming, group discussion

- Participants will be expected to have individually read through the content before the session.
 - Start by reviewing the immediate dangers of not following personal hygiene. Then briefly lecture on good personal hygiene practices, indicating how these practices can cause diseases if not properly followed and how they would prevent diseases if they are properly followed.
-

1. GOOD PERSONAL HYGIENE PRACTICES

The community needs to be advised on good personal hygiene practices and some of the areas that need emphasis are;

- ◆ Taking daily bathe
- ◆ Oral cleanliness every morning and after a meal on regular basis
- ◆ Washing of beddings and clothes
- ◆ Cutting nails and hair short
- ◆ Proper hair dressing
- ◆ Washing hands; after using the toilet, before preparing food, before taking a meal and feeding a baby, after taking a meal, after changing the child's napkins and before handling water in the home

2. DISEASES AND CONDITIONS ASSOCIATED WITH POOR PERSONAL HYGIENE

The following are diseases and conditions associated with poor personal hygiene;

- ◆ Scabies

Training Manual

- ◆ Eye infection
- ◆ Lice infestation
- ◆ Diarrhoea
- ◆ Typhus fever
- ◆ Tuberculosis
- ◆ Scurvy
- ◆ Bad smell

UNIT 13: VILLAGE INSPECTION

INTRODUCTION

The process of village inspection complements the process of community assessment in collecting information about environmental sanitation and disease prevalence at the village level.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to;

1. Plan for village inspection
2. Conduct village inspection
3. Analyze data from village inspection
4. Use the village register
5. Write a report and Give feedback to stakeholders/community and supervisors

Time allocation: 4 hours Theory and 8 hours Practical.

Materials needed: Village inspection forms, Flip charts, Village Inspection checklist, Markers, Flip chart

Teaching and Learning Methodology: Lecture discussion and Group discussions, Demonstration, Role Play

- Participants will be expected to have individually read through the content before the session.
- Start by outlining the objectives and inform the participants that this unit will emphasize on practical. Then briefly lecture on village inspection, indicating that the preparation phase and village inspection procedure are very important in conducting effective village inspection. Emphasize on the purpose of village inspection.
- Show the participants the different types of defects, and then explain in a practical session how these contribute to disease causation.
- Allow the participants to actively participate in the session by asking probing questions and allowing them to brainstorm before you tackle any objective.
- Review the responses together with the participants adding any omissions and eliminating any incorrect responses after explaining why they are incorrect using the content that follow.
- Practical exposure will provide an opportunity for the participants to practice village inspection

1. PLANNING FOR VILLAGE INSPECTION

3.5 Purpose of village inspection

The purpose of village inspection is to identify and prioritize village problems to implement essential health interventions. The information that will assist in achieving this purpose is about village sanitation in terms of;

- ◆ Housing
- ◆ Water supply
- ◆ Food supply
- ◆ Excreta and refuse disposal
- ◆ Infestations
- ◆ Physical surroundings
- ◆ Personal hygiene
- ◆ Incidence and prevalence of disease

1.2. Types of village inspection

- ◆ Routine inspection
- ◆ Incidental inspection

1.3. Steps for preparing for village inspection

- ◆ Send messages to leaders
- ◆ Collect required materials e.g. checklists, etc
- ◆ Look at last inspection report in line with the name of village, location of village on map, demographic data on village and other findings

2. CONDUCTING VILLAGE INSPECTION

2.1. The procedure for conducting village inspection

To make the village inspection cost-effective and worthwhile the following procedure has to be followed;

- ◆ Meet the local leaders in the village or Village Health Committee
- ◆ Outline the purpose of the village inspection
- ◆ Do the inspection together with local leaders
- ◆ Advise on the spot where possible
- ◆ Analyze the findings with the local leaders and give them a feedback

2.2. Features and Conditions to be checked during village inspection

The features and conditions to be checked are presence, number and state of repair of;

- ◆ Dwelling houses
- ◆ Kitchens
- ◆ Water supply
- ◆ Latrines
- ◆ Bath shelters
- ◆ Dish racks
- ◆ Animal kraals
- ◆ Refuse pits
- ◆ Infestations
- ◆ Prevalence of diseases

2.3. The common defects or conditions identified during village inspection

Some common defects and conditions identified during village inspection are;

- ◆ Cracked walls
- ◆ Broken bore holes
- ◆ Collapsed latrines, dish racks etc
- ◆ Presence of rodents and flies

3. DATA ANALYSIS AND INTERPRETATION AFTER VILLAGE INSPECTION

Data analysis and interpretation should be systematic and follow the following steps:-

- ◆ Sorting out the data
- ◆ Comparing the data collected with the current situation
- ◆ Identification of problems
- ◆ Prioritizing the problems
- ◆ Reporting the problems

4. VILLAGE HEALTH REGISTER

Village health register is a monitoring tool that summarizes data from other registers and it is collated at health centre level by the HSA supervisor. The register is owned by the Village Development Committee (at group village head level) but is kept by the HAS

4.1. Purpose of Village Health Register

- ◆ Monitoring the equity of EHP service provision at household and community level
- ◆ Helping in the design of a monthly plan of activities at community level; Home visit, Village clinic, Public facility inspection, Out reach clinic and Village feedback meetings
- ◆ Providing coverage indicators for the catchment area, if registers are well updated

4.2. Type of Data to be Recorded

The HSA will assist Village Development Committee by collecting, updating and compiling the data and will provide summarized information to the VDC for feedback meetings. The type of data to be recorded is as follows

- ◆ Household demographic information
- ◆ Immunizations
- ◆ Antenatal Care and delivery
- ◆ Growth monitoring, Vitamin A. supplementation and de-worming for children under 5 years
- ◆ Water and Sanitation
- ◆ Death audit (who, where, cause)

4.3. Elements of Data to be recorded

- ◆ Code number
- ◆ Name of household member
- ◆ Sex

- ◆ Date of birth
- ◆ Relationship with head
- ◆ Education status
- ◆ Occupation
- ◆ Net use

5. REPORT WRITING AND GIVING FEEDBACK TO STAKEHOLDERS, COMMUNITY AND HSA SUPERVISORS

5.1. Report writing

It is very important that after conducting village inspection, data analysis and interpretation a report must be written. The report will form the basis for giving feedback, future references and justification of interventions to be carried. The Village inspection report format is as follows;

- ◆ Name of the village
- ◆ Date of inspection
- ◆ Purpose of inspection
- ◆ Problems identified
- ◆ Advice given or solutions identified
- ◆ Date of follow up

5.2. Giving Feedback

The giving of feedback to the community should start with the positives, the areas that the community has been able to achieve and tailor down the feedback to areas that need improvement and interventions. The process therefore should be as follows.

- ◆ Identification of the target group for the feedback
- ◆ Presenting the findings of the inspection
- ◆ Discussions of the solutions

EVALUATION OF THE SESSION
<ul style="list-style-type: none">▪ Evaluate the session by asking the participants to;<ul style="list-style-type: none">• Explain why it is important to prepare for the village inspection• Explain how they will tell that the village has met the village sanitation requirements• Outline the information they will include in a report intended to give feedback to the community and their Supervisors• Explain at least three steps in the process of giving a feedback▪ Finally summarize by refining the responses and re-enforcing the correct responses

UNIT 14: COMMON DISEASES

INTRODUCTION

The unit is aimed at providing the learner with knowledge; attitudes and skills to enable them treat minor illnesses and provide essential key messages necessary for the prevention and control of the common diseases.

In this unit the following common community diseases have been discussed;

1. Malaria
2. Acute Respiratory Infections
3. Pneumonia in Under-fives
4. Tuberculosis
5. Diarrhoea Diseases
6. Cholera
7. Sexually Transmitted Infections
8. HIV and AIDS
9. Acute Flaccid Paralysis
10. Measles
11. Neonatal Tetanus
12. Bilharzia
13. Other Common Worm Infestations

LEARNING OBJECTIVES

By the end of the unit the learner should be able to;

1. Describe the common community priority diseases in Malawi
2. Educate the community on the prevention and control of common priority diseases in Malawi
3. Motivate pregnant women take SP for intermittent presumptive treatment in pregnancy
4. Provide nets and insecticides to individual, families and communities

Time allocation: 60 hours Theory and 8hours Practical.

Materials needed: **Classroom session;** Markers, Flip chart, Malaria Treatment Chart, Malaria Life Cycle Chart, Malaria IEC materials, Malawi Prescribers' Companion, Poster on STIs, Diarrhoea assessment chart

Malaria Practical sessions; Insecticide, Treatment guidelines, Nets, Insecticide concentrate, Water, Plastic bag or shallow basin, Protective gloves, Measuring cylinder/or graduated container, spraying pump

Diarrhoea Practical sessions; ORS sachets, Clean 1 litre container, Fanta bottle as a measuring bottle, Safe water, clean basin, Tablespoon

Teaching and Learning Methodology: Lecture discussion and Group discussions, Demonstration, Role Play

- Participants will be expected to have individually read through the content before the session.
- Start by outlining the objectives of the unit and then review the common diseases in a brainstorming session. Then briefly lecture on the major areas of each disease emphasizing on the preventive measures of the diseases. Show the participants the different types of posters of conditions and diseases as appropriate.
- Allow the participants to actively participate in the session by asking probing questions and allowing them to brainstorm before you tackle any objective.
- Review the responses together with the participants adding any omissions and eliminating any incorrect responses after explaining why they are incorrect using the content that follow.

1. THE COMMON PRIORITY COMMUNITY DISEASES IN MALAWI

Malaria

Malaria is an acute infection of the blood caused by protozoa of the genus plasmodium. It is a major cause of illness and death in Malawi especially in children under-five and pregnant women.

◆ Risk factors leading to the occurrence and transmission of Malaria

The following are the risk factors leading to the occurrence and transmission of Malaria;

- Presence of female anopheles mosquitoes which transmit the disease
- Presence of Plasmodium falciparum
- Presence of parasites which are drug resistance.
- Stagnant water around the homes providing a habitat for mosquito breeding
- Low immune system like in pregnant mothers and children under –five years of age
- People who have been resident in non-malarious areas
- Children with sickle cell anemia

◆ Groups at high risk of dying of Malaria

The following groups once attacked are at high risk of being severely ill and dying of Malaria;

- Children under-five years of age
- Pregnant women
- Individuals who are HIV positive
- People who have been resident in non-malarious areas
- Children with sickle cell anemia

◆ The signs and symptoms of Malaria

It is very important to recognize the signs and symptoms of Malaria in the two major categories of illness;

▪ **Uncomplicated malaria in children under-five years and other at risk groups**

The following signs and symptoms are associated with malaria in young children;

- Fever or history of fever especially in the absence of other causes of fever should be considered to be Malaria.
- Refusing to feed including breast feeding
- Vomiting
- Diarrhoea

▪ **Uncomplicated malaria in older children and adults**

- Fever or history of fever
- Rigors (shivering) and sweating
- Headache and joint pains
- Vomiting
- Diarrhoea
- Enlarged spleen in children
- Coma, shock, anaemia, jaundice may also be present

▪ **Severe or Complicated Malaria e.g. cerebral malaria.**

- High fever
- Headache
- Vomiting
- Confusion
- Drowsiness
- Convulsions with or without loss of consciousness
- Irritability
- Neck stiffness

◆ **Danger signs of malaria**

The following are danger signs of malarial and once identified the patient should be urgently referred to a health facility;

- High fever
- Profuse vomiting
- Confusions
- Drowsiness
- Convulsions with or without loss of consciousness
- Neck stiffness
- Anaemia

◆ **Home management of malaria**

The home management of malaria comprises the following;

- Controlling fever by tepid sponging and giving paracetamol in appropriate doses
- Treating all under-five children with fever by LA in appropriate doses
- Giving patient more oral fluids
- Encouraging pregnant women to get a dose of SP at the beginning of 2nd trimester and the start of third trimester
- Referring all cases with signs of severe malaria, not responding to treatment and adults with signs of malaria

◆ Preventive and Control measures of Malaria

The following are preventive and control measures of malaria;

- Environmental sanitation to prevent mosquito breeding such as cutting bush around homes, draining all stagnant water, destroying water collecting vessels-
- Promotion of hygiene, sanitation and vector control
- Use of other vector control measures.
- Use of impregnated bed nets.

◆ IEC messages on the prevention of Malaria in the community

The appropriate IEC messages on the prevention of Malaria that Health Surveillance Assistants should communicate to the community are;

- Use of personal protection measures such as impregnated bed nets.
- Appropriate treatment of malaria
- Mosquito control by killing adults larvae
- Environmental control measures such as draining all stagnant water, clearing bushy rivers, cutting grass around the house, keeping area clear of rubbish
- Use of Intermittent Preventive Treatment for pregnant women.

◆ Intermittent Presumptive Treatment in Pregnancy (IPTp)

- Intermittent Presumptive Treatment in Pregnancy are malaria treatment doses taken during pregnancy to prevent adverse effects of malaria infection such as anaemia, abortion, still birth or low birth weight. The doses are given on the assumption that every pregnant woman is infected with malaria parasite; the drug is given to clear off the parasites from the woman's body.
- In Malawi, SP is still recommended for IPTp despite discontinued use in treatment of malaria episodes

▪ Advantages of taking SP for IPTp

Pregnant women who take SP for IPTp are;

- less likely to suffer from anaemia

- more likely to have no abortions
- more likely to have no still births
- more likely to deliver normal weight babies more likely to have a healthy baby

▪ **Important health education messages on IPTp are;**

- Every pregnant woman should take SP for IPTp at least twice during pregnancy
- Every pregnant woman should start ANC first trimester to receive important services including IPTp
- Pregnant women who react to SP should seek advice from a health worker regarding malaria prevention in pregnancy

◆ **Insecticides Treated Bed Nets**

These are nets which have been treated with appropriate insecticide using a recommended formula; the use of these nets is a very important personal protection measure against mosquito bites. It is therefore the responsibility of Health Surveillance Assistants to motivate individuals, families and communities to use treated nets in order to prevent malaria.

▪ **The types of ITNs used in Malawi**

These ITNs can either be conical or rectangular and the two types are;

- Convectional ITNs
- Long lasting Insecticide net

▪ **ITNs distribution channels**

• **Public Sector**

The nets are distributed free of charge through health delivery system (ANC, Under-five clinic), and direct to the community through campaign. The colour of the nets is green. The ITNs are distributed to children under-five and pregnant women.

• **Commercial sector**

The nets are sold by private sector where any person is free to buy them. Malawi is moving towards long lasting nets that will not require yearly re-treatment.

▪ **The commonly used insecticides**

Deltamethrin is the insecticide that is currently used in Malawi and the others are;

- Permethrin
- Cyfluthrin
- Deltamethrin are all Pyrethroids.

- Bifenthrin
- Alpha cypermethrin
- Lambdacypermethrin

▪ Advantages of using ITNs

The major advantage of using ITNs is improved personal protection because;

- Mosquitoes are repelled or killed
- Head lice, ticks, bedbugs and cockroaches are killed
- Reduces exposure to mosquito biting
- The number of mosquitoes and population infected with malaria parasites are reduced.
- People sleeping without a net in rooms where treated nets are present may also be protected
- Cases of malaria are reduced in children using a treated net compared with those not using a net or those using untreated net
- Treated nets reduce child deaths

▪ Precautionary measures during the treatment of nets

The following precautionary measures have to be followed to avoid undesired effects that may occur during and after the treatment process;

- Precautions for protecting people
- Precautions to protect the environment
- Proper storage of insecticides
- Check expiry date of the insecticide before use

▪ Materials needed for treatment of nets

- Insecticide concentrate
- Water
- Plastic bag or shallow basin
- Protective gloves
- Measuring cylinder/or graduated container

▪ Treatment of nets

- Make sure all materials are available.
- Organize materials required
- Measure the amount of the required water.
- Dilute the insecticide concentrate accurately so that the required concentrate of insecticide is used
- Dip the net until it is thoroughly mixed.
- Dry net on the flat surface in a shade.

- **Net treatment options**
 - Mass dipping
 - Individual dipping
- **Care of ITNs**
 - Avoid smoke and dust
 - When it is torn, repair it immediately
 - Re-dip it after washing
- **Important health education messages on insecticide treated nets**

The following are the important health education messages that should be communicated to the community;

- Use treated nets every night
- Pregnant women and under-five children should get priority in the use of treated nets
- Sleeping under treated nets reduces mosquito biting
- Sleeping under treated nets reduces frequency of malaria illness in the household
- Use of Insecticide Treated Net saves expenditure on malaria treatment, travel to seek treatment and reduces work days loss
- Insecticide Treated Net kills mosquitoes and other nuisance insects such as ticks, bedbugs and head lice
- Ensure nets are retreated as recommended
- Old or torn nets provide protection if they are treated, but holes should be mended
- Washing nets frequently removes insecticides.

Acute Respiratory Infections(ARI)

Acute Respiratory Infection is infection of the respiratory tract, caused by bacteria and virus. Most infections are transmitted through inhalation of droplets, which can be spread from one person to another by coughing or sneezing.

◆ Common Acute Respiratory Infections

The common Acute Respiratory Infections in Malawi are;

- Pneumonia
- Otitis media
- Sore throat
- Cough

◆ The common signs and symptoms of ARI

The signs and symptoms of ARI usually are those of pneumonia and the most common ones are;

- Cough
- Fever
- Difficult breathing
- Chest in-drawing
- Rapid breathing or fast breathing;
Children less than 2 months 60 breaths per minute or more per minute, children 2 months up to 12 months 50 breaths per minute or more per minute and children 12 months up to 5 years 40 breaths per minute or more per minute
- Not able to drink

◆ The risk factors leading to the transmission of ARI

The risk factors leading to the occurrence and transmission of ARI are;

- Overcrowding
- Poor housing conditions i.e. dust, lack of ventilation
- Smoke
- Malnutrition
- Lack of immunization and Vitamin A supplementation

◆ Danger signs of pneumonia

Children with danger signs should be referred immediately and the danger signs of pneumonia requiring referral are;

▪ In young infant (2 months)

In this age group the danger signs include the following;

- Breathing rate more than 60/min
- Failure to breast-feed
- Convulsions
- Abnormally sleepy or difficult to wake
- Stridor in a calm child
- Grunting
- Apnea

◆ In children from 2 months to 5 years

In this age group the danger signs include;

- Chest in drawing
- Not able to drink
- Convulsions
- Abnormally sleepy or difficult to wake
- Stridor in a calm child

◆ Home care management of ARI

- While in the home and child has developed danger signs take child to the clinic; the child may have developed pneumonia observe for the following signs;
 - Breathing becoming difficult
 - Breathing becoming fast
 - The child is unable to drink
 - The child becomes more ill
 - The child developing convulsions or not feeding well
- Feeding the child; continue to feed the child during illness
- Increase feeding after illness
- Increase fluid intake, offer the child extra fluids to drink
- Increase breast feeding
- Clear the nose if it interferes with feeding

◆ Methods of controlling and prevention of ARI

All cases of ARI should be treated accordingly. Therefore refer all cases of ARI to the nearest health unit. Educate the people to;

- Use houses with adequate ventilation
- Avoid overcrowding
- Avoid use of cough remedies

Pneumonia in Under- five

◆ Case Definitions

Pneumonia in under-fives has two categories of case definitions as follows;

▪ Pneumonia

This is diagnosed in any child aged 2 months up to 5 years of age with cough or difficult breathing and when the breathing is;

- 50 breaths or more per minute in an infant 2 months up to 1 year
- 40 breaths or more per minute for a child aged 1 to 5 years

▪ Severe Pneumonia

This is diagnosed in any child aged 2 months up to 5 years with cough or difficult breathing with;

- Any of the following general danger sign; unable to drink or breast-feed, vomits everything, convulsions, lethargy or unconsciousness.
- Chest in-drawing

- Stridor in a calm child
- ◆ Referral of children
 - All children with danger signs should be referred to a health facility
 - Infants less than 2 months with fast breathing 60 breaths or more per minute are referred as serious bacterial infection

Diarrhoea Diseases

Diarrhoea disease is defined as the passage of three or more watery loose stools in 24 hours.

◆ Common acute Diarrhoea diseases in Malawi

The following are some of the common acute diarrhoea diseases in Malawi;

- Childhood diarrhoea caused by Rota virus
- Cholera
- Bacillary dysentery (Shigellosis)
- Amoebic dysentery (amoebiasis)

◆ Signs of common acute Diarrhoea diseases

Diarrhoea with fever and no blood in stool can also be accompanied by other illnesses like malaria. The following are signs and symptoms of most common diarrhoea diseases;

▪ Cholera

- Diarrhoea is usually rice watery stool
- Passage of stool is effortless
- No fever
- No blood in stool

▪ Bacillary dysentery

- Diarrhoea
- Fever
- Blood in stool

▪ Amoebic dysentery

- Diarrhoea
- no fever
- No blood in stool

◆ Signs of dehydration

Dehydration is the loss of large amount of water and salts from the body. The following are the signs of dehydration;

- Not able to drink or drinking poorly
- Sunken eyes
- Sunken fontanel in infants
- Fast, weak pulse
- A pinch of the abdominal skin goes back slowly into shape (inelastic skin)
- Patient is sleepy and irritable
- Lethargic or unconscious

◆ **Assessment of the degree of dehydration**

Assessment starts by looking at the appearance and the child's general condition; check to see if the child;

- is well and alert
- is lethargic or unconscious
- is restless and irritable
- has sunken eyes
- is able to drink or drinks poorly, drinking eagerly, thirsty
- abdominal skin goes back very slowly (longer than 2 seconds), or slowly (elasticity) when pinched

◆ **Classification of diarrhoea according to the degree of dehydration**

Severity of diarrhoea can be classified according to the degree of dehydration.

▪ **No dehydration**

- Appearance is well and alert
- Eyes normal
- Drinks normally, no thirst
- Skin pitch goes back quickly
- In infants fontanel is normal

▪ **Some Dehydration (any two of the following signs)**

- Patient is restless, irritable
- Eyes sunken
- In infants fontanel is slightly sunken
- Thirsty and drinks eagerly
- Skin pinch goes back slowly

▪ **Severe Dehydration (any two of the following signs)**

- Patient is lethargic or unconscious, floppy
- Eyes are very sunken and dry
- In infants fontanel is very sunken
- Drinks poorly or unable to drink
- Skin pinch goes back very slowly
- Little or no urine

◆ The feaco-oral transmission of diarrhoea diseases

Diarrhoea diseases are transmitted through feaco-oral transmission route. The disease occurs as result of accessing food and water contaminated by faeces and flies, into the mouth through contaminated fingers.

◆ Prevention of feaco -oral transmission of diarrhoea

The following are the measures of interrupting the feaco-oral transmission route in order to prevent diarrhea;

- **Feaces:**

Proper disposal of faeces using deep pit latrines

- **Fingers:**

Wash hands after going to the toilet and before cooking or eating

- **Food**

Food should always be properly cooked. Eating utensils should be cleaned and dried after use

- **Flies:**

Flies can be controlled by proper disposal of refuse in pits and faeces in latrines. Latrines should be covered and toilets screened.

- **Eating utensils**

These should be cleaned and dried after use

- **Water:**

Protection and chlorination of public water supply should strictly be followed

- **Health education:**

Educate mothers about the dangers of bottle feeding, instead encourage cup and spoon feeding methods and prolonged breast feeding

◆ Home management of diarrhoea

Home management of diarrhea should emphasize on the following;

- **Recommendations**

- Give extra fluids as much as child will take to prevent dehydration
- Continue giving these fluids until the diarrhoea stops. .
- Use recommended home fluids such as oral re-hydration salts (ORS) solution, food based fluids such as soup, rice water thin porridge and clean plain water.

- Breast feed more frequently and longer at each feeding
- Give the child plenty of nutritious food to prevent malnutrition.
- Practice exclusive breast-feeding.
- Continue to breast feed frequently.
- If the child is not breast-fed give the usual milk. If the child is 6 months or already taking solid food, give cereals or any starchy food mixed if possible, with green leafy vegetables, meat, and fish. Give fresh fruit juices, mashed banana to provide potassium.
- Give freshly prepared foods. Encourage the child to eat. Offer food at least 6 times a day. (Give some food after diarrhoea stops and give an extra meal each day for two weeks.)
- Take the child to the health worker if the child does not get better in 3 days or develops any of the following: many watery stools, repeated vomiting, and marked thirst, eating or drinking poorly, fever, blood in stool.
- Advise when to return to the health facility: when the condition worsens

▪ Importance of home management of diarrhoea and dehydration

Home management of diarrhoea has several advantages but it prevents;

- Dehydration
- Complications such as malnutrition, unconsciousness and death

▪ Rules for treating diarrhoea at home

There are basically three very important rules that must be followed when managing diarrhoea at home and these are;

- Give the child more fluids than usual to prevent dehydration
- Give the child plenty of food to prevent malnutrition
- Take the child to the clinic if the child does not get better in 3 days

◆ Materials for preparing ORS solution

The preparing of ORS solution will require the following materials;

- ORS sachets
- Clean 1 litre container
- Fanta bottle as a measuring bottle
- Safe water
- Clean basin
- Tablespoon

◆ Procedure for preparing Oral Re-hydration Solution

Mothers should be taught how to prepare ORS solution in the homes and the following is the procedure for preparing ORS solution;

- Wash hands with soap and water
- Measure 1 litre of safe drinking water in a clean container(it is best to boil and then cool the water)
- Open the sachet and pour all powder from one sachet into a clean container Pour the water into the container, mix well until the powder dissolves completely
- Taste solution so that you know how it tastes
- Tell mother that she should mix fresh ORS, each day in fresh container, keep container closed and throw away any solution remaining from each day (give 2 sachets to each mother to use at home)
- Empty the salt into 1 litre of safe drinking water and Stir up the mixture

◆ Administration of Oral Re-hydration Solution

ORS solution requires proper administration taking into consideration the dose and frequency and therefore mothers need to be taught on how to give ORS solution

▪ Patients between 0-2 years

50mls to 100mls after each loose stool

▪ Over 2 years

100mls to 200mls after each loose stool

▪ Give frequent sips from a cup For an older child

▪ If the child vomits

Wait for 10 minutes then give the solution more slowly (e.g. a spoonful every 2-3 minutes)

▪ If the diarrhoea continues after the ORS packets are used up

The mothers should give other fluids. The patient should then be referred to the hospital

▪ Emphasize to the mothers indications for referral

That is presence of general danger signs

◆ Prevention of diarrhoea

Diarrhoea comes about because of contaminated food, water and fingers by faeces into our mouth and therefore the best method of preventing diarrhoea is;

- Hand washing using running safe water

- Washing all fruits and raw food before eating

Cholera

A person over the age of five (5) years with severe dehydration or dies from acute watery diarrhoea is said to have or has died of cholera while a confirmed case is said to be any person with diarrhoea, vomiting, dehydration and has *Vibrio cholera* O1 or O139 isolated from the stool. In lay definition a cholera case is said to be any person over the age of 5 years with lots of watery diarrhoea. It is however very important to note that during an epidemic, a large proportion of cases of acute watery diarrhoea in persons aged 2 years and older will be due to Cholera.

◆ Transmission of Cholera

The route of transmission of cholera is Faeco-oral route which is through contaminated;

- Water
- Food during and after preparation
- Fruits and vegetables

◆ How *Vibrio* causes Diarrhoea

- *Vibrio cholera* is ingested through water or food that is contaminated by faeces;
 - Once the organisms are ingested they are normally destroyed by acid produced by a normally functioning stomach
 - The organisms that escape this destruction produce toxins, these toxins will then attach themselves to the walls of the intestinal
 - The intestines will then release a lot of water in response to the irritation caused by the toxins
 - This leads to the manifestation acute watery Diarrhoea.

◆ Symptoms of cholera

- Symptomatic cholera will manifest with the following symptoms;

- Acute profuse watery diarrhoea
- The stools are like 'rice water', this is the common symptom
- Vomiting and leg cramps common
- Dehydration (can lose up to 10% body weight)
- Hypo-volaemic shock
- Renal failure and death may follow
- There is no fever or abdominal cramps

◆ Risk factors for cholera

Risk factors for the occurrence of cholera are;

- Poor hand washing practice

- Areas without safe water (unprotected shallow wells)
- Areas without good sanitation (pit latrines, refuse pits)
- Rainy season
- Public feasting (weddings, funerals and other social events)
- Uncontrolled food vending in streets

◆ Preventive measures for cholera

Cholera epidemic is a public health concern; health education is the foundation for control of cholera outbreak. It is therefore the responsibility of Health Surveillance Assistant to inform the public and the media early to avoid panic in case of a suspected outbreak. All channels of communication must be used to communicate the following Key messages:

- Seeking care as quickly as possible
- Drinking ORS on the way to the health facility
- Observing water safety procedures in the home
- Observing strict hand washing
- Proper food preparation and storage
- Excreta disposal either in the latrine or toilet
- Use all channels of communication

◆ Collection and transportation of cholera specimens

The collection and transportation of cholera specimens should follow the following procedure;

- Collect specimen from fresh stool or rectum with a swab from a tube of Cary-Blair transport medium
- Insert swab back into the tube break stick and seal the tube
- Label the tube with specimen's number, patient's name and date of collection
- Send the specimen to the lab as soon as possible

◆ Recording basic information in register

When recording the date consider using a separate 'epidemic register' during an epidemic. The basic information that needs to be recorded in the register should include the following;

- Date, name, age, sex, address
- Specimen collected
- The result
- Treatment given
- Outcome this includes whether the patient is alive, dead or referred

◆ Data needed during cholera investigation

The data that needs to be recorded, if relevant, for each cholera case during cholera investigation includes;

- Recent travel history
- Contact with persons with diarrhea
- Recent attendance at a funeral and the cause of death of deceased should be noted
- Water sources for bathing ,drinking, cleaning kitchen utensils
- Food history
- Occupation

◆ Principles of Cholera Case Management

▪ Good history taking

This is critical for diagnosis during the first contact with the patient by use of cholera case definition

▪ Proper Patient Examination:

Very vital for determining and ascertaining the weight and level of dehydration of the cholera patient

▪ Timely Assessment of Patient Progress

This is especially for those patients on Plans B and C

▪ Good Medical Practice:

Requires that those managing cholera cases examine and read instructions and labels of all the tools and medicines being used to determine for instance number of drops per millilitre passing through the giving set and the cannula in use

◆ The goal for cholera case management

The goal for cholera case management is to re-hydrate and replace electrolytes as such;

- 80-90% of cholera patients can be re-hydrate with Oral Rehydration Salts (ORS)
- Severe dehydration will require IV therapy
- Ringers Lactate is the best IV solution
- In severe dehydration, antibiotics should be administered to reduce stool volume, duration of diarrhoea and infectivity
- Treatment procedures adopted should be explained to the patient or guardian
- The patient will require feeding as well.

◆ Steps in cholera case management

The following are the steps to follow in cholera case management;

- Assess for level of dehydration
- Re-hydrate the patient and maintain hydration
- Monitor and reassess frequently
- Replace ongoing fluid losses
- Give antibiotics to severely dehydrated patients only

- Feed the patient
- Teach the patient and family about treatment and prevention of cholera

◆ Cholera Patient with Severe dehydration

Plan C cholera management is the protocol that is used in managing severely dehydrated cholera patients and it starts by giving IV fluids immediately and Ringers Lactate is the fluid of choice. Antibiotics should be given to the patients who have severe dehydration, which is DCN 300 mg stat for adults, Erythromycin 10 mg/kg, 3 times a day for 3 days for children)

▪ For patients aged 1 year and over:

In first 30 minutes give patient 30ml/kg of Ringers lactate then give 70ml/kg in 2 hours and 30 minutes

▪ For infants less than 12 months:

In the first 1 hour give the patient 30ml/kg of Ringers lactate then give 70ml/kg in 5 hours

- Give ORS if patient can drink (5 ml/kg/hour)
- Monitor very frequently by checking patient's condition and that the IV is running well
- After giving the first 30ml/kg body weight radial pulse should be strong and blood pressure should be returning to normal
- Reassess adults after 3 hours and Reassess infants after 6 hours; If there is still severe dehydration, repeat Plan C, if some dehydration - start Plan B and if no dehydration start Plan A

◆ Cholera Patient with Some dehydration

Plan B cholera management is used in managing patients with some dehydration and this follows the following protocol;

- Give ORS according to how the patient is responding
- Maintain hydration by giving ORS for each loose stool

◆ Cholera Patient with No dehydration

Plan A cholera management is the management protocol used for managing patients with no dehydration and this involves the giving of ORS

◆ Procedures for discharging cholera patients

A well managed patient can be discharged within 24hrs, however when discharging cholera patients the following procedures should be followed;

- Suspected patients should remain at health facility until diarrhoea and vomiting have stopped
- After correcting the dehydration, the patient should be continuously monitored closely to replace ongoing losses of fluids
- The patient should be advised to return if:
 - there is increased number of stools
 - the patient is eating or drinking poorly
 - there is marked thirst
 - there is repeated vomiting
 - there is fever
 - there is blood in stools

- ◆ **Cholera response measures**

In case of a suspected cholera case the following are the cholera response measures to follow;

 - Collect a stool specimen from the first 5 suspected cholera patients seen, for confirmation of the diagnosis and for drug sensitivity.
 - Isolate and treat all cholera patients using standard treatment guidelines.
 - Avoid or limit community gatherings such as feasts, weddings and funerals.
 - Provide safe domestic water to the community through water chlorination.
 - Ensure proper faecal disposal.
 - Ensure proper food hygiene
 - Bury dead bodies immediately with supervision of health workers.

- ◆ **Management of cholera camps**

The management cholera camps should follow laid down basic principles and these include;

 - Site cholera camps where they can be accessible by as many villages as possible i.e. outskirts of villages. Where possible avoid schools, churches and mosques
 - Observe strict barrier nursing techniques
 - Restriction of visitors
 - Use of Personal Protective Equipment (PPE) by health workers and guardians
 - Hand washing observed every time a patient is attended to using chlorinated water
 - Disinfect soiled linen, utensils and floors by use of 0.5% chlorine
 - At the entrance put a rag soaked in 0.5% Chlorine solution and ensure that it is wet all the time
 - Every camp should be supervised daily by the officer in charge of the nearest health facility
 - Mop the floor at least every 6 hours or disinfect contaminated floors using 0.5% chlorine solution

- Ensure availability of safe and adequate water
 - Provide emergency latrines (preferably for male and female) and waste disposal site.
 - Ensure adequate light both during the day and night
 - At any one time, a camp should have at least two health workers during an outbreak
 - Ensure that every patient is recorded adequately
 - Ensure availability of drugs and supplies all the time
- ◆ **Cholera burial**
- Prepare 0.5% stock solution
 - Close all necessary orifices with 0.5% stock solutions
 - Decontaminate the dead bodies using 0.5% stock solutions
 - Do not bath the dead body
 - Bury the same day under supervision
 - Limit number of people handling the dead body
 - No feasting
 - Disinfect all terminal materials
 - Wash hands thoroughly after burial

TUBERCULOSIS

Tuberculosis is a communicable systemic disease caused by the Tubercle bacillus germ. The germs settle anywhere in the body but most commonly in the lungs.

◆ **Modes of TB transmission**

The most common mode of transmission is;

- By inhalation of droplets containing tubercle bacillus, which can be spread from one person to another by coughing or sneezing.

◆ **Signs and Symptoms of TB**

Some symptoms of TB can mimic other illnesses, so it is important for the person who has signs suspected to be TB to go to a health facility for a check up and proper assessment. However suspect Pulmonary Tuberculosis on a patient presenting with the following signs and symptoms:

- Persistent cough for three weeks or more:
- Fever
- Sweating at night, even when it is cold
- Chest pains
- Shortness of breath
- Loss of appetite
- Loss of weight
- Coughing up blood mixed with sputum

◆ **The classification of TB**

TB is classified according to site of disease as follows;

- **Pulmonary**

When the infection is in the lungs

- **Extra pulmonary**

When the infection involves other parts of the body other than the lungs. e.g. Spine

- ◆ **The main categories of TB patients**

The following are the four main categories of TB patients;

- **New Patient**

A patient who has never taken anti-tuberculosis drugs for more than one month

- **Relapse Patient**

A patient who has previously been treated and completed treatment and has now developed active tuberculosis with smear-positive sputum

- **Failure of treatment**

A newly diagnosed tuberculosis patient who is sputum-smear positive 5 months or more after the start of chemotherapy

- **Treatment interrupted (default)**

A patient who interrupted treatment for more than 2 months after at least one month of chemotherapy and is subsequently found to have smear-positive tuberculosis

- ◆ **Control of TB**

It is important for a TB patient to take all the TB drugs regularly, on schedule and for the full duration of the treatment or else the disease may become incurable and control may be difficult; however the following are the methods of TB control;

- **BCG Vaccination**

This is given as early as possible in life preferably at birth

- **Case Finding and Treatment**

Case finding and treatment are considered to be one entity. This breaks the chain of tubercle bacilli and therefore controlling the spread of the disease. This also improves the burden of tuberculosis in the community

- ◆ **Drugs used in TB treatment**

The following are drugs currently used in TB treatment in Malawi;

- Rifinah (RH)
- Isoniazid (H)
- Pyrazinamide (Z)
- Ethambutol (E)
- Combined Ethambutol/ Isoniazid (EH)
- Streptomycin (S)

◆ Directly Observed Treatment (DOT)

This is where a supervisor watches the patient taking drugs especially during the intensive phase of treatment. A DOT monitoring form is used for treatment supervision and the actual number of tablets is recorded every time the patient takes drugs. A supervisor can be a guardian or a community health worker e.g. HSA

▪ Tasks of a treatment supervisor (HSA or Guardian)

A treatment supervisor is a very important person in TB treatment and the tasks of a treatment supervisor are as follows. :

- Checking the drugs to make sure they are the correct the drugs.
- Giving the patient the anti-TB drugs at each appointed according to the schedule.
- Observing the patient swallow the anti-TB drugs
- Record on the DOT monitoring form each time the patient takes the drugs.
- Encouraging patients to eat food with the drugs to reduce nausea
- Observing for any possible side effects
- Refer the patient to a health facility if side effects continue.
- Encouraging the patient to continue TB treatment until the whole treatment duration is finished.
- Encouraging the patient to go to a health center to collect a re-supply of drugs every 2 weeks of the intensive phase of treatment
- Making sure the patient submits sputum for follow up examination when due.

▪ Possible side effects or Bad drug reactions and the response of HAS

Non- dangerous side effects

- Nausea, Loss of appetite, Stomachache, gas
- Orange/Red urine
- Joint pains
- Burning sensation in the feet

Response to non dangerous side effects

- Continue Treatment

- Reassure patient
- Give drugs with food, milk or phala
- Refer to health centre for further assessment and management

Dangerous side effects

- Itching skin rash
- Skin and or eyes turn yellow
- Vomiting repeatedly
- Deafness
- Dizziness
- Visual impairment

Response dangerous side effects

- STOP treatment
- Send patient immediately to a health facility

◆ The role of the Health Surveillance Assistant on TB control at community level

At the community level HSA has following roles on TB control;

- Identification and referral of TB suspects to HC for screening
- Monitoring of DOT
- Tracing of TB defaulters
- Referring of failure TB cases to health centres.
- Ensuring proper documentation
- Monitoring and evaluation

◆ Information Education and Communication messages on TB control

The following are the important IEC messages on TB and should be communicated to the community;

- All babies born should receive BCG at birth.
- A person with a cough of 3 weeks or more should submit sputum for microscopy.
- Early TB diagnosis and treatment are essential.
- TB suspects should bury their coughed up sputum and the mouth and nose with their palm when coughing and sneezing to restrict the spread of the bacilli
- Irregular taking of TB drugs can lead to a patient develop Multi Drug Resistance (MDR).
- The treatment supervisor's main role is to make sure that patients take all drugs regularly; on schedule and for the full duration of the TB treatment and watch the patient swallow the drugs each time they are taking a dose
- All sputum positive patients should submit sputum at the end of two and half months to confirm with the laboratory if they have converted to negative and at 7 months to confirm if they are cured or not.
- TB is curable even in the presence of HIV

- TB drugs are given free of charge.
- TB treatment may have side effects. The patient who notices the side effects should inform the treatment supervisors for appropriate action.
- The TB treatment supervisor is there to help the patient get well and prevent TB from spreading to the family and community.

Sexually Transmitted Infections

◆ Common Sexually Transmitted Infection Syndromes in Malawi

The following are the common Sexually Transmitted Infections in Malawi;

- Urethral discharge
- Genital Ulcer disease
- Abnormal vaginal discharge
- Bubo
- Lower abdominal pains
- Acute scrotal swelling
- Persistent or recurrent urethral discharge
- Balanitis (itching or discharge on gland penis)
- Neonatal conjunctivitis.

◆ The signs and symptoms of each syndrome

The common signs of STI are;

- Genital discharge
- Genital ulcers

◆ Complications of Sexually Transmitted Infections

The possible complications of STI are as follows;

- Congenital syphilis and neonatal abnormalities (Effects on the foetus and the neonate)
- Chronic lower abdominal pains (Pelvic Inflammatory Disease)
- HIV facilitation
- Infertility
- Urethral strictures.
- Cancer of the cervix
- Prostate cancer

◆ The importance of partner notification on Sexually Transmitted Infections

Partner notification is very important because;

- This prevents re-infection and further, spread of the infection.
- It provides opportunity for identification of asymptomatic persons (particularly women) at an early stage and prior to development of complications

◆ Contact tracing of Sexually Transmitted Infections

The process of contact tracing of Sexually Transmitted Infections is as follows;

- Take note of the name and address of the patient
- Ask the patient about name and address of his or her contacts or partners
- Visit or write the contact to ask them to come to the clinic.
- Use the partner notification slip to the client to be given to his or her contacts.

◆ Information Education and Communication messages on Sexually Transmitted Infection

The individuals and families have to be educated on STI and the following are the key IEC messages;

- Tell the patient to inform his or her sexual partner to go for treatment
- Tell the patient on how to take medicine
- Tell patient to refrain from sex until all the signs and symptoms are gone and that they and their partners have fully completed their treatment
 - Tell patients to return to the clinic if the disease reoccurs or treatment fails
 - Let them use condoms and teach them on how to use it
 - Explain the risk and complications of STI
 - Strongly advise to have one faithful partner

◆ The role of the Health Surveillance Assistants in the management of Sexually Transmitted Infections in the community

The role of Health Surveillance Assistant in the management of STI in the community is that of;

- Educator
- Advisor
- Motivator
- Advocator
- Counselor
- Case identifier
- Referring of cases to the nearest health facility.
- Following up patients

HIV and AIDS

◆ The Mode of HIV transmission

The common modes by which HIV is transmitted are;

- Having unprotected sexual intercourse with an infected person
- From an infected mother to the baby before and during delivery and through breastfeeding
- Transfusion with infected (unscreened) blood
- Sharing of skin piercing instruments infected by blood such as un-sterile needles, razor blades

◆ **Misconceptions and believes on HIV and AIDS transmission**

The Clarification on common misconceptions or rumours about HIV/AIDS transmission is as follows;

▪ **AIDS can not be transmitted through:**

- Shaking hands with people
- Shaking hands with an infected Person
- Staying in the same room with a person who has AIDS
- Using the same public toilet, telephones, with an infected person
- Insect bite (mosquitoes, bed bugs)
- Stepping on infected persons clothes
- Air, water or the food we eat

▪ **Taking a capsule before sexual intercourse does not protect against AIDS.**

▪ **AIDS has no cure.**

◆ **Cultural practices leading to HIV and AIDS spread**

Some of the cultural practices that may lead to HIV/AIDS spread and should be discourage among the communities practicing them are;

- Chokolo
- Fisi
- Kuchotsa imfa
- Kuchotsa fumbi etc

◆ **Prevention of HIV and AIDS**

HIV and AIDS transmission can be prevented by;

- Abstinence from sex until marriage
- Having only one faithful sexual partner
- Use condoms
- Not having unprotected sex with an infected person
- Not becoming pregnant if infected
- Not sharing, piercing instruments such as needles, razor blades
- Avoiding having unnecessary injections from untrained health personnel

◆ **Prevention of mother to child transmission of HIV (PMTCT)**

- Use of condoms
- Administration of Niverapine to the mother and baby
- Usage of different feeding options that are affordable, feasible, accessible, safe and sustainable

◆ Health education messages on HIV and AIDS

The important health education messages that should be communicated to individuals, families and the community on HIV and AIDS are;

- The modes of transmission
- The methods of prevention with emphasis on having only one partner and condom use
- Youth abstinence from sex until marriage and use of condoms if they have sex
- The benefits of HIV testing counseling (HTC)

1.8. Acute Flaccid Paralysis (AFP)

Acute Flaccid Paralysis is basically defined as a sudden weakness of a limb or limbs

◆ Standard Case Definition

Any case of acute paralysis including guillain-barre syndrome (GBS), in a child less than 15 years of age for which no other cause is apparent, or a patient of any age diagnosed as polio by a medical officer.

◆ Lay Case Definition

Sudden weakness or paralysis in the leg or legs and or arm or arms not caused by injury in child less than 15 years of age

◆ Activities on confirmation of diagnosis

Once a case has been detected, the following should be done to confirm the diagnosis;

- Advise the guardian to take the patient to the Health Facility for further examination by a Clinician
- Complete the Case Investigation Form.
- Ensure two stool specimens are collected within 14 days of onset of paralysis and the collection of the specimens should be 24-48 hours apart
- Keep the specimens in the refrigerator
- Send the stool specimens to the District Coordinator through reverse cold chain, that is vaccine carrier with ice packs
- Ask for detailed physical address for follow-up examination

Measles

Measles is a disease caused by a virus and according to disease surveillance it has the following definitions;

◆ Case Definitions

▪ Standard Case Definition

History of;

- generalized blotchy rash

- fever
- with or without cough
- with or without runny nose
- with or without red eyes.

▪ Lay Case Definition

History of;

- rash
- fever
- with or without cough
- with or without runny nose
- with or without red eyes

◆ Laboratory Confirmed Case

Suspected case of measles with positive serum IgM antibody, and not vaccinated in the preceding 4 weeks.

◆ Confirmed by epidemiologic linkage

A suspected case of measles not investigated serologically but has possibility of contact with a laboratory-confirmed case, living in the same geographical area, whose rash onset was within the preceding 30 days

◆ Activities involved in case detection, investigation and specimen collection and transportation

Any suspected measles cases with rash and fever should be taken blood specimen at a Health Facility. The roles of a Health Surveillance Assistant in suspected measles cases include the following;

- Facilitation of the collection of blood sample at a health facility for serologic testing
- Transporting the specimens to the District Coordinator through a vaccine carrier with icepacks and this is known as reverse cold chain
- Notifying the EPI Coordinator or a surveillance focal person to make sure that the case is reported
- Completing case investigation form and sending the form together with the specimen to the District coordinator
- Line listing the cases using Line Listing Form
- Facilitation of discontinuation of specimen collection once an outbreak is confirmed that is 3 IgM positive measles cases
- Facilitation of resumption of collection of blood specimens from all suspected cases if there is no measles outbreak that is less than 3 IgM positive measles cases.
- Managing cases with Vitamin A, supportive treatment, etc

Neonatal Tetanus

◆ Case Definitions

The following are categories of case definitions for Tetanus;

▪ Suspected case

Any neonatal death between 3 to 28 days of age in which the cause of death is unknown; or any neonatal death reported as having suffered from neonatal tetanus (NNT) between 3 to 28 days of age and not investigated.

▪ Confirmed case

- Any neonate with a normal ability to suck and cry during the first 2 days of life, and who between 3 and 28 days of life cannot suck normally and becomes stiff or has convulsions or both.
- NNT cases reported from hospitals are considered confirmed.

▪ Activities on reported Neonatal Tetanus case

The activities to be done when an NNT case has been reported are;

- Fill the Neonatal tetanus case investigation form for each case.
- Send the filled form to the district for onward transmission to EPI Unit

▪ Response to a confirmed case of Neonatal Tetanus

The following activities should be initiated by the district when there is a confirmed NNT case in the area;

- Respond by immunizing all women of childbearing age in the community where the case originated and surrounding communities.
- If a woman had the first dose only, immunize the second dose if due.
- Conduct the immunization sessions twice: 1st dose, first contact and 2nd dose after 4 weeks.
- Endorse the vaccinations given in their health profile books and add the number of immunized women to your routine data.

1.12 Bilharzia

Bilharzia is defined as a parasitic disease caused by worms also known as blood fluke called Schistosomes. The worms live in the veins of large intestines or the urinary bladder

◆ The common types of Bilharzia

There are two types of bilharzia found in Malawi and these are;

- Urinary bilharzia caused by "Schistosoma Haematobium"
- Intestinal bilharzia caused by "Schistosoma Mansoni"

◆ Signs and symptoms of the two types of Bilharzia

The following are signs and symptoms of Bilharzia;

▪ Urinary bilharzia

- Pain on passing urine
- Blood in urine seen at the end of the stream of urine

▪ Intestinal bilharzia

- Blood in faeces
- Stool with blood and slimy substance in stool known as mucus
- abdominal pains
- Enlargement of the liver and spleen

◆ The dangers of Bilharzia

Bilharzia can cause the following conditions which are a danger to life;

- Anaemia
- Ascitis
- Infertility
- Cancer of cervix and bladder
- Portal hypertension
- Enlargement of Kidneys
- Impairing the cognitive performance and growth of children
- Reducing the work capacity and productivity of adults.

◆ Risk groups in the communities

Groups of people who are at risk of getting bilharzia in the communities are;

- School-age children
- Fishermen
- People involved in irrigation
- Rice and sugar cane farmers

◆ The vicious circle of Bilharzia transmission

The vicious circle or transmission route through which the bilharzia is transmitted is as follows;

- Starts with an infected person urinating or defecating in or near water

- Eggs hatch into larva called miracidium
- The miracidium enters suitable snail
- In the snail the miracidium then develops into cercaria
- After development the cercaria comes out of snail and goes into water
- Cercaria penetrates the skin of a person in contact with water of the river, stream or lake which is infested with Cercaria

◆ Measures of interrupting the Bilharzia transmission

Interruption of the Bilharzia transmission route in order to control and prevent Bilharzia is based on the following measures;

▪ Treatment

- Mass treatment where prevalence is >50%
- Targeted treatment where prevalence is 30% - 50%
- Treatment of cases at health facilities

▪ Prevention

Intensifying health education activities on the following

- Proper use of latrines and toilets
- Avoiding walking through infested water
- Avoiding swimming in infested rivers, streams, ponds and canals
- Use of safe water supplies
- Environmental management
- Water management in schemes
- Modification of snail habitats

1.13. Other Worm Infestations

◆ Worms commonly found in Malawi

Worm infestation is a condition whereby a person has worms in the body and the common worms in Malawi are;

- Hook worms
- Round worm also known as Ascaris
- Tape worms
- Pin worms

◆ The transmission route of worms

Routes of transmission of Worms are;

Ingestion through contaminated food or dirty hands

- Round worms
- Tape worms
- Pin worms

Penetration of the skin by larvae through bare foot

- Hookworms

◆ Signs and symptoms of worm infestation

The following are signs and symptoms of worm infestation;

- Anaemia
- Loss of appetite
- Weakness and tiredness
- Abdominal pain
- Diarrhoea
- Passing worms in stool
- Vomiting of worms
- Nausea

◆ Risk groups to worm infection

Groups at risk of worm infestations are;

- Under- five children
- School age going children
- Pregnant women

◆ The dangers of worms

The effects of worm infestation that may be ad danger to life are;

- Anaemia
- Retarded growth
- Intestinal obstruction

◆ Measures of interrupting worm transmission

The community needs to be communicated to on measures to be used in interrupting worm infestation transmission route and these measures are;

- Treatment

Training Manual

- Mass treatment
- Case treatment in Health Centre
- Use of pit latrines or toilets
- ◆ Prevention of worms

In order to prevent worms there is need to intensify IEC in the following:

- Wearing shoes
 - Washing fruits and vegetables before eating
 - Avoidance of eating soil when pregnant
 - Hand washing with soap at all times
-

UNIT 15: PATIENTS AND CLIENTS FOLLOW-UP

INTRODUCTION

Patient and client follow-up is a very important component in patient management and health provider and client relationship. This maintains contact with the patient or client and provides an opportunity to assess whether the patient or client adhere to instructions and comply with treatment regimes.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Explain the purpose of patient/clients follow-up in the community
2. Outline the types of patients or clients follow-up in the community
3. Conduct patient follow-up in the community

Time allocation: 2 hours.

Materials needed: Markers, Flip chart, Registers

Teaching and Learning Methodology: Lecture discussion, Group discussions, Demonstration, Role Play

- Participants will be expected to have individually read through the content before the session.
 - Start by reviewing the objectives and then briefly lecture on Patient and Client follow-up
 - Allow the participants to actively participate in the session by asking probing questions and allowing them to brainstorm before you tackle any objective.
-

1. THE PURPOSE OF PATIENT AND CLIENT FOLLOW-UP IN THE COMMUNITY

Apart from maintaining patient and client contact, patient and client follow-ups have the following purposes;

- ◆ Identification of needed resources
- ◆ Identification of other problems that may have developed as secondary to the primary problem
- ◆ Provision of sustainable health care
- ◆ Obtaining first hand information of the patient

2. THE TYPES OF PATIENTS AND CLIENTS TO BE FOLLOWED-UP IN THE COMMUNITY

Patients and clients who are targeted for follow-up in the village are the following;

- Chronically ill patients
- Terminally ill patients
- Patients on long term drugs
- Malnutrition cases
- Clients on family planning methods
- Epidemic cases

3. CONDUCT PATIENT AND CLIENT FOLLOW-UP IN THE COMMUNITY

The procedure of conducting patient follow-up should follow the following steps;

Preparation for the visit

- ◆ Read the case history/notes
- ◆ Collect the forms
- ◆ Prepare objectives for the visit
- ◆ Discuss with other care providers
- ◆ Arrange for transport
- ◆ Arrange date and time
- ◆ Make necessary communications

Procedure for conducting patient of follow up

- ◆ Observe the environment for resources, needs, problems
- ◆ Check if instructions are followed
- ◆ Check for any improvement of the condition
- ◆ Identify new problems
- ◆ Check supply and utilization of remedies

UNIT 16: INTERPERSONAL COMMUNICATION AND COUNSELING

INTRODUCTION

After learning the core modules and acquiring the necessary skills, the Health Surveillance Assistance needs to pass on the information and some skills to individuals, families and the community. For this to be achieved a Health Surveillance Assistant needs to acquire knowledge and appropriate attitude and skills of effective communication since communication is a two way process of sharing information, ideas, experiences and feelings through a channel to another person who will react by giving a feedback. The feedback will be in the form of utilization of health services, participation and active involvement in health related activities within the community.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to;

1. Explain the importance of communication
2. Utilize various types of communications
3. Identify the channels of communication
4. Analyze the communication process
5. Identify barriers to effective communication
6. Describe the types of counseling
7. Identify the barriers to counseling
8. Counsel patients and clients in the community

Time allocation: 1Hour.

Materials needed: Markers, Flip chart

Teaching and Learning Methodology: Lecture discussion and Group discussions, Role Play

- Participants will be expected to have individually read through the content before the session.
 - Start by lecturing and discussing the three main components of Interpersonal communication, Definition of communication, Creating Rapport and Gathering Information, for a care plan
 - Allow the participants to role play and go through each component explaining each skill and implications these skills can bring if not properly performed.
-

1. THE IMPORTANCE OF COMMUNICATION

Communication as a process in health activities aims at sharing information so that the receiver adopts a healthful behaviour, it is therefore very important that the Health Surveillance Assistant understands the importance of effective communication skills when working with people in the community. The importance is to;

- reach a common understanding
- change behaviour
- inform
- educate
- entertain

2. TYPES OF COMMUNICATIONS

There are basically two types of communication and these are;

◆ Verbal

This is the use of words in the form;

- Spoken or sung words
- Written words

◆ Non-verbal

This is the use of;

- Body language
- Drums
- Gestures
- Pictures

3. THE CHANNELS OF COMMUNICATION

The following are some of the communication channels that can be used when interacting with individuals, families and communities;

- Face to face
- Letter
- Radio
- Pictures
- Pamphlets
- Group discussion
- Television
- News papers

4. THE COMMUNICATION PROCESS

For information to be effectively communicated it goes through a process as follows;

- ◆ **Source**
The source is the person who carries and sends the information or message, idea, skill, attitude or feeling to the receiver also known as the audience
- ◆ **Message**
This is the information, idea, skill, attitude or feeling to be communicated to the receiver or audience
- ◆ **Channel**
This is the means by which the information or message, idea, skill, attitude or feeling is transmitted from the source to the receiver or audience and this could be through, a letter, report, songs, radio, role plays, drama, television etc
- ◆ **Receiver**
This is the person who is targeted for the information or message, idea, skill, attitude or feeling being communicated.
- ◆ **Feed-back**
This is what the receiver or audience sends back to the source or sender as regards to the understanding and acquisition of the information or message, idea, skill, attitude or feeling communicated. Communication is said to be successful where the feedback is what is desired.

5. BARRIERS TO EFFECTIVE COMMUNICATION

Despite the clearly set process and channels there are several challenges that are met to make communication effective. Some of the challenges that are a barrier to effective communication are as follows;

- ◆ **In appropriate dressing**
The communicator can be a source of destruction if the dressing is inappropriate because this can divert the attention of the audience, instead of listening to what is being communicated by the communicator; the audience may either be admiring or simply laughing at the type of dressing the communicator is putting on.
- ◆ **Inaccurate information**
This comes about as a result of lack of knowledge, experience or inadequate preparation by the communicator.
- ◆ **Lack of trust**
The communicator may have demonstrated an attitude that may not be in compliance to what is being communicated or may have demonstrated lack of knowledge or experience in a previous session, this can create lack of trust among the people the communication is intended.

◆ **Differences in language**

The communicator may not be knowledgeable or fluent with language of the audience and therefore the use or application of certain terminologies may be communicating a different message and not the one intended for the audience.

◆ **Tiredness, Busy schedules, Illnesses or Body pains**

Communication occurring when individuals, families or the communities are too tired, too busy and have illnesses or body pains will not achieve the intended purpose because these situations and conditions will divert their attention making the communication ineffective

◆ **Illiteracy**

Where information is communicated to an individual, families and communities where there is illiteracy and to understand the messages will require the reading of leaflets or instructions and interpretation of certain terminologies, communication in that scenario can not be effective

◆ **Different Cultural believes and values**

Communicating messages that have an implication on cultural believes and values posses a challenge in making the communication effective, especially where there is a mixture of sexes and different age groups within the audience and the messages having cultural conflicts in terms of delivering the messages in one group regardless of age and sex differences

◆ **Unsuitable venue**

Depending on the message being communicated a venue can be a destructor in trying to make the communication effective. Every message requires an appropriate venue to make communication effectively for the purposes of acquiring knowledge, attitude and skills intended.

6. TYPES OF COUNSELING

There are basically two types of counseling and these are;

◆ **Crisis counseling**

This is the counseling that occurs as an emergency or abruptly

◆ **Planned counseling**

This is the type of counseling that occurs in routine planned services

7. THE BARRIERS TO EFFECTIVE COUNSELING

The following factors which are basically derived from communication process should be considered to make counseling effective;

- Personality of the counselor
- Socio-economic background of the counselee
- Beliefs and cultural values of the counselee
- Skills and experience of the counselor

8. COUNSELING PATIENTS AND CLIENTS IN THE COMMUNITY

8.1. Components of the interpersonal communication and Counseling

For effective counseling to occur the following are the components;

- Creating a caring environment
- Gathering information for care plan
- Counseling effectively

8.2. Interpersonal Communication and Counseling Skills

Under each component the following skills need to be practiced to effectively communicate and counsel patients or clients;

◆ Building a rapport

This skill creates an environment that is conducive for interpersonal communication and the following should be strictly observed during rapport building;

- Greeting the patient or client
- Making the patient or client relaxed by smiling, maintaining eye contact and displaying appropriate body language
- Use of soft tone when communicating
- Explaining the purpose of the interaction
- Showing empathy

◆ Questioning and Listening

This skill enables the counselor to gather information for the purposes of coming up with the care or care plan. Questioning and listening skill requires the need to listen actively and the use of appropriate questions. The following should strictly be followed;

- Encourage dialogue through the use of open-ended questions
- Show that you are actively listening by head nodding, maintaining eye contact, making acknowledging sounds like yes, ok, right etc.
- Do not interrupt as the patient or client is talking
- Seek more information through probing questions
- Avoid making premature conclusions
- Reflect the feeling of the patient or client
- Acknowledge the patient or client by making the patient or client feel noticed and normal
- Paraphrase what ever the patient or client has said to ascertain that you are on the same level

◆ Counseling and Sharing Information

This skill helps the counselor to counsel effectively through creation of common understanding. There is a need therefore in this skill to follow the steps strictly;

- Ask if the patient or client understands the situation at hand
- Discuss and try to correct any misconception or rumours concerning the issue at hand
- Use simple and understandable non-medical language
- Ask for any questions or concerns that the patient or client may have
- Present what the patient or client needs to do in short sentences and in clear blocks of information
- Use visual communication materials when appropriate
- Ask the patient or client to repeat what is supposed to be done
- Ask if the patient or client agrees and will try to do what is being discussed
- Summarize and repeat key information
- Arrange for follow-up if indicated

EVALUATION OF THE SESSION
<ul style="list-style-type: none">▪ Evaluate the session by;▪ Having the participants interviewing each other▪ Allow each participant to interview at least 2 to 3 of the other participants▪ Have the other participants also participating in assessing fellow participants▪ Record the information on the worksheet▪ Allow the participants to give feedback to fellow participants▪ Summarize by giving a general feed back at the end of the exercise

UNIT 17: HEALTH EDUCATION

INTRODUCTION

Health education is said to be the outward and downward communication of "health knowledge" to individuals and communities supposedly with limited ideas on how to avoid illness or on how to cope with disease in order to promote health. Appropriate education in health calls for proper understanding of instructional methods and use of proper health education materials. This module is therefore designed to provide knowledge, attitude and skills in health education methodologies

LEARNING OBJECTIVES

By the end of the unit learner should be able to;

1. Explain the Aims of health education
2. Describe the qualities of a good health educator
3. Describe the health education methods
4. Explain the relationship between health promotion and health education
5. Describe the advantage and disadvantages of different media, materials and techniques for communication support
6. Plan for Information Education and Communication activities
7. Utilize the Interpersonal communication approaches

Time allocation:

18 hours Theory and 2 hours Practical.

Materials needed:

Markers, Flip chart, Health education visual and audio aids

Teaching and Learning Methodology: Lecture discussion and Group discussions, Role Play, Micro-teaching

- Participants will be expected to have individually read through the content before the session.
 - Start by lecturing on the definition of visual teaching and learning materials. Give examples of the visual teaching and learning materials
 - Then discuss how health education visual teaching and learning materials can be used when talking to individuals, community and family members for the purpose of gathering and sharing information in the provision of Primary Health Care services
 - Remind the participants that it is easy to remember things that you have seen than those you have heard
 - Refer the participants to the methods and different media, materials and techniques for communication support in their manual and go through each method and give relevant examples.
-

1. AIMS OF HEALTH EDUCATION AND DEGREES OF ACHIEVEMENT OF GOALS

All health programs tend to improve and promote health and well-being of individuals and communities, health education has an important role to play in such programs so as to create awareness and sensitize people in the programs.

◆ Aims of health education

The aims of health education in most health programs are as follows;

- To make health a valued community asset
- To help individuals and communities to become competent to be able to participate in community health activities
- To promote the development and proper use of health services

◆ Degrees of Achievement of Health education Goals

The degree to which these goals can be achieved is determined by a series of inter-related factors. These factors are;

- The availability of health advice and health services in which the individuals have trust
- The economic feasibility of putting into practice the health measures being advocated
- The accessibility of the proposed health practice in terms of the customs and traditions that individuals, families and groups observe, the beliefs that they hold and the attitudes of their peers
- The extent to which people already have the kinds of learning experience needed to enable them to understand or to desire the benefits to be derived from a new or modified health behaviour which may require personal sacrifice of financial, social or psychological in nature.

2. THE QUALITIES OF A HEALTH EDUCATOR

An effective health educator should be somebody who is;

- A role model
- Has communication skills
- Knowledgeable of health messages to communicate
- Able to plan

3. THE HEALTH EDUCATION METHODS

The selection of health education methods should be based on the type of audience to be taught, for example some education methods would target individuals, groups or communities. The health education methods are therefore divided into;

◆ Face to Face methods

These are interpersonal communication approaches which involve interaction between the health educator or worker and the audience. These methods are more effective in changing and forming attitudes about innovations. They are designed for reaching small numbers of people with health education messages. The interaction in these methods allows for exchange of ideas and views and this in turn allows the messages to meet specific needs of the intended

audience, this also allow for participatory learning and have the advantage of having an immediate feedback. These approaches include;

- **One to one**
This method is one of the most important encounter situations in Health education and it includes meetings in home visits in the community, meetings with individuals in communities to discuss health education issues. One to one method aims at giving information to persuade a person to perform or promote health behaviour.
 - **Counseling**
This method provides information for the patient or client to make an informed choice. It is a method that is used to help clients or patients to make a decision and come up with a care plan
 - **Group discussion**
This a method that helps members to build group consciousness and create a common understanding
 - **Health talks**
This presents specific health messages to individuals
 - **Meetings**
This is a method that creates public interest and awareness
 - **Demonstrations**
This method encourages active learning among the audience
 - **Role play**
This method focuses on presentation of controversial issues to accommodate different views
- ◆ **Mass media**
These methods are concerned with mass communication. These have wide coverage and create awareness, and sensitize individuals and communities. But the methods are deficient in obtaining immediate feedback. They consist of;
- Electronic media like radio and television
 - Printed materials like news papers, leaflets and posters
- ◆ **Traditional methods**
In education practice these assist in reinforcing interpersonal methods and mass media. These methods tend to dramatize “real” health situations. These include;
- Story telling
 - Songs
 - Drama

4. IMPORTANCE OF HEALTH EDUCATION

Health education is a very important component of Primary Health Care as it is a key tool in implementing PHC. Among the many advantages the following is a summary of the importance of health education;

- Promotion of health awareness among people
- Building the capacity of communities to change behaviour
- Adoption of healthier lifestyles among the people
- Motivation of the community to take ownership of their health
- Motivation of the community to be more involved in health-related activities
- Creation of an environment to empower the communities in the governance of health care services

5. ADVANTAGE AND DISADVANTAGES OF DIFFERENT MEDIA, MATERIALS AND TECHNIQUES FOR COMMUNICATION SUPPORT

There are basically three major Media, Materials and Techniques for Communication Support and these are, People based, Mass media and other media materials

◆ PEOPLE BASED

▪ Home visit

Main Advantages

- Establishes good personal relationships between community health workers and families
- Can provide information about families that cannot be collected otherwise
- Encourages families to participate in public functions, demonstration and group work

Main Disadvantages

- Community health worker cannot visit every family in the community
- Only families in accessible localities can be visited

▪ Public meetings and lectures

Main Advantages

- Easy to arrange
- Can reach many people
- Can have more than one speaker
- Creates public interest and awareness
- Stimulates follow-up discussions

Main Disadvantages

- Audience is usually passive
- Speakers may not understand audience's needs
- Difficult to assess success
- Audience might not learn the main points

▪ Group Discussions

Main Advantages

- Builds group consciousness
- Individual members of the group can understand where each member stands in regard to the discussed issue
- Provide chances for exchanging opinions and increase tolerance and understanding

Main Disadvantages

- Some members may dominate
- Sometimes difficult to control or to keep focusing on the main issue
- Requires trained leaders

▪ Role Playing

Main Advantages

- Facts and opinions can be presented from different viewpoints especially on controversial issues
- Encourages people to re-evaluate their stand and understanding on issues
- Allows audience to participate
- Deepens group insight into personal relations

Main Disadvantages

- Cannot be used in community meetings
- Some role players may feel upset by playing a role they do not agree with
- Requires careful preparation for the selection of the issue and actors
- Careful preparation is essential

▪ Drama

Main Advantages

- Groups can be active “learning by doing”
- Can attract attention and stimulate thinking if situations are effectively dramatized

Main Disadvantages

- Actors require attention in training and preparing script
- Preparation may be too difficult for a community worker
- Difficult to organize because it requires considerable skills and careful guidance by the community worker

▪ Demonstrations with a small group

Main Advantages

- Participants can be active and learn by doing
- Convinces audience that things can easily be done

- Establishes confidence in community health workers' ability

Main Disadvantages

- Requires preparation and careful selection of demonstration topic and place
- Outside factors can affect demonstration results and consequently might affect confidence in the health worker

▪ Case Study

Main Advantages

- Can illustrate a situation where audience can provide suggestions
- Can elicit local initiatives if the case corresponds to local problems

Main Disadvantages

- Difficult to organize
- Rewording of events and personalities might reduce the effectiveness of the case
- Some audiences may not identify themselves with the case

◆ MASS MEDIA

▪ Radio

Main advantages

- Can reach mass audience cheaply
- Receivers are available in the remotest communities
- Messages can be repeated at low cost
- Easy to reach illiterate audience
- Can be used to support other channels of communication
- Efficient in announcing events and development activities
- If properly used can mobilize audience to participate in public events and projects of value to the community
- It is flexible for it can include; drama, lectures, folklore songs and interviews
- It is effective in creating awareness and setting agenda of priorities for peoples' attention

Main Disadvantages

- One-way channel
- Difficult to illustrate
- Difficult to assess audience reaction, participation or interest in messages delivered
- It requires special skill and continuous training of radio personnel
- Content may not be tailored to small communities and it tends to be general in nature
- Usually prepared for national audience or special ethnic or language group reducing relevance to local problems
- Difficult to use material broadcast as a reference without investment in radio documentation
- Effective follow-up is not always possible

▪ Television

Main Advantages

- It attracts audience and be the main captivator in rural communities
- It can be used to explain complicated messages because of its combination of sound and pictures
- It is suitable for mixed presentation of issues through utilization of folklore art and music, community events and animated public speeches and debates
- Successful in creation awareness
- Suitable for illiterate audiences if they have access to receivers or Television clubs

Main Disadvantages

- Expensive to operate
- Receivers not available in many rural areas and among poorest groups
- Has traditionally been used for entertainment and politics more than health educational and development purposes
- Health educational programs may face severe competition from entertainment programs
- No audience participation
- Present state of technology in many developing countries does not allow immediate coverage or timely relay of local community actions and events
- Requires more planning and preparation and technical, creative and communication skills
- Difficult to use material televised as a reference without investment in television documentation
- Effective follow-up is not always possible

6. PLANNING FOR INFORMATION, EDUCATION AND COMMUNICATION ACTIVITIES

Identification of Community's health education needs

The process for identification of community needs for information, communication and education should be as follows;

- Community needs assessment
- Setting priorities
- Deciding on goals for Information, Education and Communication activities
- Formulating specific objectives
- Deciding on the content to be communicated

Planning for the delivery of Health Education messages

The planning for a health education session will involve the preparing a lesson plan and this should include the following;

- Consideration of the audience
- Consideration of the topic to be delivered
- Deciding on the duration of the session

- Outlining the specific objectives identified during the needs assessment exercise
- Outlining the content that should correspond to the objectives
- Deciding on the methods to be used, will it be a lecture, health talk, group discussion, demonstration or role plays
- Organizing the teaching materials like audio visual or audio materials or visual materials like posters or pictures

Conducting a health education session

- Use suitable language and speak loudly to be heard
- Greet the audience
- Organize the audience in a manner that will enable you to maintain eye contact to most audience
- Introduce yourself
- Let the audience introduce themselves if possible
- Introduce the topic
- Introduce the objectives to be covered in a simple way
- Ask the audience what they know about the topic to be discussed and praise for the participation, this will motivate them to continue participating
- Present the information step by step
- Minimize mannerisms because these can be destructors
- Give time for questions from the audience, respond to the questions and praise as appropriate
- Evaluate the session by asking questions related to the objectives
- Then summarize the session
- Finish by thanking the audience for their participation and attention

EVALUATION OF THE SESSIONS
Evaluate the sessions by asking the participants to; <ul style="list-style-type: none">▪ State the three components of the interpersonal communication process▪ Give an example of a probing question when interacting with clients▪ Demonstrate in a role play the following skills;<ul style="list-style-type: none">• active listening• Maintaining eye contact• Nodding the head• Giving verbal encouragement• Paraphrasing• Reflecting feelings• Acknowledging• Giving praise▪ Summarize by providing correct responses and adding any missed information▪ Give an exercise on micro-teaching

MODULE 2: FAMILY HEALTH

The module aims at providing the learner with knowledge, attitude, skills and practices necessary for the caring of a pregnant woman, promotion of mother and child health by conducting maternal and child health activities; promotion of the elimination of harmful reproductive health practices and advising families on infertility.

Care of a pregnant woman before, during and after delivery is very essential in the promotion of health of the mother and the baby and elimination of complications that are associated with pregnancy. It is also very important that early child care is provided through growth monitoring, immunizations and adequate nutrition to ensure child survival, growth and development.

This module has eleven units. Each unit has specific objectives and content covering each specific objective.

- Unit 1: Safe Motherhood
- Unit 2: Female and Male Reproductive systems
- Unit 3: Family Planning
- Unit 4: Antenatal Care
- Unit 5: Postnatal Care
- Unit 6: Immunization
- Unit 7: Nutrition
- Unit 8: Growth Monitoring
- Unit 9: Harmful Reproductive Health Practices
- Unit 10: Infertility
- Unit 11: Infection Prevention and Universal Precautions

UNIT 1: SAFE MOTHERHOOD

INTRODUCTION

Reproductive Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity in all matters related to the reproductive system and its functions and processes.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Outline the components of reproductive health
2. Explain the safe motherhood concept
3. Explain the four Delays in Implementing Safe Motherhood activities
4. Methods for promotion of Safe Motherhood

Time allocation: 4 hours Theory.

Materials needed: Markers, Flip chart, LCD and computer

Teaching and Learning Methodology: Lecture discussion and Group discussions

- Participants will be expected to have individually read through the content before the session.
 - Start by reviewing the objectives of the unit and then define the Reproductive health and the concept Safe motherhood. Let the participants read, in their manual, the content of Safe motherhood and clarify issues as they crop up.
 - Allow participants to take a leading role in these discussions because some of the activities are activities that they are already doing. Make sure that the presentation is objective by objective
-

1 COMPONENTS OF REPRODUCTIVE HEALTH

Reproductive health has the following components;

- ◆ Safe Motherhood
- ◆ Perinatal and New Born care
- ◆ Family Planning
- ◆ Prevention and Management of STI, HIV and AIDS
- ◆ Prevention, early Detection and Management of Cervical Prostate and Breast cancer
- ◆ Elimination of Harmful Reproductive Health practices
- ◆ Youth friendly health services

- ◆ Infertility

2. Safe Motherhood Concept

Safe Motherhood is a combination of activities focusing on the promotion of safe pregnancy, labor, delivery and post partum. The aim is to reduce maternal and neonatal morbidity and mortality. Safe motherhood has four pillar and these are;

- ◆ Family planning
- ◆ Antenatal care
- ◆ Clean and safe delivery
- ◆ Access to emergency obstetric care

3. Four Delays in Implementing Safe Motherhood activities

The four delays framework that cause delay in safe motherhood implementation are;

- ◆ **Delay 1**
Decision making at community level
- ◆ **Delay 2**
Transport and Communication
- ◆ **Delay 3**
Identification of problems and deciding on care at the health facility
- ◆ **Delay 4**
Provision of appropriate care at health facility

4. Methods for Promotion of Safe Motherhood

There are several activities that are intended to promote Safe Motherhood and these are some of the activities;

- ◆ Advocacy meetings
- ◆ Drama
- ◆ Radio messages
- ◆ Information Education and Communication materials.

UNIT 2: THE FEMALE AND MALE REPRODUCTIVE SYSTEMS

INTRODUCTION

The ability to reproduce is one of the properties which distinguish living from non-living matter. The more the animal is primitive the simpler the process of reproduction. In human beings the process is one of sexual reproduction in which the male and female organs differ anatomically and physiologically. This unit therefore aims at providing basic knowledge of male and female reproductive systems so that the learner is able to collate the functions of the family planning methods

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Describe the main structures and functions of the female and male reproductive systems
2. Explain the physiology of menstruation
3. Identify a pregnant and non-pregnant women among the family planning clients

Time allocation: 4 hours Theory.

Materials needed: Markers, Flip chart, Illustrations

Teaching and Learning Methodology: Lecture discussion and Group discussions, Brain storming

- Participants will be expected to have individually read through the content before the session.
 - Start by reviewing the objectives and then use lecture discussion to discuss the content
-

1. The main structures of the female and male reproductive systems

◆ Female Reproductive System

The female reproductive organs or genitalia are divided into external and internal organs

▪ External Genitalia

The external genitalia are known collectively as the vulva and consist of;

• Labia majora

These are two large folds which form the boundary of the vulva. At puberty hair grows on the mons pubis and on the lateral surfaces of the labia majora

- **Labia minora**

These are two smaller folds of the skin between the labia majora, containing numerous sebaceous glands

- **Clitoris**

The clitoris corresponds to the penis in the male and contains sensory nerve endings and erectile tissue but has no reproductive significance

- **Hymen**

The hymen is the thin layer of mucous membrane which partially occludes the opening of the vagina. It is normally incomplete to allow for passage of menstrual flow

- **Vestibular Glands**

These are situated one on each side near the vaginal opening. They secrete mucus that keeps the vulva wet.

- **Internal Genitalia**

The internal organs of the female reproductive system lie in the pelvic cavity and consist of;

- **Vagina**

This is a fibromuscular tube connecting the external and internal organs. The vagina acts as receptacle for the penis during coitus and provides an elastic passageway through which the baby passes during childbirth

- **Uterus**

The uterus is a hollow muscular pear shaped organ. It lies in the pelvic cavity between the urinary bladder and the rectum. The parts of the uterus are; the fundus the dome-shaped part of the uterus above the openings of the uterine tubes, the body which is the main part of the organ, the cervix or neck of the uterus which protrudes the anterior wall of the vagina opening into it at the external os.

After puberty the endometrium of the uterus goes through a regular monthly cycle of changes, the menstrual cycle, which is under the control of hypothalamic and anterior pituitary hormones. The purpose of the cycle is to prepare the uterus to receive, nourish and protect a fertilized ovum. Once fertilization has taken place, the uterine secretions nourish the fetus for a few weeks thereafter the placenta takes over. The placenta, which is attached to the fetus by the umbilical cord, is firmly attached to the wall of the uterus and provides a means by which the growing baby receives oxygen and nutrients and gets rid of the wastes.

- **Uterine tubes**

The uterine tubes extend from the sides of the uterus between the body and the fundus. The end of each tube has finger-like projections called fimbriae. The longest of these is the ovarian fimbria which is in close association with the ovary. The uterine tubes convey the ovum from the ovary to the uterus by peristalsis and ciliary movement. The mucus secreted by the lining membrane provides ideal conditions for movement of ova and spermatozoa. Fertilization of the

ovum usually takes place in the uterine tube, and the zygote is propelled into the uterus for implantation.

- **Ovaries**

These contain ovarian follicles in various stages of maturity each of which contains an ovum. Before puberty the ovaries are inactive but during childbearing years, about every 28 days, one ovarian follicle matures and ruptures and releases its ovum into the peritoneal cavity. This is called ovulation and it occurs during most menstrual cycles. The ovaries are the female gonads or glands. The maturation of the follicle is stimulated by follicle stimulating hormone from the anterior pituitary and oestrogen secreted by the follicle lining cells. If the ovum is fertilized it embeds itself in the wall of the uterus where it grows and develops and produces the hormone which stimulates the corpus luteum to continue secreting progesterone and oestrogen. If the ovum is not fertilized the corpus luteum degenerates and new cycle begins with menstruation.

- ◆ **Male Reproductive System**

The male reproductive system consists of the following organs;

- **Scrotum**

The scrotum is a pouch divided into two compartments each of which contains;

- One testis
- One epididymis
- Testicular end of the spermatic cord

- **Testes**

The testes are the reproductive glands of the male and are equivalent of the ovaries in the female. In each testis are lobules and within each lobule are convoluted loops called seminiferous tubules. The tubule leaves the scrotum as the vas deferens in the spermatic cord. Spermatozoa (sperms) are produced in the seminiferous tubules of the testes, and mature as they pass through the long and convoluted epididymis, where they are stored. The hormones controlling sperm production is Follicle Stimulating Hormone from the anterior pituitary gland. Successful spermatogenesis takes place at a temperature about 3 degrees Celsius below normal body temperature. The testes are surrounded by three layers of tissue;

- **The tunica vaginalis**

This is a double membrane, forming the outer covering of the testes, and is down growth of the abdominal and pelvic peritoneum. Descent of the testes into the scrotum should be complete by the 8th month of fetal life.

- **The Tunica Albuginea**
This is a fibrous covering beneath the tunica vaginalis that surrounds the testes. Ingrowths form septa dividing the glandular structure of the testes into lobules.
 - **The Tunica Vasculosa**
This consist of a network of capillaries supported by delicate connective tissue
 - **The Spermatic Cords**
The spermatic cords suspend the testes in the scrotum. Each cord extends through the inguinal canal and is attached to the testes on the posterior wall.
 - **Seminal Vesicles**
These are small fibromuscular pouches lined with columnar epithelium, lying in the posterior aspect of the bladder. At its lower end each seminal vesicle opens into a short duct which joins with the corresponding deferent duct to form an ejaculatory duct. The seminal vesicles contract and expel their stored contains, seminal fluid, during ejaculation. The fluid contains nutrients to support the sperm during their journey through the female reproductive tract.
 - **Ejaculatory Ducts**
These are two tubes each formed by the union of the duct from a seminal vesicle and deferent duct. These ducts carry seminal fluid and spermatozoa to the urethra.
 - **Urethra**
The male urethra provides a common pathway for the flow of urine and semen, the combined secretions of the male reproductive organs.
2. **The Physiology of Menstrual (Sexual) Cycle**
Menstrual cycle is defined as a series of events occurring regularly in females every 26 to 30 days throughout the childbearing period of about 36 years. The cycle consists of a series of changes that take place concurrently in the ovaries and uterine walls, stimulated by changes in the blood concentration of hormones. Hormones secreted in the cycle are regulated by negative feedback mechanisms.

◆ Negative Feedback Mechanisms

The hypothalamus responds to changes in the blood levels of oestrogen and progesterone. It is switched off by high levels and stimulated when they are low. The hypothalamus secretes luteinising hormone releasing hormone (LHRH) which stimulates the anterior pituitary to secrete

- Follicle stimulating hormone (FSH), which promotes the maturation of ovarian follicles and the secretion of oestrogen, leading to ovulation
- Luteinising hormone, which triggers ovulation, stimulates the development of the corpus luteum and secretion of progesterone.

◆ Menstrual Phases

The average length of the menstrual cycle is about 28 days. By convention the days of the cycle are numbered from the beginning of the menstrual phase as follows;

• Menstrual Phase

This phase lasts for about 4 days. When the ovum is not fertilized, the corpus luteum starts to degenerate. Progesterone and oestrogen levels therefore fall, and the functional layer of the endometrium of the uterus which is dependent on the high levels of these hormones, is shed in menstruation. After degeneration of the corpus luteum, however, falling levels of oestrogen and progesterone lead to resumed anterior pituitary activity, rising FSH levels and initiation of the next cycle.

• Proliferate Phase

This phase lasts for about 10 days. At this stage an ovarian follicle, stimulated by FSH, is growing towards maturity and is producing oestrogen. Oestrogen stimulates the proliferation of the functional layer of the uterine endometrium in preparation for the reception of a fertilized ovum. This phase ends when ovulation has occurred and oestrogen production declines.

• Secretory Phase

This phase lasts 14 days. Immediately after ovulation, the lining cells of the ovarian follicle are stimulated by LH to develop the corpus luteum, which produces progesterone and some oestrogen. Under the influence of progesterone the endometrium becomes oedematous and the secretory glands produce increased amounts of watery mucus. This is believed to assist the passage of the spermatozoa through the uterine tubes where the ovum is fertilized. If the ovum is not fertilized menstruation occurs and a new cycle begins.

3. How to tell that a Woman is not pregnant

A woman should not start certain family planning methods while she is pregnant. However condoms and vaginal methods can and should be used when protection against sexually transmitted infections is needed

◆ A woman is not pregnant if:-

- Her menstrual period started within the last seven days
- She gave birth within the last four weeks
- She had an abortion or miscarriage within the last seven days
- She gave birth within the last six months, breast feeding and has not yet had a menstrual period
- She has not had vaginal sex since her last menstrual period
- She has had sex since her last menstrual period using family planning methods correctly

4. How to tell that a Woman is pregnant

If a woman had sex and her last period was five weeks ago or more, pregnancy can not be ruled out, even if she used effective contraception. The signs of pregnancy are;

◆ **Early Signs**

- Later menstrual period
- Breast tenderness
- Nausea
- Vomiting
- Weight change
- Always tired
- Mood changes
- Changed eating habits
- Urinating more frequently

◆ **Late Signs**

- Larger breasts
- Dark nipples
- More vaginal discharge
- Enlarged abdomen
- Movements of a baby

If a woman's answers cannot rule out pregnancy she should wait until her next period or she should have a laboratory test if available

UNIT 3: FAMILY PLANNING

INTRODUCTION

Family planning is defined as a voluntary decision made by men, women, adolescents and, or couples to determine how many children to have, when to have them and at what interval. This is a very important component of safe motherhood because it helps in the reduction of maternal and neonatal morbidity and mortality and prevents unwanted pregnancies in the adolescents.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Outline the Roles of Health Surveillance Assistant in Family Planning Services
2. Describe the benefits of Family Planning
3. Explain the traditional Methods of Family Planning
4. List the Common Modern Family Planning Methods used in Malawi
5. Distribute Family Planning Methods to families
6. Advise the community on where Family Planning services are provided
7. Refer Family planning Clients
8. Provide Health Education Messages on Family Planning

Time allocation: 20 hours Theory and 12 hours Practical.

Materials needed: Markers, Flip chart, Contraceptives, Client card, Client check list, Referral form, CBD service form, LCD and computer

Teaching and Learning Methodology: Lecture discussion and Group discussions, Role Play, Demonstrations

- Participants will be expected to have individually read through the content before the session.
- Briefly lecture and discuss with the participants on Roles of Health Surveillance Assistant in Family Planning Services
- In a brainstorming session ask the participants to list down the traditional methods and the advantages of family planning methods they know. Have the answers written on flip chart and discuss them at the end, making corrections where necessary
- Emphasize on promoting modern methods compared to traditional methods then proceed with the session following the objectives

1. The Role of Health Surveillance Assistant in Family Planning Services

Health Surveillance Assistants as key primary health care providers in the community play very important role in family planning services. The following are the three major roles of the Health Surveillance Assistants in the community;

- ◆ Motivation of individuals and families to practice modern family planning methods
- ◆ Distribution of family planning methods to clients
- ◆ Referral of clients to family planning providers for long-term and permanent contraception and physical examination

2. Benefits of Family Planning

The following are the benefits of family planning to the child, mother, family and the nation.

◆ To the child

- The child grows healthy
- The child breast feeds for at least 2 years
- There is love continued love between child and mother

◆ To the mother

- Mother has enough time to breastfeed the baby
- She has enough time for child care and psychological support
- Mother has time to participate in national development and can have time to attend adult education

◆ To the family

- There is more time to show love between the couples e.g. freedom of sex because there is no fear of unwanted pregnancies
- The family has enough money to support the family
- Father goes to work with free mind

◆ The Nation

- The country allocates funds to other priority areas other than consequences of unplanned families.
- Funds used for family planning can be diverted to other developmental activities.
- The nation benefits from productive mother and father.

3. Traditional Methods of Family Planning

The following are some of the traditional methods of family planning;

- ◆ Abstinence
- ◆ Breast feeding
- ◆ Use of strings
- ◆ Use of local herbs
- ◆ Withdrawal
- ◆ Polygamy

4. The Common Modern Family Planning Methods used in Malawi

The common family planning methods provided in most centers in Malawi are;

◆ Hormonal Methods

- **Pills**
Combined oral Pill such as Lo-femenal
Progestin only Pill such as Ovrette
- **Injectables**
Depo-Provera
- **Implant**
Norplant

◆ Intra-Uterine Contraceptives Devices

- Loop

◆ Barrier Methods

- Male and Female Condoms
- Spermicides
- Sponge
- Foam tablets
- Diaphragm

◆ Permanent Methods

- Vasectomy
- Tubal Ligation

◆ Natural Methods

- Basal Body temperature
- Cervical Mucus (Billings)
- Symptom-thermal

◆ Lactation Amenorrhoea

◆ Cycle beads

◆ Postinor-2

5. Family Planning Methods to be distributed by Health Surveillance Assistant

Of all the family planning methods provided in Malawi, currently the following are the only ones to be distributed by Health Surveillance Assistant;

◆ Condoms (Barrier Methods)

- **Definition**

This is a barrier method that can be used by both males and females

- **Types**

Male and Female condoms

- **Who Can Use these Methods**

Condoms can be used by any man and woman and the following considerations should be noted;

- **Consideration by Age**

Man and women of the reproductive age

- **Consideration by Parity**

Any parity including nulliparous

- **By General Consideration**

Couples in need of a method that is immediately effective, couples needing a back-up method when the woman has forgotten taking the pill, persons who have sex irregularly and couples waiting for a long term or permanent method such as injectable, NORPLANT, Loop, Vasectomy or Tubal Ligation

- **By Medical Consideration**

Persons who desire to take initiative in protection against exposure to or transmission of H.I.V. and other STI, couples needing to rule out possible pregnancy before proceeding with a hormonal or with a loop or men with premature ejaculation

- **Who Should Not Use these Methods**

The following should be considered as indications for the use of condoms;

- **Consideration by Age**

No contra-indications

- **Consideration by Parity**

No contra-indications

- **By General Consideration**

Couples who do not want to interrupt love-making to put on a condom and men who cannot maintain an erection with the condom on.

- **By Medical Consideration**

Couples (or either partner) who are allergic to the latex rubber of the condom itself and women who must not become pregnant for health reasons

- **Who Can Use Barrier Methods For Women**

Women condoms and other barrier methods like spermicides, sponge and diaphragm can be used by any woman and the following considerations should be noted;

- **Consideration by Age**

Women of the reproductive age

- **Consideration by Parity**

Any parity

- **By General Consideration**

Women who need a method that is immediately active, who prefer not to use hormonal methods of contraceptives or Loop, couples who do not mind inserting a spermicides, sponge or diaphragm each time they have sex; breast feeding mothers and women needing a back-up method when they have forgotten to take the pill.

- **By Medical Consideration**

Women needing to rule out possible pregnancy before proceeding with a Hormonal method or with a Loop

- **Advantages**

Barrier methods for men and women; if used correctly have been shown to provide a high degree of protection against exposure to STI including HIV, if used correctly effectiveness is about 95%, in view of the HIV and AIDS this method should be promoted as the method of choice of choice and if used in combination with other contraceptives the effectiveness against pregnancy is enhanced.

- **Who should not use the Barrier Method For Women**

The following should be considered as indications for the use of female condoms and other barrier methods;

- **Consideration by Age**

No contra-indications

- **Consideration by Parity**

No contra-indications

- **By General Consideration**

Women who are unable to feel their own cervix, who do not want a method that requires inserting a spermicides, sponge or diaphragm each time they have sex.

- **By Medical Consideration**

Couples (or either partner) who are allergic to the spermicides or the material from which the device is made, women with vaginal abnormalities, women with frequent urinary tract

infections, women with poor vaginal muscle tone (for diaphragm only) and women who must not become pregnant for health reasons.

- **Advantages**

Barrier methods for women; If used correctly, have been shown to provide some protection against STI, if used in combination with condoms effectiveness is 100% and if used alone effectiveness is 80%

- ◆ **Combined Oral Pill- such as Lo-Femenal**

- **Who should use Combined Oral Pills**

The use of Lo-Femenal pill should consider the following as indications;

- **Consideration by Age**

Women of reproductive age under 50 years provided they are not smokers.

- **Consideration by Menarche**

Any female who has at least three regular menses since menarche

- **Consideration by Parity**

Any parity including nulliparous

- **By General Consideration**

Women who want highly effective protection against pregnancy, young women (adolescents) who are sexually active, breast-feeding mothers six months after delivery and women with self-discipline who can follow a daily routine.

- **By Medical Consideration**

Women with anaemia from heavy menstrual bleeding, women with severe menstrual pains and women with a history of ectopic pregnancy

- **Who should not use Combined Oral Pills**

The use of Lo-Femenal pill should consider the following as contra-indications;

- **Consideration by age**

Women of reproductive age over 35 years if they are smokers and women of reproductive age over 50 years if they are non-smokers

- **Consideration by Parity**

No contra-indications

- **By general consideration**

Women who cannot or are unable to remember to take the pill every day, breast-feeding mothers before six months after delivery and women who are heavy smokers (140 or more cigarettes per day)

- **By Medical Consideration**

Women who are pregnant or suspected of being pregnant, women with a history of blood clotting disorders, women with undiagnosed lump in either breast, cardiovascular or liver diseases; high blood pressure on 3 or more checks, women on TB, diabetes and epilepsy treatment, women with varicose veins and women who must not become pregnant for health reasons.

- ◆ **Progestin only Pill- such as Ovrette**

- **Who should use Progestin only Pills**

The use of Progestin only Pill- such as Ovrette should consider the following as indications;

- **Consideration by Age**

Women of reproductive age under 50 years

- **Consideration by Parity**

Any parity

- **By General Consideration**

Breastfeeding mother four to six weeks after delivery.

- **By Medical Consideration**

Women who cannot use combined Pills due to estrogen related contraindications.

- **Who should not use Progestin only Pills**

The use of Progestin only Pill- such as Ovrette should consider the following as contra-indications;

- **Consideration by Age**

Women over 50 years

- **Consideration by Parity**

No contra-indications

- **By General Consideration**

Women who cannot tolerate possible disruptions in the menstrual cycle, women who cannot or unable to remember to take pills everyday, breast-feeding mothers before four to six weeks after delivery and non- lactating women

- **By Medical Consideration**

Women who are pregnant or suspected of being pregnant, women with a history of blood disorders, women with a history of heart and liver diseases, women with unexplained

vaginal bleeding, women with undiagnosed breast lump on either breast and women who must not become pregnant for health reasons.

- **How the contraceptives work**
 - Thickens cervical mucus, making it difficult for sperm to pass through
 - Stops ovulation (release of eggs from ovaries) in about half of menstrual cycle

- **Advantages**
 - Can be used by nursing mothers starting 6 weeks after childbirth
 - No oestrogen side effects
 - Women take one pill every day with no break, easy to understand
 - Can be very effective during breast feeding
 - May help prevent benign breast disease, endometrial and ovarian cancer and pelvic inflammatory disease

- **Disadvantages**
 - For women who are not breast feeding, change in menstrual bleeding are normal, including irregular periods, spotting between periods and amenorrhoea and other may have prolonged or heavy bleeding.
 - Less common side effects include headaches and breast tenderness
 - Should be taken at the same time every day to work better
 - Do not prevent ectopic pregnancy

- ◆ **Provision of Oral and Injectable Contraceptives**

The provision of oral and injectable contraceptives to clients should at least follow the following steps;

 - Decide the type of contraceptives to dispense.
 - Emphasize the importance of dual protection to the clients
 - Use a checklist to identify appropriate client
 - Refer client for physical examination
 - Schedule for return visits

- ◆ **Injectable contraceptives such as Depo-Provera**

- **Who should use Injectable contraceptives**

The use of Injectable contraceptives such as Depo-Provera should consider the following as indications;

 - **Consideration by Age**

All women of reproductive age under 50 years

 - **Consideration by Parity**

Any parity including nulliparous women

- **By General Consideration**
Breastfeeding mother four to six weeks after delivery and women who want a long-term method of contraception
- **By Medical Consideration**
Women with sickle cell diseases, women who cannot use combined Pills due to estrogen related contraindications and women with a history of ectopic pregnancy
- **Who should not use Injectable contraceptives**
The use of Injectable contraceptives such as Depo-Provera should consider the following as contra-indications;
 - **Consideration by Age**
Women over 50 years
 - **Consideration by Parity**
No contra-indications
 - **By General Consideration**
Women who cannot tolerate possible disruptions in the menstrual cycle, women who desire another pregnancy before two years and breast-feeding mothers before six weeks after delivery and non- lactating women
 - **By Medical Consideration**
Women who are pregnant or suspected of being pregnant, women with a history of blood clotting disorders, women with a history of heart and liver diseases, women with unexplained vaginal bleeding, women with undiagnosed breast lump on either breast and women who must not become pregnant for health reasons.
 - **Precautions**
There is a delay in return of fertility associated with the use of Injectable contraceptives. The fertility will return to normal in the majority of clients within 4 to 24 months and in almost all the women fertility will have returned to normal.
It is therefore important for clients who choose Injectable contraceptives for spacing between pregnancies to keep in mind this delay in return of fertility.
- **Advantages**
 - Very effective
 - Private, no one else can tell that a woman is using it
 - Long term pregnancy prevention but reversible, one injection pregnancy for at least three months
 - Does not interfere with sex
 - Allows flexibility in return visits, a client can return 2 to 4 weeks early or late
 - Can be used at any age
 - Helps prevent; ectopic pregnancy, endometrial and ovarian cancer and uterine fibroids

6. Places where Family Planning services are provided

The following are some of the places where family planning services are provided in Malawi;

- ◆ Mobile and static Family planning clinics
- ◆ Health centers
- ◆ Hospitals
- ◆ Private clinics
- ◆ Community Based Distribution Agents.

7. Procedure for Referring Family planning Clients

Some of the issues that should be considered and are included in the referral procedure for family planning client are;

- ◆ Provision of a letter to the client to take to the referral clinic
- ◆ Stating the reasons for referral
- ◆ Provision of feedback by the referral Clinic staff

8. Health Education Messages on Family Planning

The most important health education key messages on family planning should include the following;

- ◆ Benefits of family planning
- ◆ Methods of family planning
- ◆ Where Family planning Methods are provided

EVALUATION OF THE SESSION

- Summarize the session by asking the participants the following questions
 - What are the main health education messages on family planning?
 - What is the role of HSA in contributing to the provision of family planning services?
 - What are the issues included in referring a family planning client?
- Let participants respond individually
- Ensure positive reinforcement after each response
- Allow the learners practices the use of:
 - Clients checklist
 - Client card
 - Referral form and all CBD service forms
- Finally summarize by giving the answers to the questions refer to the HSA tasks in the manual

UNIT 4: ANTENATAL CARE

INTRODUCTION

Antenatal Care is defined as the process of examining pregnant mothers for early detection of problems associated with pregnancy and providing them with essential care

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Visit Mothers during Antenatal Period
2. Describe activities conducted at the Antenatal Clinic
3. Identify danger signs of a pregnant woman
4. Provide health education messages on Antenatal Care
5. Promote clean and safe delivery

Time allocation: 5 hours Theory and 9 hours Practical.

Materials needed: **Classroom sessions;** Markers, Flip chart,
Practical sessions; List of Pregnant Women, Calendar, Birth Plan, Pregnancy Counseling Cards, Pregnancy Screening Cards, Referral Note, and Pregnant Mothers Form

Teaching and Learning Methodology: Lecture discussion and Group discussions, Role Play and demonstrations

- Participants will be expected to have individually read through the content before the session.
- Start by reviewing the objectives and the previous sessions of Safe motherhood and reproductive systems.
- Ask participants what they understand by the term antenatal care
- Let participants come up with a list of activities and summarize it for them
- Then lecture the participants on the importance of antenatal care for the health of mothers and unborn babies.
- Let the participants read, in their manual, the content of targeted antenatal visits one by one and discuss the activities conducted in these targeted visits as you go along.
- Allow participants to take a leading role in these discussions because some of the activities are activities that they are already doing. Make sure that the presentation is objective by objective

1. Visiting Mothers during Antenatal Period

The Health Surveillance Assistant is required to make 3 visits to the mother during her antenatal period for the following;

◆ **First Visit Within The First 3 Months of Pregnancy**

- To ensure that the mother is attending ANC as scheduled
- Counsel the mother on activities done at ANC
- Counsel the mother on minor ailments of pregnancy, management, and or care seeking
- Counsel the mother on hygiene ,rest and good nutrition
- Provide health education message on danger signs of pregnancy

◆ **Second Visit -4-6 Months**

All of the first visit activities including the following;

- Assessment for early recognition of danger signs
- To encourage on subsequent ANC visits
- To check on the ANC card to ensure that they received required care e.g. TTV IPT, ITN ,HIV testing
- To assist family to develop a birth plan and needs for complication readiness
- To advise that the person who will be the birth companion should be present

◆ **Third Visit 7 -9 Months**

- Advising on care seeking for skilled attendant at birth
- Advising mothers on care of the mother and baby at home
- Counseling for mothers who are HIV positive on Affordable, Feasible, Accessible, Safe and Sustainable feeding practices
- Educating mothers on Family planning
- Educating mothers on Common post natal maternal and neonatal danger signs
- To provide mothers with advice on the use of condoms for STI/HIV/AIDS prevention.
- To provide the mother with counseling on HCT/PMTCT/IPT and ITN

2. Activities Conducted at the Antenatal Clinic

There are a lot of activities conducted at the Antenatal Clinic and some of them are as follows;

- ◆ Monitoring mothers' general health well-being
- ◆ Monitoring mothers' nutritional status
- ◆ Interactive health talks.
- ◆ One-on- one counseling
- ◆ Physical examination
- ◆ Immunization activities
- ◆ Screening for hemoglobin, syphilis and HIV
- ◆ Prevention from Mother to Child transmission of HIV activities(PMTCT)
- ◆ Provision of iron supplementation , Intermittent preventive treatment for malaria(IPT) ,Tetanus Toxoid Vaccine(TTV) Insecticide Treated Nets(ITN)
- ◆ Deworming tablets and Niverapine if the mother is HIV positive

- ◆ Assisting the mother in making a Birth preparedness plan

3. Danger signs of a pregnant women

The danger signs that once identified in a pregnant woman she should be advised to seek medical care immediately are;

- ◆ Dizziness
- ◆ Swelling of feet, legs, arms and face
- ◆ Vaginal bleeding
- ◆ Severe headache
- ◆ Blurred vision
- ◆ Fits (convulsions)
- ◆ Fever
- ◆ Prolonged labor taking more than 12 hours
- ◆ Draining liquor

4. Important Health Education Messages on Antenatal Care for Health Surveillance Assistant

Every woman has the right to health care, especially during pregnancy and childbirth. Health care providers should be technically competent and treat women with respect. It is therefore very important for Health Surveillance Assistants to educate the community on the following important health education messages on antenatal care so that the women are able to access and receive appropriate care during pregnancy and child birth.

- ◆ Recognition of warning signs during pregnancy and childbirth
- ◆ Importance of making a birth plan
- ◆ Information of where to obtain immediate skilled help if problems arise during pregnancy and childbirth
- ◆ Importance of attending Antenatal clinic at least 4 times during her pregnancy
- ◆ Importance of nutritious meals and more rest throughout the pregnancy
- ◆ Dangers of smoking, taking alcohol, drugs, poisons and pollutants
- ◆ Dangers of physical abuse of women during pregnancy for both the woman and the foetus
- ◆ The right to health care during pregnancy and childbirth

5. Promotion of clean and safe delivery

Apart from accessing and receiving appropriate care during pregnancy and child birth there is a need to promote clean and safe delivery among the pregnant women and their families. Health Surveillance Assistant plays a major role in promoting clean and safe delivery. The Health Surveillance Assistant should therefore, during Antenatal Clinic, ensure;

- ◆ Reminding the families to plan for health facility delivery
- ◆ That deliveries are conducted at a health facility by skilled personnel
- ◆ Encouraging pregnant women to report to nearest health facility as soon as labor starts
- ◆ Encouraging pregnant women to go to a maternity waiting home before labor starts in case of long distances

- ◆ That Traditional Birth Attendants are compliant to the scope of practice
- ◆ Referring both the mother and the baby to the nearest health facility immediately after birth incase of home deliveries
- ◆ Referring women with their babies for post-natal care at a health facility a week after delivery

EVALUATION OF THE SESSION
<p>Evaluate the session by asking the participants to;</p> <ul style="list-style-type: none">● Explain what their roles in antenatal care will be when they return to their communities on completion of the training● Explain how they would determine when to visit a woman during pregnancy● Outline the activities done during the 1st visit, the 2nd visit● Finally summarize by restating the responses and refining the responses where there is a need

UNIT 5: POSTNATAL CARE

INTRODUCTION

Postnatal care is care given to the mother and the baby following delivery starting a week after delivery to up to six weeks.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to;

1. Explain the importance of check-ups after delivery (Postnatal checkups)
2. Identify danger signs in postnatal period that require immediate medical care
3. Provide important Health Education messages during post natal care

Time allocation: 4 hours Theory and 6 hours Practical.

Materials needed: Markers, Flip chart, screening cards for danger signs immediately after birth, Birth Plan

Teaching and Learning Methodology: Lecture discussion and Group discussions, Brain Storming, Role Play

- Participants will be expected to have individually read through the content before the session.
- Briefly lecture and discuss with the participants on normal labour and delivery. Inform them that most babies are born with the head first but sometimes the baby's bottom, leg or an arm comes first and this is very dangerous for both the mother and the baby
- In a braining storming session ask the participants to explain the signs and symptoms of labour and the danger signs that may be associated with this process. Have the answers written on flip chart and discuss them at the end, making corrections where necessary
- Emphasize to the participants that when any one of these signs are observed by the mothers or any one attending to the mother during delivery or after delivery, the mother and or the baby should be referred to the nearest health facility immediately
- Then proceed with the session following the objectives

1. Importance of Postnatal checkups

◆ First visit (Day 1 - post discharge)

Postnatal first visit ensures that;

- The mother received a treated bed net on discharge
- The mother is counseled on postnatal check up at 1 and 6 weeks
- The mother is counseled on good nutrition and Exclusive Breastfeeding as per choice

◆ Second visit (Day 3- post discharge)

◆ **Third visit (Day 8- post discharge)**

Early detection of problems and provision of appropriate treatment such as;

- Provision of Vitamin A supplementation to mother within 8 weeks post delivery
- Counseling on FP and provision of FP methods e.g. condoms.
- Counseling on lactation management
- Immunizations to baby at 6 weeks

2. Danger signs in postnatal period that require immediate medical care

Danger signs that should be recognized as soon as possible and requiring prompt medical care are;

◆ **Mother**

- Swelling of feet, arms face and legs
- Dizziness
- Heavy vaginal bleeding
- Severe headache
- Blurred vision Fever with or without chills.
- Severe pain in calf muscles
- Foul smelling vaginal discharge

◆ **Baby**

Make sure that the baby is kept warm and dry, clean and is exclusively breast-fed if that is the choice of feeding the baby. The following are the danger signs that will require prompt medical care

- Fever or low temperature
- Difficulty in breathing
- Difficulty in breastfeeding
- Heavy eye discharge
- Yellow color of skin or eyes (Jaundice)
- Inactive baby.
- Diarrhea or constipation.
- Redness or pus from the umbilical cord.

3. Important Health Education messages during post natal care

The important health education messages on post natal care should emphasize the need for;

- ◆ Adequate nutritious food and fluids
- ◆ Personal and environmental hygiene
- ◆ Adequate rest and sleep
- ◆ Daily bowel movement and elimination
- ◆ Vitamin A supplementation within 8 weeks post delivery
- ◆ Comprehensive Baby care
- ◆ Early recognition of danger signs in the mother requiring prompt medical care.

- ◆ Early recognition of danger signs in the baby requiring prompt medical care.
- ◆ Family planning including dual protection
- ◆ Attendance of postnatal checkup
- ◆ Growth monitoring
- ◆ Immunizations

EVALUATION OF THE SESSION
<ul style="list-style-type: none">▪ Evaluate the session of by asking the following question;<ul style="list-style-type: none">○ How will they orient the community on Maternal Neonatal care?○ How will they work with various community leaders and groups to improve maternal and newborn health?○ What health education information will they tell the community on postnatal care?▪ Summarize by going through the responses given by the participants, let the participants participate in the process of summarizing the responses

UNIT 6: IMMUNIZATIONS

INTRODUCTION

Immunization is a process of reinforcing natural defenses by providing active artificial immunity to the mother and the child through vaccines either orally or Injectable, using killed organisms, attenuated living organisms or inactivated toxins.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to;

1. Describe an overview of Expanded Program of Immunization
2. Outline Expanded Program of Immunization Diseases in Malawi
3. Explain the methods of prevention of EPI diseases
4. Provide immunizations to mothers and children

Time allocation: 12 hours Theory and 24 hours Practical.

Materials needed: Markers, Flip chart, Posters of EPI diseases Assessment Immunization schedule, Cold chain equipment

Teaching and Learning Methodology: Lecture discussion and Group discussions, Demonstration, Role Play

- Participants will be expected to have individually read through the content before the session.
- Briefly lecture and outline the overview of Expanded Program on Immunization. Then go through the content objective by objective, emphasizing the importance of observing immunization schedule. Allow the participants to actively participate in the session by asking probing questions and allowing them to brainstorm before you tackle any objective.
- Review the responses together with the participants adding any omissions and eliminating any incorrect responses after explaining why they are incorrect using the content that follow.

1. Overview of Expanded Program of Immunization

The goal of Expanded Program of Immunization is to immunize all children before attaining one year of age, all women of child bearing age and maintaining quality disease surveillance

2. Expanded Program of Immunization Diseases in Malawi

- ◆ Tetanus
- ◆ Measles
- ◆ Poliomyelitis
- ◆ Pertusis
- ◆ Hepatitis B

- ◆ Tuberculosis
- ◆ Diphtheria
- ◆ Bacterial meningitis
- ◆ Bacterial pneumonia

3. Methods of prevention of EPI diseases

The prevention and control of EPI diseases is through;

- ◆ Health education
- ◆ Immunization

4. Provision of Immunizations

The essential information and activities necessary for the provision of immunizations are;

- ◆ **EPI vaccines available in Malawi**
 - Oral Polio Vaccine (OPV)
 - BCG (Bacillus Calmette Guerin)
 - DPT – Hep B+ Hib
 - Measles
 - Tetanus Toxoid

- ◆ **Storage and handling of vaccines**

To maintain vaccine effectiveness, cold chain is the means by which vaccines are continuously stored from the time of manufacture until they are administered to the client

- **The cold chain equipment**

- Vaccines carriers
- Refrigerator
- Cool packs
- Thermometers
- Cold box
- Temperature chart
- Freeze watch
- Cold chain monitor

- **The factors which can reduce potency of vaccines**

- Exposure to heat if not conducted under shed
- Constant opening and closing of a refrigerator door
- Slack of or irregular electricity supply or paraffin/gas
- Transportation – unreliable vehicles may cause breakdown of cold chain
- Vigorous shaking
- Freezing
- Light

▪ Vaccine storage

- Check if refrigerator is working well
- Check expiry dates of vaccines
- Use First Expiry First Out (FEFO)
- Put vaccines according to their sensitivity (see EPI Manual)
- Close the fridge tight

◆ Contraindication and side effects

◆ Immunization schedule

- OPV '0': at birth up to 2 weeks
- OPV 1: at 6 weeks
- OPV 2: 4 weeks after 1st dose
- OPV 3: 4 weeks after 2nd dose
- BCG: at birth or first contact
- DPT-Hep B+ Hib 1: at 6 weeks
- DPT-Hep B+ Hib 2: 4 weeks after 1st dose
- DPT-Hep B+ Hib 3: 4 weeks after 2nd dose
- Measles: at 9 months
- Tetanus 1st dose: First visit
 - 2nd dose: 4 weeks after 1st dose
 - 3rd dose: 6 months after 2nd dose
 - 4th dose: 1 year after 3rd dose
 - 5th dose: 1 year after 4th dose

◆ Administration of vaccines

During immunization session protect BCG, Polio, measles vaccines from heat and light to preserve the potency of the vaccines. Discard mixed vaccines within 6 hours or at the end of the session, whichever comes first and then prepare for the next immunization clinic. Steps to be followed during the administration of vaccines are;

▪ Determination of the required vaccination

- Ask the mother about previous vaccinations
- Examine child health passport or card

▪ Reconstitution of the vaccine

- BCG and Measles with the right diluents
- DPT-Hep B with Hib
- Use the diluents from the same manufacturer (do not interchange the diluents)

▪ Drawing the right dose

- OPV: 2-3 drops (according to manufacturer's instructions) orally
- BCG: 0.05 ml (under 1 year) 0.1 ml (over 1 year) intra-dermal
- DPT: Hep B+ Hib 0.5 ml intramuscular

- Measles: 0.5 ml subcutaneous
- Tetanus: 0.5 ml Intra Muscular

◆ Injection safety and Waste disposal

An injection is considered safe to the mother or child, when the health worker uses a sterile syringe, needle and appropriate technique; considered safe to the health worker, when the health worker avoids needle prick injuries and to the community, when waste created by used injection is disposed of correctly and does not cause harm through pollution and injuries

- **Equipment used to administer injectable vaccines:**
 - Auto-disable (AD) syringe, currently recommended
 - Prefilled AD injection devices, available for some antigens
 - Single use disposable (non AD) syringes and needles, for mixing purposes only
 - Safety box for disposing used syringes, do not dispose opened vials and swabs in it
- **Safe injection practices**
 - Use one injection for each vaccination
 - Use one reconstitution syringe for each vial.
 - Do not pre-fill the syringe with vaccine
 - Do not touch ; the shaft of the needle, bevel of the needle, the adaptor of the needle and the adaptor of the syringe handle syringes and needles safely
 - Position children correctly for injections
 - Practise safe disposal of all injection materials
- **Two common types of disposing injection materials**
 - Incineration
 - Burning
- **Disposal guidelines**
 - Properly assemble safety boxes before use.
 - Use a safety box filled with 100 syringes (3/4)
 - Close safety box when full (3/4)
 - Incinerate the filled safety box where there are incinerator exists
 - Burn the safety box in a designated pit in areas where there are no incinerators, and bury the ashes.

EVALUATION OF SESSION

- Evaluate the session by asking the participants to;
 - Explain the cold chain
 - Explain the injection safety and waste disposal
 - Outline the Expanded Program on Immunization Diseases in Malawi
 - Explain the Safe injection practices
- Finally summarize by refining the responses and re-enforcing the correct responses

UNIT 7: NUTRITION SERVICES

INTRODUCTION

Nutrition is the science that deals with how the body obtains and utilizes nutrients for normal body processes and functions or simply the study of food and how the body uses it.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to;

1. Explain the basic Nutrition Concepts
2. Describe the micro-nutrients
3. Explain the seven Essential Nutrition Actions
4. Educate mothers on exclusive breast feeding
5. Describe complementary feeding practices
6. Education mothers on supplementary Feeding
7. Identify children with Malnutrition
8. Provide Community Based Therapeutic Care (CTC)
9. Conduct Nutrition Follow-Up

Time allocation: 10 hours Theory and 12 hours Practical.

Materials needed: Markers, Flip chart, Posters of Nutrition Assessment, Pictures demonstrating breast feeding techniques

Teaching and Learning Methodology: Lecture discussion and Group discussions, Demonstration, Role Play

- Participants will be expected to have individually read through the content before the session.
- Briefly lecture and outline the overview of micronutrients. Then go through the content objective by objective, emphasizing the importance of adequate nutrition. Allow the participants to actively participate in the session by asking probing questions and allowing them to brainstorm before you tackle any objective.

1. Basic Nutrition Concepts

◆ Purposes of good nutrition

The purpose of good nutrition is to provide the body with necessary nutrients it requires for normal body processes in order to reduce morbidity and mortality due to malnutrition most especially in children and pregnant and lactating mothers. Adequate nutrition can be achieved when one eats a variety of foods in the right amount and proportion.

◆ Multi-mix principle for maximum nutritional benefits

The most nourishing meals are made from a variety of foods from the six food groups. The method of using foods from different food groups at each meal is called the Multi Mix Principle. It helps to plan meals by combining foods from different groups in order to maximize the nutritional benefit from the food that we eat. The foods also complement each other in terms of nutrition adequacy and absorption, for example Vitamin A needs fat to be used properly by the body. It starts with a staple food eaten with other foods to which cooking oil or other oil rich foods are added, and eaten with a fruit.

- **Example 1:** Staple (nsima, rice or cassava) served with dark green leafy vegetables enriched with groundnut, soya flour or cooking oils and food from animals (fish, matemba, usipa, utaka, chicken or meat) eaten with a fruit. The food can be eaten together in a meal or cooked in one pot.
- **Example 2:** Staple (nsima, rice, cassava or potatoes) served with vegetables cooked with pumpkinseed, groundnut or soya flour and legumes eaten with a fruit or a glass of milk

◆ The food nutrients

The following are the food nutrients;

- **Macronutrients:**
 - Carbohydrates
 - Proteins
 - Fats
- **Micronutrients, also called trace elements:**
 - Vitamins
 - Minerals
- **Others:** Water

◆ The common sources of food nutrients

The common sources of food nutrients are;

- **Carbohydrates:**
 - Nsima
 - Rice
 - Potatoes
 - Millet
 - Cassava
 - Sorghum
- **Proteins:**
 - Legumes
 - Meat
 - Milk

- Fish
- Eggs
- Edible insects and caterpillars

- **Fats:**
 - Avocado pear
 - Fats and oils
 - Coconut
 - Soya, Groundnut, Pumpkin seed flour

- **Vitamin A:**
 - Dark green leafy vegetables
 - Yellow fruits such as mango, pawpaw, yellow potato, carrots, pumpkin

- **Minerals:**
 - Animal products
 - Grains

2. Micro-nutrients

Micro-nutrients are nutrients that required by the body in small quantities but very essential for normal functioning of the body.

◆ Vitamin A

▪ Importance of vitamin A

Vitamin A is a very important nutrient because it;

- Helps in vision
- Helps in growth of the child
- Prevents the child from diseases such as ARI and diarrhoea

▪ Vitamin A deficiency symptoms

The following are symptoms of vitamin A deficiency

- Night blindness
- Low immunity to diseases
- Blood spots
- Dry eyes
- Scars in the eye
- Frequent infections

▪ Local sources of foods rich in Vitamin A

The local sources of foods rich in Vitamin A being available according to seasons;

- Papaw
- Yellow sweet potatoes

- Pumpkins
- Dark green leafy vegetables
- Carrots
- Fish
- Eggs
- Liver
- Breast milk

▪ **Vitamin A supplementation schedule**

Vitamin A supplementation should be given according to schedule. Remember to record Vitamin A supplementation correctly on under- fives and mothers card and village register. Children between 6-59 months and breastfeeding mothers the schedule is as follows;

- Children between 6-11 months should be given ½ red or 1 blue capsule (100,000 IU) orally, once only
- Children between 12-59 months should be given 1 red capsule (200,000 IU) orally every 6 months
- Postnatal mothers, should be given 1 red capsule (200,000 IU) orally within two months of delivery

▪ **Important health education facts on Vitamin A**

The following are the important health education facts on Vitamin A;

- Foods rich in Vitamin A should be added to children's food
- Give children foods from local sources rich in Vitamin A such as papaws, pumpkin leaves, mangoes, green leafy vegetables and fat rich foods e.g. groundnuts, soya bean flour, cooking oil, avocado pears.
- Fats or oils facilitate absorption of Vitamin A in the body. Therefore add fats or oil e.g. cooking oil, ground nuts or soya flour in vitamin A rich foods like vegetables
- Eat Vitamin A rich fruits with a meal containing fats or oil rich foods
- Eat fat-rich foods e.g. avocado pears or ground nuts together with fruits and vegetables
- Take children to under five clinics to get the Vitamin A. capsule
- Have gardens in the homes for growing vegetables rich in Vitamin A

◆ **Iodine**

Iodine is essential for production of thyroxin which is a hormone used for reproduction, growth and proper functioning of the brain;

▪ **Iodine deficiency disorder**

The following are iodine deficiency disorders;

- Goiter; this is characterized by cretinism, mental retardation, poor growth, slowness of movement
- Pre-production problems e.g. premature birth, still birth, childhood death

- **Prevention and control of Iodine Deficiency Disorders**
The use of iodized salt is the best preventive measure for iodine deficiency

- **Important facts for the use of iodine in the prevention and control of Iodine Deficiency Disorders**
 - Buy iodized salt only and always check expiry date
 - Iodized salt should be stored properly to avoid loss of iodine.
 - Store the salt in, moisture proof packages, closed containers, away from direct sunlight excessive heat or humid conditions,
 - store on shelves in covered, well ventilated rooms and should be stored for not more than 6 months
 - Using iodized salt regularly helps; children to learn well in class, children to grow well, children and adults to be active and energetic, prevents goiter and helps to avoid childhood deaths.

- **Testing salt for the presence of iodine**
The following are steps in testing salt for iodine (Rapid Qualitative test);
 - Take a sample of salt with a spatula
 - Add 2 to 3 drops of rapid testing fluid/kit
 - Observe colour change for 1 minute
 - If the colour turns blue black, there is iodine in the salt, and if there is no colour change, then there is no iodine
 - Repeat the test to confirm the results

- ◆ **Iron**
 - **Importance of Iron in the body**
 - Combines well with protein to form Haemoglobin
 - Carries oxygen to cells
 - Increases resistance to infection

 - **Iron deficiency Anaemia**

Whenever iron is deficient in the body, the person becomes anaemic and is prone to infections. Anaemia is defined as Haemoglobin of less than 10gm/dcl. (Use IMCI manual for more information) Anaemia is not a disease but a symptom. Apart from lack of nutrients such as iron and protein anaemia can also be caused by blood loss due to hookworm disease, bilharzia and nose bleeding and breakdown of blood cells in Malaria. The prevention of the condition is to give iron supplements and advise on diet with high iron content such as dark green vegetable, meat, milk and vitamin C. People should also be advised to wear shoes for protection against worms, Use of pit latrines and prompt treatment of Malaria and Hookworms. Where the diagnosis is made the patient should be referred to the health center. The symptoms and signs of anaemia are;

- Paleness of lips, palms, tongue and conjunctiva

- Tiredness
- Swollen feet

3. Essential Nutrition Actions

The Essential Nutrition Actions (ENA) is an intervention that has shown high impact in improving women and child nutrition. ENA promotes optimal practices, key nutrition services and messages for improving women and child nutrition.

◆ The Seven Essential Nutrition Actions

The following are Seven Essential Nutrition Actions (ENA):

- Improving women nutrition before, during and after pregnancy
- Optimal breast feeding in the context of HIV and AIDS
- Optimal complementary feeding
- Feeding a sick child, during and after illness
- Control of iodine deficiency disorders
- Control of anaemia
- Control of Vitamin A deficiency

◆ Essential Nutrition Actions contact points

The ENA optimal practices, promotion of services and messages can be promoted through a number of contact points to the mother or caregiver and the child within the health facility or community. The ENA contact points are:

▪ At health facility level:

- During pregnancy at Antenatal clinic
- During labour and delivery
- Postnatal ward, on discharge, during postnatal check up and family planning
- During growth monitoring and promotion in the under five clinic or outreach
- During Immunization
- When the child is sick in OPD/IMCI or ward, NRU, OTP, SFP

▪ At community level

Promotion of optimal feeding practices; Services and messages on ENA in community-based services, community based child care centers, community or traditional functions, activities and events.

▪ Outside Health sector

Use all available networks in all sectors such as field days, agriculture shows, school feeding centers, School Health and Nutrition programmes, community debates, dialogue and many others.

4. Exclusive Breast Feeding

Exclusive breast feeding means giving the baby breast milk only as a their only source of nutrients from birth until they are 6 months old unless medically indicated (babies are not given

other foods or drinks, not even water) Refer to booklet for ENA messages for medically indicated babies

◆ **Benefits of exclusive breast feeding**

- Protection from infections
- Ideal natural food for the baby
- Helps to control bleeding soon after birth
- Promotion of love between child and mother
- Maintenance of milk production
- It is cheap and readily available at the right temperature
- Delays return of fertility, benefit for child spacing

◆ **Health education facts on exclusive breastfeeding**

Important health education facts on exclusive breastfeeding include advice on;

- Early initiation within half hour of birth
- Milk expression if mother goes away and use cup to feed child
- Early seeking of advice for breastfeeding problems or conditions
- Mothers should avoid early introduction of other foods or fluids
- Breastfeed using correct positioning and attachments as follows;
 - Mother is relaxed and comfortable
 - Baby's head and body are straight and well supported
 - Baby facing the breast
 - Baby's tummy and mothers abdomen touching each other
 - Signs of correct attachment will be; Baby's chin touching the breast, baby's mouth wide open, baby's lower lip curled outward, baby's cheeks round or flattened against mother's breast, more areola above baby's mouth than below and breast looking round not stretched or pulled during feeding.

◆ **Dangers of early introduction of other food and fluids**

The dangers of early introduction of other food and fluids are;

- Inadequate intake of nutrients
- Baby is immature therefore may not digest or utilize other foods and fluids adequately while breast milk is easily digested
- Increased risk of getting infections such as diarrhoea
- Reduction of breast milk output which interferes with breastfeeding
- Reduced contraceptive advantage
- Allergies like skin rash

5. Complementary Feeding

Complementary feeding is giving a child appropriate foods in addition to breastmilk at the age of 6 months.

◆ Optimal complementary feeding practices for children six to twenty-four months

Recommendations for Optimal Complementary feeding practices for children between 6-24 months are as follows;

- At 6 months, mother introduces soft, appropriate foods and continues breastfeeding on demand.
- Mother increases the frequency of feedings and amount of food as the child gets older. Mother should use individual plate for the child and should continue frequent breastfeeding
- Mother increases food thickness and variety as the child gets older Mother interacts with child during feeding (active feeding)
- Mother practices good hygiene and safe food preparation
- Mother continues to breastfeed until the child is at least 2 years old
- Mother continues to breastfeed when child is ill and encourages the child to eat during and after illness
- Mother continues to breastfeed when child is ill and encourages the child to eat during and after illness

◆ Feeding recommendations for sick children

▪ Advice on feeding the sick child during illness:

- Children less than 6 months should continue exclusive breastfeeding, and increase the frequency of breastfeeding
- If the child is unable to suckle, the mother should express her breast milk and feed the child using a cup
- Children older than 6 months should breastfeed frequently to avoid dehydration and malnutrition
- Offer the child a variety of foods in small amounts at a time but more often.
- Offer more food if the child shows interest.
- Offer the child foods that he/she likes more.
- Give physical assistance e.g. sitting with the child and helping him/her to hold the cup to his/her mouth or putting the food within his/her reach.
- Offer verbal encouragement or praise when the child eats something.

▪ Advice on feeding the sick child after illness:

Children less than 6 months should continue to exclusively breastfeed and breastfeed more frequently for at least 2 weeks after the illness

Children older than 6 months should breastfeed more frequently, and should be given an extra meal or snack every day, for two weeks after illness

Refer to the Booklet for ENA messages for the others

6. Supplementary Feeding

Supplementary feeding is defined as giving additional nutritious foods to risky groups in communities with very high malnutrition rates.

◆ Importance of supplementary feeding

The needs for supplementary feeding include the following;

- To relieve serious food deficits in families at risk
- The food mixes improve the nutritional value of the people's diet and so provide essential nutrients missing in the families

◆ Beneficiaries of food supplements

People who are supposed to get food supplements are;

- People who are at high risk of malnutrition in the community e.g. Malnourished children and those who continue to falter in growth
- Pregnant and lactating mothers with risky factors
- Families in difficult situation

◆ Health education information on food supplements

Guidelines for preparing the food supplement and the food should be given to the targeted beneficiaries

7. Malnutrition

Malnutrition is defined as a state when there is an imbalance between a person's nutritional intakes and his or her nutritional needs

◆ The Common Types of Malnutrition

The common types of malnutrition are;

- Stunting
- Wasting
- Underweight
- Protein energy malnutrition (Marasmus)
- Kwashiorkor
- Vitamin A Deficiency
- Iodine deficiency
- Iron deficiency
- Folic Acid deficiency
- Niacin deficiency
- Low birth weight
- Non-communicable nutrition related diseases: diabetes, hypertension, gout

◆ Identification of Children with Kwashiorkor and Marasmus

- Signs of Kwashiorkor
- Thin, pale straight weak hair
- Moon face
- Pot belly
- Swollen legs (oedema)

- Peeling off of skin
- Underweight
- Miserable
- Poor appetite
- Diarrhoea is common

▪ Signs of Marasmus

- Thin with an old man's face
- Very under weight
- Thin muscles and without fat
- Irritable
- Alert
- Appetite is good

◆ Causes of Malnutrition

- Low food intake due to;
 - Poor feeding practices
 - Lack of food in the household
- Frequent diseases e.g. malaria, measles, diarrhoea due to
 - Inadequate maternal and child care
 - Insufficient health services and unhealthy environment
 - Frequent infections lead to;
- Mal-absorption of food nutrients
- Loss of appetite (anorexia)
- Failure to eat adequately due to sores in the mouth

◆ Important Nutritional Practices to be encouraged in the Community

The important nutritional practices to be encouraged in the community are;

- Exclusive breastfeeding for the first 6 months unless medically indicated
- Initiating breastfeeding within the first half hour of birth
- Sustain breastfeeding up to 2 years or more unless medically indicated
- Regular breastfeeding for children at least 8-12 times in 24 hours
- Giving more nutritious fluids and foods to the child than usual during and after illness
- Feeding from individual cup or plate, no bottle feeding

◆ Prevention of Malnutrition

Malnutrition can be prevented by using the following measures;

- Encouraging breastfeeding for the first 6 months
- Timely introduction of appropriately prepared complementary foods for the child at 6 months using locally available foods from the 6 food groups
- Immunize all children and monitor their growth

8. Community Based Therapeutic Care (CTC)

Community Based Therapeutic Care is an approach of delivering care to acutely malnourished people on out-patient basis to the majority of cases and the following are the major components;

◆ Community Outreach

This is aimed at;

- Community sensitisation
- Active case finding
- Referral and case follow up.
- Stimulating understanding, engagement and participation of the target population.

◆ Supplementary Feeding Programme (SFP):

This provides dry take home rations and routine basic treatment for;

- Moderately acute malnourished children under 11 years of age
- Moderately acute malnourished pregnant or lactating women and
- Children discharged from OTP and NRU

◆ Outpatient Therapeutic Programme (OTP):

This is involved in;

- Treating severely acute malnourished children who have appetite and no medical complications (the majority of severely acute malnourished cases)
- Providing Ready to Use Therapeutic Food (RUTF) or chiponde and systematic medications
- Check-up and re-supply of RUTF to children who attend OTP site weekly or biweekly

◆ Nutrition Réhabilitation Unit (N.R.U.)

This unit is involved in the provision of in- patient care to ;

- Severely acute malnourished children with medical complications and no appetite until the children are stabilised.

9. Nutrition Follow-Up

The following are the important nutrition follow-up activities to be done and key nutrition messages to be delivered to the community;

◆ Follow-Up Activities

- Check the health status of the malnourished child including those discharged from CTC, NRU to find if there is improvement or not. If possible weigh the child or use the MUAC tape to assess improvement. Observe for the presence of diseases such as ARI, diarrhoea diseases, oral thrush, intestinal worms like round worms (ascaris) and hookworm, which may contribute, to malnutrition. The health status of other children in the household should be observed.
- Ask the mother on how the child is feeding (breastfeeding) what other fluids the mother is giving, frequency of feeding the child and problems faced in feeding the child, check the availability of food in the house and stock likuni phala. If food is not available it is unlikely to find likuni phala. Check how likuni phala is being utilized. Observe the mother preparing likuni phala or any other kind of food for the child and advise accordingly.
- Cautiously ask the family how they spend their money. Advise on food priorities
- Check on the sanitation of the home identifying factors that can influence the occurrence of diseases
- Encourage them to attend under-five clinics where they can get Vitamin A capsules. And also to eat more of local foods, which provide Vitamin A such as pumpkin, leaves, paw paws, mangoes and other green leafy vegetables and fat rich foods for Vitamin A absorption.
- Emphasize on the importance of Vitamin A as means of preventing night blindness, enhancing growth and preventing infection
- Check their salt for the presence of iodine and how it is stored
- Keep a record of the follow up activities done and the findings.
- Give feedback to the community and decision makers of the community on quarterly basis

◆ Key Nutrition Messages

- Breast milk is the best and natural food for the child
- Exclusive breastfeeding for 6 months
- Breast feed on demand at least 8-12 times a day
- Initiate breast feeding early within half an hour after delivery
- Breast feed using correct positioning and attachment
- If mother and baby are to be separated for more than one hour, express breast milk and store in a clean covered container and put in cool place, feed the child using a cup
- Give children foods rich in Vitamin A and fat
- Feed nutrient and energy rich and freshly prepared foods from 6 months such as Likuni phala, porridge enriched with groundnut or Soya flour, milk, eggs, avocado pear, banana or other foods
- Feed the child from an individual plate
- Continue breastfeeding up to 2 years or beyond
- Feed children frequently and when they are ill feed them as much as possible with more nutritious fluids and foods
- Women should eat more and diversified foods during pregnancy in order to have a healthy baby
- Vitamin A supplementation within 8 weeks postnatal

EVALUATION OF THE SESSION

Evaluate the session by asking the participants to;

- Outline activities done during nutrition follow-up
- Prepare nutrition follow-up check list
- Outline nutrition key messages individual

UNIT 8: GROWTH MONITORING

INTRODUCTION

Growth monitoring is a process of detecting the development and growth through the assessment of milestone, weight and nutritional status of the child from birth up to 5 years. In this manual the process emphasizes on measuring the weight, height and mid-upper arm circumference as means of early identification of malnutrition in children for the purposes of monitoring growth and promotion of health.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Explain the process of Weighing and measuring a child
2. Assess a Child's Growth
3. Provide Health Education Facts on Growth Monitoring
4. Refer Children with Nutritional Problems

Time allocation: 6hours Theory and 6 hours Practical.

Materials needed: Classroom sessions; Markers, Flip chart,

Practical sessions; weighing scale, Weighing bag, Height boards, Child Health Profile and Register, MUAC (Mid Upper Arm Circumference tape), Hook and string

Teaching and Learning Methodology: Brainstorming, Lecture discussion, Group discussions, Demonstration and Role Play

- Participants will be expected to have individually read through the content before the session
- Start by briefly lecturing on the process of weighing and measuring a child
- Explain to the participants that it is important to always remember the facts on growth monitoring

1. Process of Weighing and Measurement

◆ Purpose of growth monitoring

The purpose is early identification of malnutrition in children

◆ Equipment and supplies used

The equipment and supplies used in growth monitoring are;

- Weighing scale
- Weighing bag
- Height boards
- Child Health Profile and Register
- MUAC (Mid Upper Arm Circumference tape)
- Hook and string

◆ Weighing of a child

The following is a procedure for weighing a child;

- Hang the scale to eye level of the reader
- Hang the empty weighing bag
- Adjust arrow of scale to "0" point
- Instruct the mother to remove clothes from child
- Attach the child to the scale
- Read the scale correctly and plot on the child health profile
- Remove the child from the scale
- Tell the mother whether or not the child is gaining weight. Praise her if the child is gaining weight and give advice accordingly if there is constant weight or weight loss.
- Tally child's weight on child register

◆ Determining mid-upper arm circumference

- Determine the mid way of the upper arm
- Place the tape around the mid point of the arm (not too tight and loose)
- Read and note the findings
- Record findings in the appropriate form

2. Assessing a Child's Growth

◆ Signs of poor nutritional status

- Thin
- Underweight
- Miserable
- Irritable

◆ Signs of poor growth

- Mid Upper Arm Circumference (MUAC) less than 13.8cm
- Weight below "green road"
- Constant weight for 3 months

◆ Signs of Growth faltering and other problems

To identify signs of growth faltering check for the presence of signs of common diseases and once these are identified give advice appropriately or refer for further assessment.

3. Health Education Facts on Growth Monitoring

Topics to be presented during growth monitoring exercise;

- ◆ Importance of going to under- five clinics
- ◆ Importance of having the weight chart
- ◆ Causes of low birth weight
- ◆ Identification of malnutrition
- ◆ Immunization
- ◆ The Six Food Groups

4. Referral of Children with Nutritional Problems

After identification of problems associated with growth and development as result of suspected poor nutrition refer to a:

- ◆ Nutritional clinic
- ◆ Health facility

EVALUATION OF SESSION
<p>Evaluate the session by asking the participants to;</p> <ul style="list-style-type: none">● Review the equipment and supplies used in growth monitoring● Explain the Signs of poor growth and signs of poor nutrition<ul style="list-style-type: none">▪ Outline risks of a baby who has a Low Birth Weight or premature▪ Explain how mid-upper arm circumference is determined▪ Explain how they would tell a mother who is HIV positive on feeding options <p>Finally summarize by briefly by analyzing the responses from the participants</p>

UNIT 9: HARMFUL REPRODUCTIVE HEALTH PRACTICES

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Describe the types of harmful reproductive health practices
2. Promote the elimination of harmful reproductive health practices

INTRODUCTION

Harmful Reproductive Health Practices are practices that can endanger the lives of individuals, couples and newborn babies leading to diseases, disability or death.

LEARNING OBJECTIVES

By the end of the unit the learner should be able to:-

1. Describe the types of harmful reproductive health practices
2. Promote the elimination of harmful reproductive health practices

Time allocation: 2 hours Theory.

Materials needed: Markers, Flip chart, LCD and computer

Teaching and Learning Methodology: Brainstorming, Lecture discussion, Group discussions, Demonstration and Role Play

- Participants will be expected to have individually read through the content before the session
- Start by outlining the objectives and then briefly lecture on the topic
- Ask the participants to come up with harmful reproductive health practices that they know

1. Types of harmful reproductive health practices

Types of harmful practices include:

- Inheritance of a wife or husband
- Practice of hiring of man for sex and conception (Fisi)
- Death rituals (hiring of a man to have sex with the widow to drive out spirits)
- Use of traditional herbs or plants into the vagina for dry sex.
- Use of local oxytocin-like traditional medicines to enhance labor.
- Performance of traditional circumcision under un- sterile conditions

- Male or female prostitution
- Post partum abstinence which predisposes a man to promiscuity
- Traditional treatment of vulva or vaginal warts and hemorrhoids (e.g. by cutting)

2. Elimination of harmful reproductive health practices

The best ways of overcoming harmful practices include the following;

- Providing community health education on consequences of harmful practices so that individuals, families and groups understand and change or stop the practices to reduce risks to health
- Encouraging individuals with hemorrhoids, warts, etc. to utilize health care facilities for proper management
- Sensitization of traditional counselors and practitioners on the dangers of harmful practices.
- Encouraging dialogue with community on how to overcome harmful cultural practices.
- Encouraging all victims of domestic and sexual violence to have access to legal entitlement course of law, counseling and other support services including Post exposure Prophylaxis (PEP) for rape

UNIT 10: INFERTILITY

INTRODUCTION

This unit aims to provide the students with knowledge, attitude and skills on infertility so that they are able to support the infertile couple and educate the community on the causes, prevention and management of infertility so that they avoid the use of herbs that may have disastrous consequences.

SPECIFIC OBJECTIVES OBJECTIVES

By the end of the unit the learner should be able to:-

1. Describe the types of infertility
2. Outline the causes of infertility
3. Describe the methods of preventing infertility
4. Explain the management of infertility

Time allocation:

2 hours Theory.

Materials needed:

Markers, Flip chart, LCD and computer

Teaching and Learning Methodology:

Brainstorming, Lecture discussion, Group discussions, Demonstration and Role Play

- Participants will be expected to have individually read through the content before the session
- Start by outlining the objectives and then briefly lecture on the topic
- Ask the participants to come up with how infertility is treated at home

1. TYPES OF INFERTILITY

Infertility is the failure of a couple to achieve pregnancy despite regular unprotected intercourse for at least 12 months. This is a problem that requires adequate counseling because it is one of the causes of stress and psychological trauma among couples as they are socially affected. There are basically two types infertility and these are;

◆ Primary infertility

This is a situation where a couple has never conceived despite having regular unprotected intercourse for at least 12 months

◆ Secondary infertility

This is a situation where a couple has previously conceived, but is subsequently unable to conceive within 12 months despite having regular intercourse

2. THE CAUSES OF INFERTILITY

The following are the main causes of infertility among couples;

- ◆ Sexually transmitted infections
- ◆ Sexual dysfunction
- ◆ Anatomical disorders
- ◆ Ovulatory factors in women
- ◆ Metabolic disorders in women
- ◆ Damage to the uterus
- ◆ Self induced abortions using local herbs
- ◆ Abnormal spermatogenesis

3. METHODS OF PREVENTING INFERTILITY

Methods of prevention of infertility include the following among others;

- ◆ Protection against Sexually Transmitted Infections
- ◆ Access to prompt and effective Sexually Transmitted Infection treatment
- ◆ Educating the Community on the effects of untreated Sexually Transmitted Infections
- ◆ Educating the community on dangers of abortion and postpartum infections
- ◆ Early and effective management of incomplete abortion and postpartum infections
- ◆ Avoidance of risky sexual behaviors

4. MANAGEMENT OF INFERTILITY

- Educating and counseling on fertility awareness.
- Psychosocial support
- Adoption and fostering
- Referral for appropriate screening, diagnosis and treatment

UNIT 11: INFECTION PREVENTION AND UNIVERSAL PRECAUTION

INTRODUCTION

Infection control measures are intended to protect patients, clients, health care providers and other people in the health care setting. While infection prevention is most commonly associated with the prevention of HIV transmission, these procedures also guard other blood borne pathogens, such as hepatitis B and C, syphilis and other diseases and should be considered standard practice. It is very easy for an outbreak to occur in a community especially without proper precautions. It is therefore the aim of this unit to provide knowledge, attitudes and skill to the students so that they are to create safe environment as they provide their services.

LEARNING OBJECTIVES

By the end of this unit the learner should be able to:-

1. Explain the principle of infection prevention
2. Outline the infection prevention methods
3. Practice basic rules of infection prevention

Time allocation: 3 hours Theory.

Materials needed: Markers, Flip chart, LCD and computer, gloves

Teaching and Learning Methodology: Brainstorming, Lecture discussion, Group discussions, Demonstration and Role Play

- Participants will be expected to have individually read through the content before the
- Start by making a brief lecture on the infection prevention; emphasizing on the current practices
- Finally discuss with the participants in a brain storming session to come up with the measures of preventing infection in the community. The identified measures should be listed on a flip chart for further reference.

1. The Principle of Infection Prevention

Infection prevention means stopping the passage of infectious organisms between people. It is not possible to tell easily which client may have an infectious disease that could be passed in a health facility or community. All blood and body fluids from all people are treated with the same degree of caution so no judgment is required about the potential infectivity of a particular specimen. Therefore infection prevention procedures must be followed with every client as such infection prevention depends upon a system of practices in which all of the following are considered to be infectious;

- Blood
- Semen
- Vaginal secretions
- Sputum
- Body fluid containing blood

2. Infection Prevention Methods

Infection prevention procedures protect both the clients and providers from the spread of infectious disease. Infection-prevention procedures are simple, easy, effective and inexpensive. The methods are as follows;

- ◆ **Making a Barrier to Body Fluids**
 - Wearing of gloves
 - Wearing of aprons
 - Safe handling of sharps
- ◆ **Removing infectious organisms**
 - Proper disposal of medical waste
 - Proper cleaning of materials and instruments
 - Sterilization of instruments
- ◆ **Personal Discipline**
 - Creating a safe environment depends on;
 - Observation of standard procedures
 - Staff training
 - Careful attention to detail

3. Practice Basic Rules of Infection Prevention

To stop the passage of the infectious organisms and create a safe environment at a health facility and community for health services delivery the following infection prevention rules must strictly be followed;

- ◆ **Wash Hands**

Hand washing may be the single most important infection-prevention procedure as such;

 - Wash hands before and after contact with each client
 - Wash hands before putting on gloves
 - Wash hands whenever they get dirty
 - Use soap and clean running water from a tap or bucket
- ◆ **Wear Gloves**

During the delivery of health services and indeed with the aim of creating a safe environment and prevention of infection the following should be followed;

 - Wear gloves when there is a chance of contact with blood or body fluids
 - Wear gloves before any procedures with each client

- Put on a new pair of single-use or processed reusable gloves.
- Put on sterile gloves for surgical procedures

◆ Clean the Client's Skin

The client's skin must be appropriately cleaned using locally available antiseptic before;

- An injection
- Insertion of Norplant implants
- Intra-uterine contraceptive device

◆ Use Needles, Syringes and Vials appropriately

A safe injection does not harm the recipient, does not expose the provider to any avoidable risk and does not result in any waste that is dangerous for other people, the following should be strictly followed;

- Use a sterile syringe and needle for each injection and to reconstitute each unit of medication
- Ideally, use new, quality controlled disposable syringes and needles
- If single-use syringe and needles are not available, use equipment designed for steam sterilization
- Prepare each injection in a clean, designated area where blood or body fluid contamination is unlikely
- Use single-dose vials rather than multi-dose vials
- If multi-dose vials must be used, always pierce the septum with a sterile needle; avoid leaving a needle in place in the stopper of the vial
- Once opened, store multi-dose vials in a refrigerator.

◆ Clean Instruments, Equipment and other Materials

After use with each client, reusable instruments, equipment, and supplies, using universal precaution, should be appropriately;

- Cleaned with soap and water
- Washed in warm, soapy water and line dried
- Decontaminated by soaking in 0.5% chlorine solution or any other disinfectant
- Sterilized by steam or dry heat

◆ Dispose of Single-use equipment and Supplies properly

Needle and Syringes

- Needles and syringes meant for single use must not be reused
- Used needles should not be broken, bent or recapped
- Used needles should be put at once into puncture-proof container
- The container should be burned or buried when three-quarters full

Dressings and other Soiled Waste

- Soiled dressing should not be put in flush toilet but burned or put in a pit latrine
- Liquid waste should be put in a pit latrine

MODULE 3: BASIC MANAGEMENT AND ADMINISTRATION

The module aims at providing the learner with knowledge, attitudes and skills in Basic Management principles to enable the learner manage resources, plan health activities and practice according to the public health act in the implementation of community health activities

INTRODUCTION

Today's society consists of organizations and these organizations assume a variety of sizes and types like hospitals, schools, churches or sports clubs. An organization may be described as consisting of people, material and financial resources and objectives which the organization would like to achieve. Community Health workers have responsibility to make their services in the community to be as productive and efficient as possible and this can only be achieved if there is proper planning.

LEARNING OBJECTIVES

By the end of the module the learner should be able to;

1. Outline the basic elements of management
2. Describe the planning cycle
3. Manage community health activities
4. Explain the Malawi Public Service Regulations
5. Appropriately use bicycles

Time allocation: 30 minutes

Materials needed: Markers, Flip chart

- Participants will be expected to have individually read through the content before the
 - Start by making a brief lecture on the management; emphasizing on the planning cycle
 - Finally discuss with the participants in a brain storming session to cover all the objectives
 - Then summarize the responses objective by objective
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1. BASIC ELEMENTS OF MANAGEMENT

Management has four basic elements and these are;

- Planning
- Organizing
- Leading

- Controlling

2. THE PLANNING CYCLE

Planning is a method of trying to ensure that the resources available now and in the future are used in the most efficient way to obtain explicit objectives. The important components of this and other similar definitions of planning are concepts of, where are we going (objectives), with what (resources), how (efficient implementation) and when (future). The planning cycle is as follows;

◆ Situational Analysis

This describes what the current and future situation is in broad terms

◆ Priority goal and objective setting

This outlines the priorities and describes where the program wants to go

◆ Optional Appraisal

This describes the alternatives for action in the priority areas

◆ Programming

This describes the best alternatives

◆ Implementation

This provides time to take action

◆ Monitoring and Evaluation

This provides feedback on the performance and effectiveness of the entire planning cycle

3. MANAGEMENT OF COMMUNITY HEALTH ACTIVITIES

Planning forms the basis of all the elements of management because it gives direction and determines the actions of all health activities. The following are some of the components that would help in managing health activities;

Work plans

- ◆ Short term plans
- ◆ Monthly work plans

Record keeping

- ◆ Filing

4. Reporting Health Surveillance assistant activities

- ◆ Daily note taking
- ◆ Incidental reports
- ◆ Routine reports

4. MALAWI PUBLIC SERVICE REGULATIONS

The proper utilization of procedures and practices used in the execution of community health activities requires knowledgeability of the Public service regulations;

Career Procedure

◆ Appointments

Any appointment in the civil service starts with probation and later after meeting the requirements the appointment is confirmed. Initial appointment requires the appointee to meet the following;

- Educational or professional qualifications
- Medical fitness

◆ Transfer and Posting

- Once a person has been appointed, can be posted to any work place as the need will dictate the situation
- An appointee can be transfer from one post to another as need arises

◆ Termination of appointment

Terminal benefits are paid where there is mutual agreement on termination of appointment. Appointment can be terminated;

- On medical grounds
- When there is a notice of resignation by the appointee
- When the appointee is convicted

Conduct and Discipline

◆ Acts of Misconducts

There are several acts of misconducts that would tract disciplinary actions. Some of the acts of misconducts that an appointee can be considered to have committed are if one;

- Absents himself or herself from his or her post during normal hours without permission
- Performs his duties negligently
- Fails to perform any duties properly or obey any instructions given to him y a person in authority
- Displays insubordination by word or conduct
- Continues to be incompetent or inefficient after the expiration of warning period
- Is under the influence of intoxicating liquor or habit forming drugs
- Is habitually takes intoxicating liquor or habit forming drugs to excess
- Makes use of public monies or any property of the government for private purposes
- Fails to take reasonable care of any government property in his custody
- Commits bribery, corruption, theft or theft by false pretences or receiving stolen property

- Performs or engages himself or herself to perform work outside the civil service for remuneration

Holidays and Sick leave

A Civil servant is entitled to holidays where he or she is given holiday grant if it is an annual holiday. Where a person does not report for duties for no apparent reason is defined as an authorized absence. The common holidays in the civil service are;

- Annual holidays
- Sick leave
- Unpaid leave
- Leave for participation in sports activities

5. APPROPRIATE USE BICYCLES

◆ Use of a bicycle

There are various activities requiring an H.S.A to use a bicycle and some of them are to;

- Conduct outreach clinics
- Follow-up of malnourished children, TB, HIV&AIDS patients
- Village visits to form, train and supervise VHC and inspect villages
- Conduct Village clinic
- Collect, monitor and follow-up Village Health Register activities
- Trace contacts of certain diseases
- Conduct community based activities such as ITN re-dipping

◆ Assembling a bicycle

Assembling the bicycle can be possible if one is able to identify parts of the bicycle, the following are the parts of a bicycle;

- Frame
- Saddle
- Chain
- Handle
- Spokes
- Hub
- Rim
- Tube
- Tyres
- Crank
- Peddles
- Brakes
- Bearing
- Spindle

- Bolts
- Valve
- Bolts and Nuts

◆ Maintenance and Repair of a Bicycle

Problems and defects affecting the bicycle can be prevented by having enough spare parts in stock, the problems and defects that can occur in parts of the bicycle are;

- Wear and tear
- Unavailability of spare parts
- Aged bicycle